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Canadian Addiction Survey (CAS)

*A National Survey of Canadians'
Use of Alcohol and Other Drugs*

Substance Use by Canadian Youth



Health
Canada Santé
Canada



Canadian Executive Council on Addictions
Conseil exécutif canadien sur les toxicomanies



CCSA - CCLAT

“Health Canada is the federal department responsible for helping Canadians maintain and improve their health. We assess the safety of drugs and many consumer products, help improve the safety of food, and provide information to Canadians to help them make healthy decisions. We provide health services to First Nations people and to Inuit communities. We work with the provinces to ensure our health care system serves the needs of Canadians.”

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Chapter 1: Introduction

Introduction

This report is one of a series of reports from the Canadian Addiction Survey (CAS, 2004). The CAS (2004) was a collaborative initiative sponsored by Health Canada, the Canadian Executive Council on Addictions (CECA)—which includes the Canadian Centre on Substance Abuse (CCSA); 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/Centre for Addictions Research of BC (CAR-BC)—and the provinces of Nova Scotia, New Brunswick and British Columbia.

The CAS was one of the most detailed and extensive addictions surveys ever conducted in Canada, with more than 400 unique questionnaire items. This report is a follow-up to the *Canadian Addiction Survey (CAS): A National Survey of Canadians' Use of Alcohol and Other Drugs, Prevalence of Use and Related Harms: Detailed Report* (Adlaf, Begin and Sawka, 2005). The detailed report provided an overview of the prevalence of alcohol and illicit drugs use in Canada, as well as an examination of the harms experienced by Canadians as a result of such use. While the full report presented some prevalence results for youth, the focus was on national estimates. As such, this report takes a more in-depth look at the use of alcohol and other drugs by youth and young adults aged 15 to 24 as well as the problems they encounter as a result of their use, their reasons for using, and the characteristics associated with such use. The discussions and results will be presented with a focus on youth, and in many instances, comparisons will be made to the general and adult populations.

Health Canada's participation in the CAS was an important initiative within the renewed Canada's Drug Strategy (CDS), announced by the Government of Canada in May 2003. The CDS is a federally coordinated initiative to reduce the harm associated with the use of alcohol and controlled substances. Because most substance use usually begins during the younger years, and literature has demonstrated that the rate of substance use is usually much higher among youth, youth are a target population prioritized under the CDS. Decreasing the number of young Canadians who experiment with drugs is one of the major objectives of the CDS. Youth are at an age when they are required to make many important decisions, including the use of substances; thus, it is important to monitor the prevalence of use and related harms of substance use among this population as well as the factors associated with use and different patterns of use.

The assessment of alcohol and other drug use among youth is important because it is only through such research that we can identify current problems in an attempt to develop intervention and prevention strategies. A key premise of prevention is that the activities need to be based on the best available information on the nature and extent of youth substance use problems (Roberts, McCall, Stevens-Lavigne et al., 2001). Information gathered through surveys such as the CAS provide us with a wealth of data, not just to describe the current situation but also to be in a better position to address it. Age of first use, the proportion of users versus non-users, and differences in gender, age group and region are all examples of key factors essential for developing prevention, intervention and treatment strategies for youth. Since the CAS was one of the most detailed and extensive addiction surveys ever conducted in Canada, as well as the most recent, the current report will examine substance use among youth with a focus on the aforementioned factors in an attempt to provide the most up-to-date and comprehensive picture of the current situation of substance use by Canadian youth.

Overview of Chapters

The following provides a brief description of the chapters contained in the present report.

Chapter 2: Survey Design, Methodology and Analysis

This chapter will discuss the main design, methodology and analysis features of the CAS.

Chapter 3: Alcohol Use and Harms

This chapter will report on five measures of alcohol use by youth, including drinking status, drinking frequency, usual consumption, frequency of heavy drinking and compliance with low-risk drinking guidelines. In addition, this chapter will examine the alcohol harms experienced by youth. It will address three measures indicative of harms or risk of harms: harms to oneself because of one's own alcohol use; harms because of the alcohol use of others; and the Alcohol Use Disorders Identification Test (AUDIT) measure of high-risk drinking.

Chapter 4: Cannabis Use and Harms

The focus of this chapter is on the use of cannabis, such as marijuana and hashish, in youth. It will describe the lifetime and past 12 months' prevalence of cannabis use and various concerns and harms experienced by youth as a result of such use.

Chapter 5: Other Drug Use and Harms

This chapter will focus on the use of drugs other than cannabis in youth 15 to 24 years of age. It will present the lifetime and past 12 months' prevalence of eight drug use behaviours: use of cocaine or crack; hallucinogens, PCP or LSD; speed or amphetamines; heroin; ecstasy (MDMA) or other similar drugs; inhalants—glue, gasoline or other solvents; steroids; and injection drug use. This chapter will also examine problems encountered by youth as a result of their use of these various illicit drugs.

Chapter 6: Poly Drug Use

The focus of this chapter is on the different patterns of substance use among youth, such as the combination use of alcohol, cannabis and other illicit drugs. It will present the most prevalent patterns of combination use and examine the impact of different types of substance use on use of other substances.

Chapter 7: Driving and Substance Use

This chapter will examine the prevalence of driving under the influence of alcohol and cannabis by youth and explore the characteristics that are associated with such behaviours.

Chapter 8: Changes Across Time

Trends in the prevalence of use and related harms of alcohol, cannabis and other illicit drugs by youth will be examined using data from the 1989 National Alcohol and Other Drugs Survey and the 1994 Canada's Alcohol and Other Drugs Survey.

Chapter 2: Survey Design, Methodology and Analysis

Sample Design

Specific details on the research design and methods can be found in the CAS detailed national report (Adlaf et al., 2005) and the *Canadian Addiction Survey 2004: Microdata eGuide* (CCSA, 2004) both of which are available online at the Canadian Centre for Substance Abuse Web site www.ccsa.ca. Presented here is a summary of the general methodology and details specific to the analyses contained in this report.

The CAS is a general population telephone survey based on a two-stage (telephone household, respondent) random sample stratified by 21 regional areas. The sampling frame was based on an electronic inventory (Statplus) of active telephone area codes and exchanges in Canada. Fieldwork for the CAS was conducted by the research firm Jolicoeur et associés. The survey used random-digit-dialling (RDD) methods via Computer Assisted Telephone Interviewing (CATI).

The final unweighted sample consisted of 13,909 interviews, representing an effective response rate of 47.0%. The base sample allocation was for 10,000 completions, 1,000 for each of the 10 provinces. Some provinces purchased additional sample (1,200 in Alberta, 2,000 in British Columbia and 500 in Manitoba). Of the 13,909 Canadians surveyed, 2,085 were youth between the ages of 15 and 24 years. Interviews were conducted between December 16 and December 23, 2003 and from January 9 to April 19, 2004. The median interview time was 23 minutes. The CAS sample represents 24,214,815 Canadians aged 15 or older.

The CAS consisted of over 400 questionnaire items pertaining to the use of alcohol and illicit drugs, patterns of use, harms associated with such use, as well as opinions and attitudes toward substance use and related programs and policies. Questionnaire items were typically drawn from existing national surveys and internationally recognized scales for comparability over time.

A three-panel design was implemented to manage the range of items of interest in the CAS without increasing response burden. Demographic items and questions on prevalence of use and harms were asked of the full sample. Other items such as those examining driving while impaired or reasons for using or not using particular substances were asked only of certain panels. Each respondent was randomly assigned to one of three panels, totalling approximately 4,600 respondents in each panel. Accordingly, the number of cases available for analysis with the “panelized” questions was reduced as were many possible further in-depth analyses of these questions. Table 2.1 presents the breakdown of the panels for youth by the main demographic characteristics examined in this report.

Weighting and Design Effect

The weighting adjustment ensures that weighted CAS distribution compares favourably to census data for sex, age and province. The weights for the CAS sample are based on 252 population classes based on 21 regional strata by six age groups and by sex. The CAS sample tends to under-represent respondents who were never married and had some post-secondary education and over-represent respondents who were married and had a university degree.

As mentioned, the CAS is a complex sampling design, which includes stratification, weighting and multi-stage selection. Such complex survey designs underestimate the variance and the confidence intervals of estimates if assumptions of simple random sampling assumptions are used. In the CAS design, the design effects are primarily influenced by the two-stage selection and the disproportional sampling fractions related to equal provincial allocations. The CAS generally has a design effect of about 3.4, which indicates that the sampling design results in national sampling errors are three times higher than they would be if a simple random sample had been used. All estimates of variances, confidence intervals and related statistical tests are based on Taylor series methods implemented in Stata (Korn and Graubard, 1999; StataCorp, 2003) in order to account for the sample design and design effects.

Precision and Stability

There are two aspects to the statistical quality of survey data: precision—typically measured by the 95% confidence interval (CI), and stability—typically measured by the coefficient of variation (CV). This report follows Statistics Canada guidelines for ensuring the presentation of statistically reliable data. Estimates are evaluated as follows:

CV range	Estimate stability
0–16.5	Estimate stable and reportable
16.6–33.3	Estimate has moderate sampling variability and should be interpreted with caution
33.3+	Estimate unstable and is suppressed

In addition to the use of the CV, estimates were also suppressed when the underlying cell sizes were less than 30.

Key Independent Variables

The following variables are commonly used throughout the various chapters in examining predictors of different outcomes for youth. Outcome variables are described in the relevant chapters.

Measure	Categories
Sex	Men; women
Age	3 categories: 15 to 17; 18 to 19; 20 to 24 to examine different outcomes specifically in youth; in addition some comparisons were made between youth 15 to 24, and the total population aged 15+ or adults only aged 25+.
Region	5 regions: used instead of province to maintain sufficient cell/sample sizes for comparisons—Atlantic, Ontario, Quebec, Prairie and British Columbia.
Income Adequacy	Income adequacy is based on the combination of household income and number of residents in household: lowest, <\$20K with 1 to 4 people or <\$30K with 5+ people; highest, \$60K+ with 1 to 2 people or \$80K+ with 3+ people; not reported, did not report income; middle, all other respondents.
Household Location	Rural versus non-rural. Rural is defined by the presence of a “0” in the second character of the respondent’s postal code.

Because youth of all ages have not had the equal opportunity to have completed all educational levels, education was omitted from the analyses. In addition, where relevant, age of initiation was also included as an independent variable in the regressions; for instance when looking at alcohol outcomes, age of alcohol initiation was used, and when looking at cannabis outcomes, age of cannabis initiation was used. In cases where it was possible to control for age of initiation, two regressions were conducted: one with only the demographic variables and one also including age of initiation; however, discussion and interpretation of the results was done only for the more detailed regression, that including age of initiation.

In the CAS (2004), a total of 13,909 Canadians, 15 years of age or older, were surveyed; 2,085 (16.5% weighted) of these were youth. Table 2.2 presents the demographic distribution of youth across the main demographic variables of interest and those that were controlled for in many of the analyses included in the youth report. When including the region variable in the analyses for youth, there are some breakdowns that lead to suppressed estimates for Quebec or Ontario. Any significant main effects of region wherein one or more regions has been suppressed should therefore be interpreted with caution. In some cases, additional supplementary analyses have been conducted to deal with this limitation.

Table 2.3 examines how the sample of youth surveyed by the CAS compares with the general population of youth surveyed by Census 2001 in terms of sex, age, region and education. Regarding the breakdown of youth by sex and region, the CAS sample of youth was similar to that of the Canadian census. In terms of age, however, the CAS sample underestimated 15- to 17-year-olds and overestimated 20- to 24-year-olds; in terms of education, the CAS sample underestimated youth with less than a high school education and those with some post-secondary education, and overestimated youth who had completed high school or had a university degree.

Description of Analyses

Analysis of the questions entailed both univariate and multivariate tests. To describe general trends or prevalence issues, univariate tests, more specifically cross-tabulations, were used to examine the distribution of responses to various questions across the major demographic variables of interest (e.g. the proportion of females who drank versus the proportion of males who drank, or differences in the proportion of residents from the British Columbia region who drank compared with the proportion who drank from the Atlantic Region).

It is imperative to go beyond looking at independent variables in isolation (i.e. the cross-tabulation results) in assessing the association between a dependent variable and two or more independent variables (predictors). This is because independent variables are often inter-related to varying degrees. Since the variables of interest are categorical, the method of choice is logistic regression. To determine where differences in the demographic variables lie, multivariate analyses were conducted using logistic regression to examine any differences in the characteristics of respondents who drank, used cannabis or used illicit drugs versus those who did not, or between those who experienced harms from such use compared with those who did not. The independent variables of interest included sex, age, region, household location and income adequacy.

The term “logistic regression” comes from the use of “logit” or transformed “odds” as the dependent variable. If a predictor is significant, it can be interpreted in terms of the direction and size of its odds ratio. An odds ratio greater than 1.0 indicates a greater than average odds, while an odds ratio less than 1.0 indicates a smaller than average odds for the dependent variable. The strength of a significant contribution can be judged by the adjusted odds ratio for a predictor. For odds ratios greater than one, the higher the ratio, the stronger the contribution is, whereas the opposite holds for odds ratios that are smaller than one. When a given predictor is significant, it is interpreted using the adjusted odds. This indicates that the predictor is significant when taking into account (adjusting for) all other predictors.

In addition to general descriptive analyses, in some instances it is important to examine changes in prevalence rates over time, such as differences obtained between the National Alcohol and Other Drugs Survey (NADS, 1989), Canada’s Alcohol and Other Drugs Survey (CADS, 1994), and the CAS (2004). Evaluations of trends (i.e. changes from the 1989 NADS, to the 1994 CADS, to the 2004 CAS) were based on differences between confidence intervals. Significance was evident by non-overlapping confidence intervals. This method is crude, but conservative.

Data Limitations

The limitations of the CAS are those common to large telephone-based surveys involving self-report measures (Adlaf et al., 2005). For example, such surveys tend to over-represent those with higher education and under-represent those with lower education.

Telephone surveys assume that everyone in the population lives in a conventional residence with telephone access. However, a small proportion of Canadian households do not have telephones while other groups would not be accessed this way because they are in hospitals, prisons, military establishments or homeless. Nevertheless, since one of the objectives of the CAS was to generate estimates of the prevalence of substance use and abuse for the general population of Canada, the relatively small size of these excluded populations should have minimal effect on the reliability of estimates for the broader population.

Some interviews could not be completed because respondents could not adequately converse in English or French or were too ill or unable to respond.

The CAS deals with a sensitive subject matter—asking people to report behaviours that may not be socially acceptable and possibly even illegal. As a result, it is expected that some under-reporting of such behaviours may occur. In addition, when examining such issues in youth, this tendency may be inflated due to the presence of parental figures nearby and the fact that among under-age youth, even the purchase of alcohol is illegal. However, there is no more efficient way to obtain such information from a sample large enough to be representative of the population of Canada and its 10 provinces (territories not included). Additionally, as noted by Adlaf et al. (2005), while this bias may influence estimates for a single point in time, it likely remains quite stable over time, thus having less of an impact on estimating trends as long as under-reporting remains consistent.

Table 2.1: Number of respondents by panel, youth aged 15–24

	Panel A	Panel B	Panel C
Sex			
Male	339	347	353
Female	352	348	346
Age			
15–17	201	195	185
18–19	141	143	155
20–24	349	357	359
Region			
Atlantic	176	165	190
Quebec	44	53	51
Ontario	48	41	57
Prairie	266	279	265
British Columbia	157	157	136
Household Location			
Rural	122	130	112
Non-rural	569	565	587
Income Adequacy			
Lowest	100	97	92
Middle	225	213	237
Highest	97	100	116
Not stated	269	285	254

Table 2.2: Demographic distribution of youth surveyed in the CAS (2004)

	Number	Unweighted %	Weighted %
Sex			
Male	1,039	49.8	51.1
Female	1,046	20.2	48.9
Age			
15-17	581	27.9	25.3
18-19	439	21.0	21.8
20-24	1,065	51.1	52.9
Region			
Atlantic	531	25.5	7.6
Quebec	148	7.0	23.6
Ontario	146	7.0	37.5
Prairie	810	38.8	18.3
British Columbia	450	21.6	13.0
Household Location			
Rural	364	17.5	12.7
Non-rural	1,721	82.5	87.3
Income Adequacy			
Lowest	289	13.9	13.5
Middle	675	32.4	33.8
Highest	313	15.0	17.0
Not stated	808	38.8	35.7
Education			
< High school	628	30.1	27.5
Completed high school	704	33.8	33.5
Some post-secondary	572	27.4	28.6
University	174	8.3	10.4
Education 15-17			
< High school	475	82.0	78.5
Completed high school	94	16.2	19.0
Some post-secondary	10	1.7	2.5
University	0	0	0
Education 18-19			
< High school	65	14.9	16.7
Completed high school	254	58.1	58.0
Some post-secondary	111	25.4	24.5
University	7	1.6	0.8
Education 20-24			
< High school	88	8.3	7.6
Completed high school	356	33.5	30.3
Some post-secondary	451	42.5	42.7
University	167	15.7	19.4

Table 2.3: Selected demographic characteristics: weighted CAS 2004 versus 2001 Census data, Canada, aged 15–24

	CAS 2004 (N = 2,085)				2001 Canada Census (N = 4,043,877)
Sex					
Male	47.3	51.1	54.9		51.1
Female	45.1	48.9	52.7		48.9
Age					
15-17	22.2	25.3	28.6	*	31.1
18-19	18.8	21.8	25.2		20.1
20-24	49.1	52.9	56.7	*	48.8
Region					
Atlantic	6.8	7.6	8.4		7.8
Quebec	20.7	23.6	26.8		24.0
Ontario	33.7	37.5	41.5		37.2
Prairie	16.8	18.3	20.0		18.2
British Columbia	11.7	13.0	14.3		12.8
Education					
< High school	24.3	27.5	30.9	*	42.6
Completed high school	30.0	33.5	37.2	*	15.6
Some post-secondary	25.3	28.6	32.1	*	36.5
University degree	8.2	10.4	13.2	*	5.4

Notes: CAS data refer to lower limit of 95% confidence interval, percentage estimate, and upper limit of 95% confidence interval.

*: indicates census data are not within the bounds of the CAS CI.

Source: Statistics Canada [online]. Available: <http://www12.statcan.ca/english/census01/release/index.cfm>

Chapter 3: Alcohol Use and Harms

Highlights

- Alcohol is the psychoactive substance most commonly used by Canadian youth, with 90.8% of youth having used alcohol in their lifetime and 82.9% having used alcohol in the past 12 months
- The mean age at which youth started drinking alcohol was 15.6 years.
- Of the 82.9% of youth who consumed alcohol over the past year, over one third (36.9%) reported doing so at least once a week, and 33.7% reported consuming 5 or more drinks per typical drinking occasion.
- The most common drinking pattern among youth is light/infrequent (38.7%).
- Among youth, 13.8% of past-year drinkers reported heavy drinking at least once a week, and 46.0% reported doing so at least once monthly.
- Youth had higher rates than the general population of reported lifetime harms (33.7% versus 24.2%) and harms in the past year (21.8% versus 8.8%) as a result of their own drinking.

Introduction

The focus of this chapter is on the use of alcohol among youth aged 15 to 24 and problems they experience as a result of their alcohol use. In addition, whether or not youth have a higher prevalence of use, higher frequency of use, higher quantity consumed per occasion, or more problems associated with their use than adults will be examined.

This chapter will report on five measures of alcohol use, including drinking status, drinking frequency, usual consumption, frequency of heavy drinking and compliance with low-risk drinking guidelines.

Drinking status was derived from two questions: “During the past 12 months, have you had a drink of beer, wine, liquor or any alcoholic beverage?” Those who answered “No” were then asked if they had ever had a drink. Three types of drinkers were defined: “past-year drinkers”, those who consumed alcohol in the 12 months prior to completion of the survey; “former drinkers”, those who had not consumed alcohol in the 12 months prior to the survey, but who had consumed in their lifetime; and “abstainers”, those who never had an alcoholic beverage in their lifetime.

Because age of alcohol initiation has been linked to an increased risk for the development of alcohol disorders and other problems later in life, the mean age of alcohol initiation was examined (DeWit, Adlaf, Offord and Ogborne, 2000). The mean age at which youth started drinking alcohol was examined by asking respondents: “Not counting small sips, how old were you when you started drinking alcoholic beverages?”

Drinking frequency was derived from the question: “How often did you drink alcoholic beverages during the past 12 months?” The answers were grouped into four categories: less than once a month, one to three times a month, one to three times a week, and four times or more a week.

Usual consumption of alcohol referred to the usual number of drinks the respondent had on the days he or she consumed alcohol. Usual consumption was measured from the question: “During the past 12 months, on those days when you drank, how many drinks did you usually have?” The answers were recorded in three categories: one or two drinks, three or four drinks, five drinks or more.

Heavy drinking is defined as five or more drinks in a single sitting for males and four drinks or more for females. The frequency of heavy drinking over the past year was assessed in six categories: never; less than once a month; once a month; two to three times a month; once a week; more than once a week. Two variables were derived from the frequency of heavy drinking: monthly heavy drinking and weekly heavy drinking, which correspond to those who drink heavily at least monthly (including weekly) and at least weekly (respectively) over the past 12 months.

Low-risk drinking guidelines were disseminated in 1994 following an international conference on health benefits and risks (Ashley, et al., 1994). In 1997, revised guidelines were released by the former Addiction Research Foundation, now Centre for Addiction and Mental Health (CAMH), and the Canadian Centre on Substance Abuse (CCSA) and have been endorsed by various provincial governments and non-government agencies. These guidelines recommend that men and women limit weekly alcohol intake to no more than 14 and 9 standard drinks, respectively, and that alcohol intake on any one day should generally be limited to 2 standard drinks. These guidelines were intended to represent the low risk of the most important forms of harms associated with drinking alcohol. Compliance with the low-risk drinking guidelines is derived from the respondents' self-reported consumption of standard drinks over the past seven days, measured daily. Respondents are considered to have exceeded the guidelines if they report a total weekly consumption of 15 drinks or more for males or 10 drinks or more for females, or for both a daily consumption exceeding 2 drinks at least once over the past week.

Related to self-reported heavy drinking and low-risk drinking guidelines, harms associated with such use were also measured. The Alcohol Use Disorders Identification Test (AUDIT) was one test used to examine harmful and hazardous patterns of alcohol use, as well as harmful consequences of that use and indications of dependency. The development of the AUDIT was supported by the World Health Organization and consists of a 10-item questionnaire. The AUDIT was primarily used to screen for alcohol problems in clinical settings; however, it can be used in research to assess

the prevalence of high-risk alcohol use in large groups. According to Babor, Higgins-Biddle, Saunders, and Monteiro (2001, p. 19), an AUDIT score of 8 or more indicates harmful use or possibly alcohol dependence. Since the present analysis of the scores is of a sample of respondents representing the Canadian population—as opposed to a clinical sample—the results should be interpreted with caution and scores of 8 or more should not be viewed as “alcoholism” but rather as an indicator of “high-risk drinking”.

In addition to the AUDIT, questions that examine the prevalence of harms associated with respondents' own alcohol use will be examined, as well as those about harms to respondents aged 18 years or over due to someone else's alcohol use.

Results

Proportion of Youth Who Drink

Among youth, like adults, alcohol is the psychoactive substance most commonly used. In the 12 months before the survey, 82.9% of Canadian youth had consumed alcohol, 7.9% were former drinkers and 9.2% had never consumed alcohol in their lifetime (Table 3.1). Furthermore, a higher proportion of adults were former drinkers than youth (14.6% versus 7.9%), and a higher proportion of youth than adults were current drinkers (82.9% versus 78.8%).

There were no differences between males and females in the prevalence of current (83.5% versus 82.3%, respectively) or lifetime (90.8% versus 90.9%, respectively) alcohol use. In addition, there were no sex differences in prevalence of lifetime or current use among youth aged 15 to 17, 18 to 19, or 20 to 24. This is different from adults—males are more likely than females to report current alcohol use (81.8% versus 76.1%, respectively) and lifetime alcohol use (94.9% versus 92.1%, respectively). This seems to indicate that the differences in the rate of alcohol use between males and females appear later rather than earlier in life.

Table 3.1 also shows the relationship between drinking and each of the demographic characteristics when all the characteristics are taken into account at the same time. Among youth, there were no differences between males and females in the rate of past-year drinking. Youth 18 to 19 years old were more likely than those 15 to 17 years old to report past-year drinking (90.8% versus 62.3%); no differences were observed between those 18 to 19 and 20 to 24 years of age (90.8% versus 89.5%). Although a main effect of region was not significant when all factors were controlled for, youth from Quebec were more likely than those from the rest of Canada to report consuming alcohol in the past year (89.8%). In addition, while past-year drinking increased according to income adequacy in the general population, no differences in rates were observed for youth.

Mean Age of Drinking Initiation

Age of alcohol initiation has been linked to later alcohol-related problems and patterns (Gruber, DiClemente, Anderson and Lodico, 1996; DeWit et al., 2000; Kraus, Bloomfield, Augustin and Reese, 2000; Pitkanen, Lyyra and Pulkkinen, 2005). In addition, it has been found that about 40% of those who start drinking at age 14 or under develop alcohol dependence at some point in their lives, whereas for those who start drinking at age 21 years or older, only 10% develop dependence (Kosterman, et al., 2000).

The mean reported age of first alcohol use among youth was 15.6 years. There were no differences between the mean age reported by males (15.7 years) and that reported by females (15.4 years).

There were regional differences, however, in the mean age of alcohol initiation; youth from Quebec had a significantly younger mean age of initiation than those from the rest of Canada (15 years), and those from the Atlantic and Ontario regions had later ages (16 years).

Frequency of Drinking

In addition to prevalence of use, the CAS provided information on how often and how much individuals drink (Tables 3.2 and 3.3, respectively). Of the 82.9% of Canadian youth who reported having consumed alcohol over the past year, over one third (36.9%) reported doing so at least once a week. More specifically, 42.3% of Canadian youth consumed alcohol approximately 1 to 3 times a month, 33.8% did so 1 to 3 times a week, 20.8% did so less than once a month, and 3.1% consumed alcohol 4 or more times a week (Table 3.2). Youth consumed alcohol less frequently than adults; a higher proportion of youth reported drinking 1 to 3 times a month (42.3% versus 31.3%), whereas a lower proportion of youth reported doing so 4 or more times a week (3.1% versus 11.5%).

As with the general population, the frequency of drinking among youth varied according to gender, age and region. Males were more likely than females to consume alcohol 1 to 3 times a week and 4 or more times a week over the past year, while females were more likely than males to report consuming less than once a month or 1 to 3 times a month. Older youth were more likely to report a consumption pattern of 1 to 3 times a week, whereas the younger age groups of youth were more likely to report a consumption pattern of less than once a week. In addition, youth from the Atlantic (31.0%) and British Columbia (27.2%) regions were more likely to report consuming alcohol less than once a month, and those from the British Columbia region were less likely than those from the rest of Canada to report consuming 1 to 3 times a week. Youth who started drinking at a younger age were more likely to consume alcohol 4 or more times a week when compared with those who started drinking at a later age (Table 3.2).

Usual Quantity Consumed

While the CAS detailed report revealed that most Canadians overall tend to drink in moderation (Adlaf et al., 2005), this was not the case with youth. Instead, there was a fairly consistent distribution across the drinking patterns of 1 to 2 drinks (37.3%), 3 to 4 drinks (29.0%) and 5 or more drinks (33.7%) per typical drinking day for youth (Table 3.3). While Table 3.2 revealed that youth tend to drink less frequently than adults, Table 3.3 reveals that when they do drink, they drink much more. More specifically, youth were more likely than adults to consume 3 to 4 drinks (29.0% versus 18.6%) and 5 or more drinks (33.7% versus 12.6%) on a typical drinking day and, as a corollary, less likely to report consuming 1 to 2 drinks (37.3% versus 68.8%).

Among youth, as with the general population, moderate drinking (1 to 2 drinks) was more common among females than males (47.1% versus 28.2%). Youth from the Atlantic region were less likely (26.2%) and those from the Quebec region were more likely (43.9%) to drink moderately than the rest of Canada. In addition, youth who had started drinking at a later age were more likely to drink moderately per typical drinking day than those who started drinking younger.

Approximately one in three youth (33.7%) reported that they usually drank 5 or more drinks per typical drinking day. This level of consumption is more likely to be associated with an increased risk of alcohol-related problems. This pattern of drinking was more common among males, approximately 2 times more likely than females (42.7% versus 24.0%), and although a main effect of age was not significant when controlling for other factors, youth 18 to 19 years of age were more likely than those aged 15 to 17 (42.5% versus 28.8%) to drink 5 or more per typical drinking day. In terms of region, youth from the Atlantic region were more likely (48.8%) than those from the rest of Canada to report consuming 5 or more drinks per typical drinking day, as were youth who had started drinking at an earlier age.

Drinking Patterns

In terms of the quantity and frequency of alcohol consumed, respondents can be classified into one of six patterns of use:

- **Lifetime abstainers**, never had alcohol
- **Former drinkers**, drank sometime during their lives but not during the past 12 months
- **Light infrequent drinkers**, drink less often than once a week, usually fewer than 5 drinks when alcohol is used
- **Light frequent drinkers**, drink once a week or more, usually fewer than 5 drinks when alcohol is used
- **Heavy infrequent drinkers**, drink less often than once a week, usually 5 or more when alcohol is used
- **Heavy frequent drinkers**, drink once a week or more, usually 5 or more drinks when alcohol is used

The most common drinking pattern reported by youth was a light infrequent (38.7%) pattern, followed by light frequent (16.1%), heavy frequent (14.5%), heavy infrequent (13.3%), abstainer (9.3%), and former drinker (8.1%) (Table 3.4). Youth were more likely than adults to be abstainers (9.3% versus 6.6%), heavy infrequent drinkers (13.3% versus 4.1%) and heavy frequent drinkers (14.5% versus 5.8%), whereas adults were significantly more likely than youth to be former drinkers (14.8% versus 8.1%) and light frequent drinkers (30.2% versus 16.1%). Among youth, males were more likely than females to report a heavy frequent drinking pattern (19.2% versus 9.6%) and females were more likely to report a light infrequent pattern (49.4% versus 28.6%).

Tables 3.5, 3.6, 3.7 and 3.8 examine the relationship between each of the drinking patterns among current drinkers (heavy frequent, heavy infrequent, light frequent and light infrequent) and the demographic characteristics when all these characteristics are taken into account at the same time. Heavy frequent drinking was more common among males, youth aged 18 to 19, those from the Atlantic region and those in the middle and highest income categories (Table 3.5).

Heavy infrequent drinking was more prevalent among males, youth aged 15 to 17 and 18 to 19, and those from the Atlantic and Prairie regions (Table 3.6).

Males, youth aged 20 to 24 and those from Quebec were more likely to report drinking lightly and frequently. Alternatively, females and youth in the middle or highest income adequacy groups were significantly less likely to do so (Table 3.7).

Females were more likely than males and youth aged 15 to 17 were more likely than those aged 18 to 24 to report drinking light and infrequently, as were those who had started drinking at a later age (Table 3.8).

Given the relatively small number of respondents in some categories when examining the four different drinking patterns above, youth were classified into one of two drinking patterns: heavy (infrequent and frequent) and light (infrequent and frequent). The results of these analyses are presented in Tables 3.9 and 3.10.

Among current drinkers 15 to 24 years of age, males were more likely than females to report drinking heavily (frequently/infrequently) (42.7% versus 24.0%) (Table 3.9). Heavy drinking was highest among 18 to 19 year olds. In addition, youth from the Atlantic region were more likely (48.8%) to report drinking heavily than those from the rest of Canada, and youth from the Quebec region were less likely. Overall, there was an inverse relationship between heavy drinking and age of alcohol initiation; in general, youth who started drinking earlier were significantly more likely to report drinking heavily.

Among current drinkers (Table 3.10), females were more likely than males (76.0% versus 57.3%), youth aged 15 to 17 were more likely than 18 to 19 year olds (71.2% versus 57.5%), youth from the Atlantic region were less likely (51.2%) and those from the Quebec were more likely (80.6%) to report drinking lightly (frequently/infrequently). In addition, as age of alcohol initiation increased, so too did youths' likelihood of drinking lightly.

Heavy Drinking

Heavy drinking has been defined as having 5 drinks or more in a single sitting for men and 4 or more drinks on a single occasion for women (Hetzler and Burnham, 1991; Wechsler et al., 1995).

Monthly and weekly heavy drinking was examined in more detail using the CAS data. Forty-six percent (46.0%) of past-year youth drinkers reported heavy drinking at least once a month, and 13.8% reported this pattern of drinking at least once a week (Table 3.11). These numbers reported by youth are almost double those reported by the total population aged 15 or over (Adlaf et al., 2005) and more than double those reported by adults (21.7% and 4.8%, respectively).

Among youth, males were more likely than females (52.0% versus 39.7%), youth 18 to 19 years old were more likely than those 15 to 17 years old (51.8% versus 35.7%) and those from the Atlantic region were more likely than those from the rest of Canada to report heavy drinking at least once a month (54.3% versus 46.0%). The only demographic characteristic related to weekly heavy drinking among youth was sex; males were more likely than females to report a heavy drinking pattern (17.4% versus 10.0%). In addition, age of alcohol initiation was associated with heavy monthly and weekly drinking; youth who started drinking at a younger age were more likely than those who started drinking later, to report heavy drinking monthly or weekly.

Exceeding Low-Risk Drinking Guidelines

In examining the low-risk drinking guidelines among youth, it must be noted that these guidelines were not developed for youth, and thus examining them among a sample of youth must be done with caution and for descriptive purposes only. Specifically, the low-risk drinking guidelines apply to people of legal drinking age only and are intended to represent the low risk of the most important forms of harm. Overall, the reported rate of exceeding the low-risk drinking guidelines was higher among youth than adults (34.1% versus 20.7%) (Table 3.12).

Among youth, males (40.2%), youth from the Atlantic region (36.5%) and those in the highest income adequacy group (49.9%) were more likely to have exceeded the low-risk drinking guidelines than females (27.7%), youth from Canada overall (34.1%) or youth in the lowest income adequacy group (33.4%). Youth from the British Columbia region (28.9%) were less likely than youth from the other regions to exceed the guidelines. In addition, age of alcohol initiation was inversely related; those who started drinking at a younger age were more likely to exceed the low-risk drinking guidelines.

Hazardous Alcohol Use as Indicated by the Alcohol Use Disorders Identification Test (AUDIT)

Table 3.13 displays percentages of current drinkers aged 15 to 24 with AUDIT scores of 8 or higher. According to this criterion, the total of high-risk drinkers among youth is 36.1%, almost double the reported national average of 17% (Adlaf et al., 2005) and more than double that reported by adults aged 25 or over (13.4%).

Similar to results demonstrated by the general population, males 15 to 24 years of age were more than twice as likely as females to drink hazardously (44.7% versus 26.8%). The rate of hazardous drinking peaked among youth aged 18 to 19 (44.6%), with the odds doubling from 15 to 17 to 18 to 19 years of age. Similar to the provincial pattern found for the general population, rates of hazardous drinking among youth were higher in the Atlantic region (44.3%) and lower in Quebec (28.4%) than in the rest of the Canada. Among the general population, those in the highest income adequacy group were less likely to drink hazardously, but no such pattern was observed among youth. In addition, youth who started drinking earlier were more likely to drink hazardously.

These results, examining hazardous drinking, exemplify why patterns of use may often be more crucial to examine than actual non-descriptive prevalence rates of use. Specifically, youth from the Atlantic region show a lower prevalence of drinking yet higher rates of hazardous drinking; in contrast, youth from Quebec showed higher rates of use yet lower rates of hazardous drinking.

Harms Because of One's Own Drinking

Prevalence and incidence of types of harms

Although nearly a quarter of adult former and current drinkers (22.8%) reported that their drinking has caused harms to themselves and to others at some time in their lives and fewer than 1 in 10 (6.3%) stated that harms occurred during the past year, these numbers were much higher among youth. Specifically, among current and former drinkers, 1 in 3 youth (33.7%) reported that their drinking has caused harms to themselves and to others at some time in their lives, and slightly more than 1 in 5 (21.8%) reported that harms occurred during the past year (Table 3.14). Whether or not it can be extrapolated that most lifetime harms occurred while the adults were youth is beyond the scope of the CAS data.

Among youth, some types of harms are more frequent than others. More specifically, lifetime adverse effects of drinking on “friendships and social life” and on “physical health” (15.9% and 18.4%, respectively) were more prevalent than other types of harms. Youth were more likely than adults to report lifetime harms to their physical health (18.4% versus 14.3%) and financial position (11.2% versus 6.2%), as well as one or more types of harms overall in their lifetime (33.7% versus 22.8%), whereas they were significantly less likely than adults to report lifetime harms to their home life or marriage (6.0% versus 8.6%).

The most prevalent types of past-year reported harms among youth were friendships and social life, physical health and financial position (7.6%, 12.0% and 8.7%, respectively). Differences in past-year reported harms between youth and adults were more pronounced than lifetime reported harms, with a higher proportion of youth than adults reporting harms in all areas examined: friendships and social life, physical health, home life or marriage, work, studies or employment opportunities, financial position, legal problems, and learning.

The emergence of differential harms to one's financial position between youth and adults could be seen as an indication that pricing of alcohol products as a means of controlling access may have a differential effect among youth and could act as a deterrent to use more effectively among youth. Of course, a more detailed examination of this question than is possible to do using data from the CAS would be necessary.

Characteristics associated with lifetime and past-year reported harms due to one's use of alcohol

Youth aged 18 to 19 were more likely than those aged 15 to 17 to report experiencing harm in their lifetime (35.5% versus 28.8%). Although there was no significant main effect of region when controlling for other factors, youth from the Quebec region were less likely to have reported harms (27.9%) and those from the Prairie region were more likely (38.1%) when compared with the Canadian average. Age of alcohol initiation was inversely associated with lifetime harms. Youth who started drinking at an earlier age were more likely to have reported harms due to their alcohol use (Table 3.15).

The alcohol-related harms experienced by an individual can be hypothesized to be associated with their alcohol-related behaviour. Table 3.16 examines past-year reported harms among youth as a function of demographic characteristics as well as past-year drinking patterns. Without taking alcohol use patterns into account, youth aged 18 to 19 reported more harms in the past year due to their alcohol use than those aged 15 to 17. In addition, youth who began drinking earlier were more likely to have reported harms. When drinking behaviour was controlled for, there was no difference in the reported harms of 15- to 17-year-olds and 18- to 19-year-olds; however, 20- to 24-year-olds were significantly less likely to report harm. This means that the difference in past-year reported harms between 18- to 19- and 15- to 17-year-olds that is demonstrated when not taking drinking patterns into account can be accounted for by the fact that 18- to 19-year-olds drink more heavily and frequently than those aged 15 to 17. As such, when drinking frequency and amount are controlled for, there are no differences in reported harms between these two age groups. On the other hand, youth aged 18 to 19 are more likely to experience harms from drinking than youth aged 20 to 24 when drinking at comparable levels.

In addition, youth who drank other than light and infrequently were more likely to experience harms as a result of their alcohol use; those who drank heavily at least monthly were approximately 5 times more likely to experience harms than those who did not (35.8% versus 6.0%). There was no difference apparent in reported harms between youth who never drank heavily and those who did so less than monthly.

Harms Because of Others' Use of Alcohol
Prevalence of types of harms

Due to the sensitive nature of some questions dealing with harms from others' alcohol use, respondents aged 15 to 17 were not asked these questions.

The rate of youth reporting one or more types of harms over the past year as a result of others drinking was double that reported by adults (59.6% versus 28.8%). More specifically, a higher proportion of youth reported past-year harms from others in terms of having been insulted or humiliated (36.1% versus 20.0%), having had family or marriage problems (13.9% versus 9.9%), having been pushed or shoved (32.7% versus 7.5%), having had serious arguments or quarrels (31.9% versus 13.0%), been verbally abused (25.4% versus 14.4%), or having been hit or physically assaulted (10.1% versus 2.2%) (Table 3.17).

Among youth, instances of negative verbal interactions were the most common types of harms experienced, with 36.1% reporting that they had been insulted or humiliated and 31.9% reporting serious arguments or quarrels over the past year. While the rates of physical altercations were much less frequent in adults than other types of harms, in youth these were just as frequent as the verbal harms. Specifically, one third (32.7%) of youth reported having been pushed or shoved by someone who had been drinking, and a lesser yet still substantial proportion reported having been hit or physically assaulted (10.1%).

An examination of the demographic characteristics associated with harm due to others' alcohol use among youth revealed that those who started drinking earlier were more likely to have reported past-year harms due to others' drinking than those who started drinking at a later age (Table 3.18).

Summary and Discussion

Despite the fact that the legal drinking age is 18 or 19 across Canada, the majority of youth consumed alcohol, both currently (82.9%) and in their lifetime (90.8%) even among those under the legal drinking age. Although there was no difference in the rate of alcohol use by youth and adults, when examining the frequency and patterns of use, many differences emerged. More specifically, youth consumed alcohol less frequently than adults; however, when they drank, they tended to drink more. The rates of heavy monthly and weekly drinking among youth were almost double that of adults, they had higher rates of exceeding the low-risk drinking guidelines, and more than doubled the rate of adults for hazardous drinking and quantity consumed per occasion. In light of these findings, it should come as no surprise that the rate of harms experienced by youth as a result of one's own drinking was also significantly higher than that of adults.

Youth are not a homogeneous group when it comes to alcohol use, frequency and quantity of use, and patterns of use. Among youth, there were no differences between males and females in terms of the prevalence of current and lifetime alcohol use; however, males were more likely than females to drink more frequently, to consume more per occasion and to report drinking heavily. In addition, youth aged 15 to 17 consumed less frequently, had fewer drinks per occasion and were less likely to drink heavily and hazardously. The mean age of alcohol initiation among youth was 15.6 years, and this was associated with several different outcome variables. More specifically, the younger that youth started drinking, the more likely they were to report consuming more per typical occasion, exceeding the low-risk drinking guidelines, and drinking heavily monthly and weekly. Youth who started drinking earlier were also more likely to have reported alcohol-related harms than those who started drinking at a later age. These findings reinforce the fact that age of initiation is an important factor to take into account in prevention and intervention efforts directed at youth since it is so tightly connected to the outcomes of alcohol use by youth.

Several findings from examination of the region variable should be noted. Firstly, youth from Quebec started drinking earlier and those from the Atlantic region later. Secondly, when looking at the above findings regarding age of alcohol initiation, one would expect that youth from the Quebec region would engage in more harmful patterns of drinking and exhibit more harm, whereas youth from the Atlantic region would display the opposite. This was not the case. Although youth from Quebec had a higher prevalence of current alcohol use, they did not display the significantly more harmful patterns of drinking than youth from the rest of Canada that one would expect given their younger age of initiation. Instead, youth from Quebec were more likely to consume fewer drinks per occasion, less likely to drink heavily (infrequently/frequently) and less likely to drink hazardously. In addition, Quebec youth were not significantly more likely to report alcohol-related harms. In contrast, although youth from the Atlantic region started drinking at a later age, these youth were less likely to consume fewer drinks per occasion and more likely to consume 5 or more, they were more likely to drink heavily, to have exceeded the low-risk drinking guidelines, and also more likely to drink hazardously than youth from the rest of Canada. These findings are interesting in that while age of initiation is an important factor to target in intervention efforts, it is clear that other factors are at play when it comes to the patterns of drinking by youth. Examining the nature of these factors is beyond the scope of this study; nonetheless, they are deserving of greater investigation, primarily for what they might offer in terms of prevention and intervention.

Table 3.1: Type of drinker by demographic characteristics, Canada, aged 15–24, 2004

	N	Lifetime abstainers		Former drinkers		Past-year drinkers		Adjusted OR
		%	[95% CI]	%	[95% CI]	%	[95% CI]	
Total adults aged 25+	11,519	6.5	[5.7-7.4]	14.6	[13.5-15.8]	78.8	[77.5-80.2]	
Total youth 15-24	2,085	9.2	[7.1-11.8]	7.9	[6.2-10.2]	82.9	[79.8-85.6]	
Sex								
Male	1,039	9.2	[6.3-13.3]	7.3	[5.1-10.3]	83.5	[79.0-87.1]	1.048
Female [comparison group]	1,046	9.1	[6.4-12.8]	8.6	[6.0-12.2]	2.3	[77.7-86.1]	--
Age [comparison group is previous]								
15-17	581	23.2	[17.3-30.4]	14.5	[10.0-20.6]	62.3	[55.1-69.0]	--
18-19	439	s	s	s	s	90.8	[85.6-94.2]	5.815**
20-24	1,065	5.0	[3.0-8.2]	5.5	[3.7-8.3]	89.5	[85.7-92.3]	0.794
Region [comparison group is Canada]								
Atlantic	531	10.8	[8.2-14.2]	7.5	[5.4-10.3]	81.6	[77.8-85.0]	0.976
Quebec	148	s	s	s	s	89.8	[83.7-93.7]	1.773*
Ontario	146	s	s	s	s	80.3	[72.6-86.2]	0.732
Prairie	810	9.2	[7.3-11.4]	9.4	[7.5-11.7]	81.4	[78.5-84.1]	0.893
British Columbia	450	10.3	[7.8-13.5]	9.1	[6.7-12.1]	80.7	[76.7-84.1]	0.884
Household Location								
Rural [comparison group]	364	10.4	[6.0-17.5]	7.5	[4.4-12.5]	82.1	[74.5-87.7]	--
Non-rural	1,721	9.0	[6.8-11.9]	8.0	[6.0-10.5]	83.0	[79.6-86.0]	0.977
Income Adequacy								
Lowest [comparison group]	289	s	s	s	s	90.2	[83.9-94.3]	--
Middle	675	8.7	[5.3-13.8]	7.0	[4.3-11.2]	84.3	[78.5-88.8]	0.687
Highest	313	s	s	s	s	89.1	[80.7-94.1]	1.069
Not stated	808	13.1	[9.4-18.1]	11.1	[7.8-15.5]	75.8	[70.1-80.7]	0.547

Notes: s = estimate suppressed due to high sampling variability (or cell size less than 30);

*p < 0.05; **p < 0.01.

Table 3.2: Drinking frequency (adjusted OR) over the past year among past-year drinkers, by demographic characteristics and age of alcohol initiation, Canada, aged 15-24, 2004

	N	Less than once a month % [CI]	1-3 times a month % [CI]	1-3 times a week % [CI]	4+ times a week % [CI]
Total among adults aged 25+ (drinkers)	8,793	22.9 [21.4-24.5]	31.3 [29.6-33.1]	34.3 [32.5-36.2]	11.5 [10.2-12.9]
Total among youth aged 15-24 (drinkers)	1,709	20.8 [17.8-24.1]	42.3** [38.2-46.4]	33.8 [30.0-38.0]	3.1** [1.8-5.4]
Sex			**	**	**
Male	857	16.3**(0.6) [12.8-20.5]	37.5**(0.6) [31.9-43.3]	40.8**(2.0) [35.1-46.8]	5.4**(9.5) [2.9-9.8]
Female [comparison group]	852	25.5 [20.9-30.8]	47.3 [41.6-53.1]	26.4 [21.5-32.0]	s
Age [comparison group is previous]		**		**	
15-17	377	37.9 [30.2-46.3]	44.7 [36.6-53.1]	15.4 [10.1-22.7]	s
18-19	389	21.9*(0.4) [15.4-30.2]	44.0 [35.6-52.8]	30.7**(2.5) [23.1-39.4]	s
20-24	943	14.6*(0.6) [11.6-18.3]	40.7 [35.3-46.3]	41.3*(1.7) [35.8-47.0]	s
Region [comparison group is Canada]		*			
Atlantic	430	31.0*(1.4) [26.4-36.1]	41.2 [36.1-46.4]	26.9 [22.5-31.8]	s
Quebec	133	18.8Q [13.0-26.3]	41.9 [33.8-50.5]	38.5 [30.7-47.1]	s
Ontario	119	16.4Q [10.7-24.3]	41.7 [32.9-51.1]	36.8 [28.3-46.1]	s
Prairies	663	23.7 [20.6-27.2]	43.5 [39.7-47.4]	29.3 [25.9-33.0]	s
British Columbia	364	27.2*(1.3) [22.8-32.1]	43.3 [38.3-48.5]	26.5*(0.8) [22.2-31.3]	s
Household Location		*			
Rural [comparison group]	283	32.3 [23.4-42.7]	36.6 [27.3-47.0]	29.6 [20.6-40.5]	s
Non-rural	1,426	19.1*(0.5) [16.1-22.6]	43.1 [38.7-47.6]	34.5 [30.2-38.9]	3.4 [1.8-6.0]
Income Adequacy					
Lowest [comparison group]	243	18.3 [11.8-27.4]	36.1 [26.6-46.9]	44.4 [33.7-55.6]	s
Middle	582	20.5 [15.7-26.4]	42.8 [35.8-50.1]	33.0 [26.7-40.1]	s
Highest	280	15.4 [9.8-23.2]	43.8 [34.2-54.0]	34.8 [25.7-45.2]	s
Not stated	604	25.2 [19.9-31.4]	43.5 [37.0-50.4]	29.4 [23.4-36.2]	s
Age Alcohol Initiation					** (0.7)

Notes: Q = qualified due to high sampling variability;

s = estimate suppressed due to high sampling variability (or cell size less than 30);

*p < 0.05; **p < 0.01.

The adjusted odds ratio when significant is presented in brackets (OR) besides the percentage.

Table 3.3: Usual quantity consumed on a typical drinking day over the past year among past-year drinkers (adjusted OR), by demographic characteristics, Canada, aged 15-24, 2004

	N	Not including age alcohol initiation			Including age alcohol initiation		
		1-2 drinks % [CI]	3-4 drinks % [CI]	5+ drinks % [CI]	1-2 drinks % [CI]	3-4 drinks % [CI]	5+ drinks % [CI]
Total adults aged 25+ (drinkers)	8,793	68.8 [67.0-70.6]	18.6 [17.1-20.2]	12.6 [11.4-13.9]	68.8 [67.0-70.6]	18.6 [17.1-20.2]	12.6 [11.4-13.9]
Total youth aged 15-24 (drinkers)	1,709	37.3 [33.3-41.5]	29.0 [25.3-33.0]	33.7 [29.9-37.6]	37.3 [33.3-41.5]	29.0 [25.3-33.0]	33.7 [29.9-37.6]
Sex		**		**	**		**
Male	857	28.2**(0.4) [23.0-34.1]	29.1 [23.8-35.0]	42.7**(2.3) [37.0-48.6]	28.2**(0.4) [23.0-34.1]	29.1 [23.8-35.0]	42.7**(2.5) [37.0-48.6]
Female [comparison group]	852	47.1 [41.3-53.1]	28.9 [23.9-34.4]	24.0 [19.4-29.2]	47.1 [41.3-53.1]	28.9 [23.9-34.4]	24.0 [19.4-29.2]
Age [comparison group is previous]							*
15-17	377	38.3 [30.3-47.1]	32.9 [25.4-41.4]	28.8 [22.0-36.6]	38.3 [30.3-47.1]	32.9 [25.4-41.4]	28.8 [22.0-36.6]
18-19	389	34.0 [26.0-43.0]	23.5 [17.0-31.6]	42.5*(1.8) [34.0-51.5]	34.0 [26.0-43.0]	23.5 [17.0-31.6]	42.5**(2.1) [34.0-51.5]
20-24	943	38.4 [33.0-44.1]	30.0 [24.9-35.6]	31.6*(0.6) [26.9-36.7]	38.4 [33.0-44.1]	30.0 [24.9-35.6]	31.6 [26.9-36.7]
Region [comparison group is Canada]		**		**	**		**
Atlantic	430	26.2**(0.7) [21.8-31.2]	25.0 [20.7-29.9]	48.8**(1.8) [43.5-54.1]	26.2**(0.6) [21.8-31.2]	25.0 [20.7-29.9]	48.8**(2.0) [43.5-54.1]
Quebec	133	43.9**(1.4) [35.7-52.5]	36.7*(1.5) [28.9-45.3]	s	43.9**(1.5) [35.7-52.5]	36.7**(1.6) [28.9-45.3]	s
Ontario	119	36.9 [28.3-46.3]	27.3 [19.8-36.4]	35.8 [27.5-45.0]	36.9 [28.3-46.3]	27.3 [19.8-36.4]	35.8 [27.5-45.0]
Prairies	663	33.5 [29.8-37.3]	25.7 [22.4-29.3]	40.8*(1.2) [37.0-44.8]	33.5 [29.8-37.3]	25.7 [22.4-29.3]	40.8 [37.0-44.8]
British Columbia	364	37.2 [32.3-42.4]	25.1 [20.8-29.9]	37.8 [32.9-42.9]	37.2 [32.3-42.4]	25.1 [20.8-29.9]	37.8 [32.9-42.9]
Household Location							
Rural [comparison group]	283	30.2 [21.3-40.9]	33.1 [23.8-43.9]	36.7 [27.3-47.3]	30.2 [21.3-40.9]	33.1 [23.8-43.9]	36.7 [27.3-47.3]
Non-rural	1,426	38.3 [34.0-42.9]	28.4 [24.4-32.8]	33.2 [29.2-37.5]	38.3 [34.0-42.9]	28.4 [24.4-32.8]	33.2 [29.2-37.5]
Income Adequacy							
Lowest [comparison group]	243	35.0 [25.3-46.1]	38.2 [27.7-49.9]	26.8 [19.0-36.5]	35.0 [25.3-46.1]	38.2 [27.7-49.9]	26.8 [19.0-36.5]
Middle	582	36.4 [29.6-43.9]	29.6 [23.4-36.5]	34.0 [27.6-41.0]	36.4 [29.6-43.9]	29.6 [23.4-36.5]	34.0 [27.6-41.0]
Highest	280	38.2 [29.0-48.4]	20.9*(0.4) [13.7-30.5]	40.9 [31.3-51.1]	38.2 [29.0-48.4]	20.9*(0.4) [13.7-30.5]	40.9 [31.3-51.1]
Not stated	604	38.9 [32.2-46.0]	28.8 [22.9-35.5]	32.3 [26.4-38.9]	38.9 [32.2-46.0]	28.8 [22.9-35.5]	32.3 [26.4-38.9]
Age Alcohol Initiation					(1.2)*		(0.8)**

Notes: s = estimate suppressed due to high sampling variability or cell size less than 30;

*p < 0.05; **p < 0.01.

The adjusted odds ratio when significant is presented in brackets (OR) beside the percentage.

Table 3.4: Past-year drinking status, Canada, 2004

	Adults aged 25+ % [CI]	Youth aged 15-24 % [CI]	Males aged 15-24 % [CI]	Females aged 15-24 % [CI]
Abstainer	6.6 [5.8-7.5]	9.3* [7.2-12.0]	9.3 [6.4-13.4]	9.3 [6.5-13.1]
Former	14.8 [13.7-16.0]	8.1** [6.2-10.3]	7.4 [5.2-10.4]	8.8 [6.1-12.5]
Light Infrequent	38.6 [36.9-40.2]	38.7 [35.0-42.4]	28.6 [23.9-33.7]	49.4** [44.0-54.7]
Light Frequent	30.2 [28.6-31.8]	16.1** [13.3-19.4]	19.2 [14.8-24.4]	12.9* [9.6-17.1]
Heavy Infrequent	4.1 [3.5-4.7]	13.3** [11.1-15.9]	16.4 [13.0-20.5]	10.1** [7.6-13.3]
Heavy Frequent	5.8 [5.0-6.6]	14.5** [12.0-17.4]	19.2 [15.3-23.7]	9.6** [6.7-13.4]

Note: *p < 0.05; **p < 0.01 = difference between adults aged 25+ and youth 15-24; between males and females aged 15-24.

Table 3.5: Proportion of respondents who reported drinking heavily frequently over the past year, current drinkers aged 15-24, Canada, 2004

	N	%	[95% CI]	OR	OR with age alcohol initiation
Total	1,709	17.5	[14.6-20.9]		
Sex				**	**
Male	857	23.0	[18.5-28.2]	2.154**	2.411**
Female [comparison group]	852	11.7	[8.3-16.2]	--	--
Age [comparison group is previous]					*
15-17	377	10.4	[6.1-17.1]	--	--
18-19	389	20.2	[13.8-28.5]	2.086	2.500*
20-24	943	18.8	[15.0-23.3]	0.954	1.113
Region [comparison group is Canada]					*
Atlantic	430	21.1	[17.1-25.8]	1.341*	1.507**
Quebec	133	s	[7.1-18.4]	s	s
Ontario	119	s	[14.7-29.4]	s	s
Prairie	663	18.1	[15.2-21.4]	1.047	1.007
British Columbia	364	16.3	[12.8-20.5]	0.931	0.891
Household Location					
Rural [comparison group]	283	16.5	[10.0-26.0]	--	--
Non-rural	1,426	17.7	[14.5-21.4]	0.936	0.959
Income Adequacy					
Lowest [comparison group]	243	10.8Q	[6.4-17.6]	--	--
Middle	582	18.4	[13.5-24.6]	1.922	2.082*
Highest	280	22.6	[14.9-32.6]	2.293*	2.471*
Not stated	604	16.8	[12.2-22.7]	1.899	2.072
Age Alcohol Initiation					**
					0.772**

Notes: Q = qualified due to high sampling variability;
s = estimate suppressed due to high sampling variability (or cell size less than 30);
*p < 0.05; **p < 0.01.

Table 3.6: Proportion of respondents who reported drinking heavily infrequently over the past year, current drinkers aged 15-24, Canada, 2004

	N	%	[95% CI]	OR	OR with age alcohol initiation
Total	1,709	16.1	[13.5-19.2]		
Sex				*	*
Male	857	19.7	[15.7-24.5]	1.742*	1.717*
Female [comparison group]	852	12.3	[9.3-16.2]	--	--
Age [comparison group is previous]				*	*
15-17	377	18.4	[13.3-24.9]	--	--
18-19	389	22.3	[15.8-30.6]	1.248	1.261
20-24	943	12.8	[9.9-16.5]	0.492*	0.487*
Region [comparison group is Canada]				**	**
Atlantic	430	27.7	[23.2-32.7]	1.782**	1.824**
Quebec	133	s		s	s
Ontario	119	s		s	s
Prairie	663	22.7	[19.6-26.3]	1.371*	1.361*
British Columbia	364	21.5	[17.5-26.0]	1.309	1.302
Household Location					
Rural [comparison group]	283	20.2	[13.3-29.4]	--	--
Non-rural	1,426	15.6	[12.8-18.8]	0.723	0.795
Income Adequacy					
Lowest [comparison group]	243	16.0	[10.0-24.7]	--	--
Middle	582	15.6	[11.2-21.2]	0.936	0.954
Highest	280	18.3	[12.0-26.9]	1.098	1.112
Not stated	604	15.6	[11.6-20.6]	0.764	0.748
Age Alcohol Initiation					
					1.021

Notes: s = estimate suppressed due to high sampling variability (or cell size less than 30);
*p < 0.05; **p < 0.01.

Table 3.7: Proportion of respondents who reported drinking lightly frequently over the past year, current drinkers aged 15-24, Canada, 2004

	N	%	[95% CI]	OR	OR with age alcohol initiation
Total	1,709	19.5	[16.1-23.4]		
Sex				*	*
Male	857	23.0	[17.9-29.0]	1.662*	1.623*
Female [comparison group]	852	15.8	[11.8-20.7]	--	--
Age [comparison group is previous]				**	**
15-17	377	s		--	--
18-19	389	14.3	[9.0-22.0]	2.413	2.189
20-24	943	26.1	[21.2-31.8]	2.078*	2.067*
Region [comparison group is Canada]				**	**
Atlantic	430	s	s	s	s
Quebec	133	27.5	[20.6-35.8]	2.287**	2.357**
Ontario	119	s	s	s	s
Prairie	663	14.5	[11.8-17.5]	1.011	1.015
British Columbia	364	13.7	[10.5-17.8]	0.898	0.897
Household Location					
Rural [comparison group]	283	s		--	--
Non-rural	1,426	20.2	[16.5-24.4]	1.294	1.292
Income Adequacy				*	*
Lowest [comparison group]	243	35.3	[24.8-47.4]	--	--
Middle	582	18.5	[13.2-25.3]	0.396**	0.388**
Highest	280	18.3	[11.4-28.1]	0.367**	0.360**
Not stated	604	14.1	[9.6-20.3]	0.404*	0.406*
Age Alcohol Initiation					
					1.034

Notes: s = estimate suppressed due to high sampling variability (or cell size less than 30);
*p < 0.05; **p < 0.01.

Table 3.8: Proportion of respondents who reported drinking lightly infrequently over the past year, current drinkers aged 15-24, Canada, 2004

	N	%	[95% CI]	OR	OR with age alcohol initiation
Total	1,709	46.8	[42.6-51.0]		
Sex				**	**
Male	857	34.3	[28.9-40.1]	0.342**	0.327**
Female [comparison group]	852	60.3	[54.4-65.8]	--	--
Age [comparison group is previous]				**	**
15-17	377	65.3	[57.1-72.8]	--	--
18-19	389	43.2	[34.6-52.1]	0.440**	0.380**
20-24	943	42.3	[36.8-47.9]	0.979	0.927
Region [comparison group is Canada]					
Atlantic	430	45.3	[40.1-50.7]	0.905	0.841
Quebec	133	53.1	[44.5-61.5]	1.276	1.359
Ontario	119	43.1	[34.2-52.5]	0.921	0.888
Prairie	663	44.7	[40.8-48.7]	0.887	0.914
British Columbia	364	48.5	[43.3-53.7]	1.059	1.078
Household Location					
Rural [comparison group]	283	48.3	[37.9-58.9]	--	--
Non-rural	1,426	46.6	[42.1-51.2]	1.082	0.982
Income Adequacy					
Lowest [comparison group]	243	37.9	[28.1-48.9]	--	--
Middle	582	47.6	[40.4-54.8]	1.552	1.514
Highest	280	40.8	[31.4-51.0]	1.307	1.287
Not stated	604	53.5	[46.5-60.4]	1.732	1.674
Age Alcohol Initiation					**
					1.147**

Notes: *p < 0.05; **p < 0.01.

Table 3.9: Proportion of respondents who reported drinking heavily (frequently/infrequently) over the past year, current drinkers aged 15-24, Canada, 2004

	N	%	[95% CI]	OR	OR with age alcohol initiation
Total	1,709				
Sex				**	**
Male	857	42.7	[37.0-48.6]	2.336**	2.485**
Female [comparison group]	852	24.0	[19.4-29.2]	--	--
Age [comparison group is previous]					*
15-17	377	28.8	[22.0-36.6]	--	--
18-19	389	42.5	[34.0-51.5]	1.808*	2.163**
20-24	943	31.6	[26.9-36.7]	0.610*	0.654
Region [comparison group is Canada]				**	**
Atlantic	430	48.8	[43.5-54.1]	1.800**	1.992**
Quebec	133	19.4	[13.5-27.1]	0.423**	0.380**
Ontario	119	35.8	[27.5-45.0]	0.958	1.014
Prairie	663	40.8	[37.0-44.8]	1.237*	1.200
British Columbia	364	37.8	[32.9-42.9]	1.108	1.087
Household Location					
Rural [comparison group]	283	36.7	[27.3-47.3]	--	--
Non-rural	1,426	33.2	[29.2-37.5]	0.774	0.847
Income Adequacy					
Lowest [comparison group]	243	26.8	[19.0-36.5]	--	--
Middle	582	34.0	[27.6-41.0]	1.423	1.496
Highest	280	40.9	[31.3-51.1]	1.805	1.882
Not stated	604	32.3	[26.4-38.9]	1.239	1.274
Age Alcohol Initiation					**
					0.843**

Notes: *p < 0.05; **p < 0.01.

Table 3.10: Proportion of respondents who reported drinking lightly (frequently/infrequently) over the past year, current drinkers aged 15-24, Canada, 2004

	N	%	[95% CI]	OR	OR with age alcohol initiation
Total	1,709				
Sex				**	**
Male	857	57.3	[51.4-63.0]	0.428**	0.402**
Female [comparison group]	852	76.0	[70.8-80.6]	--	--
Age [comparison group is previous]					*
15-17	377	71.2	[63.4-78.0]	--	--
18-19	389	57.5	[48.5-66.0]	0.553*	0.462**
20-24	943	68.4	[63.3-73.1]	1.638*	1.529
Region [comparison group is Canada]				**	**
Atlantic	430	51.2	[45.9-56.5]	0.555**	0.502**
Quebec	133	80.6	[72.9-86.5]	2.365**	2.634**
Ontario	119	64.2	[55.0-72.5]	1.044	0.986
Prairie	663	59.2	[55.2-63.0]	0.808*	0.833
British Columbia	364	62.2	[57.1-67.1]	0.902	0.920
Household Location					
Rural [comparison group]	283	63.3	[52.7-72.7]	--	--
Non-rural	1,426	66.8	[62.5-70.8]	1.292	1.180
Income Adequacy					
Lowest [comparison group]	243	73.2	[63.5-81.0]	--	--
Middle	582	66.0	[59.0-72.4]	0.703	0.669
Highest	280	59.1	[48.9-68.7]	0.554	0.531
Not stated	604	67.7	[61.1-73.6]	0.807	0.785
Age Alcohol Initiation					**
					1.186**

Notes: *p < 0.05; **p < 0.01.

Table 3.11: Prevalence of weekly and monthly heavy drinking among past-year drinkers, by demographic characteristics, Canada, aged 15-24, 2004

	N	Monthly heavy drinking				Weekly heavy drinking			
		%	[95% CI]	OR	OR with age initiation	%	[95% CI]	OR	OR with age initiation
Total adults aged 25+	8,793	21.7	[20.1-23.3]			4.8	[4.0-5.7]		
Total youth aged 15-24	1,709	46.0	[41.9-50.2]			13.8	[11.2-17.0]		
Sex				**	**			*	**
Male	857	52.0	[46.0-57.9]	1.610	1.701**	17.4	[13.4-22.4]	1.811*	1.971**
Female [comparison group]	852	39.7	[34.2-45.5]	--	--	10.0	[6.9-14.3]	--	--
Age [comparison group is previous]				*	**				**
15-17	377	35.7	[28.2-43.9]	--	--	7.6Q	[4.4-12.7]	--	--
18-19	389	51.8	[43.0-60.6]	1.899*	2.352**	16.1	[10.4-24.2]	2.180*	2.755**
20-24	943	47.0	[41.4-52.6]	0.826	0.872	14.9	[11.4-19.3]	0.885	0.996
Region [comparison group is Canada]				*	**				
Atlantic	430	54.3	[49.1-59.5]	1.407**	1.517**	15.4	[11.9-19.7]	1.204	1.336
Quebec	133	41.8	[33.7-50.4]	0.821	0.754	s	s	s	s
Ontario	119	46.6	[37.5-55.9]	0.922	0.979	s	s	s	s
Prairie	663	48.8	[44.8-52.7]	1.079	1.040	12.8	[10.4-15.7]	0.924	0.900
British Columbia	364	44.2	[39.1-49.4]	0.871	0.858	12.5	[9.5-16.3]	0.923	0.875
Household Location									
Rural [comparison group]	283	40.6	[30.9-51.1]	--	--	14.7	[8.8-23.6]	--	--
Non-rural	1,426	46.8	[42.3-51.3]	1.238	1.302	13.7	[10.8-17.2]	0.791	0.849
Income Adequacy									
Lowest [comparison group]	243	47.4	[36.7-58.3]	--	--	15.0	[8.6-24.9]	--	--
Middle	582	44.3	[37.3-51.6]	0.894	0.902	12.2	[8.2-17.8]	0.788	0.829
Highest	280	49.4	[39.4-59.5]	1.030	1.032	20.5	[13.1-30.6]	1.141	1.499
Not stated	604	45.3	[38.5-52.2]	0.975	1.020	11.2	[7.8-15.9]	0.784	0.835
Age Alcohol Initiation					**				**
					0.834**				0.775**

Notes: Q = qualified due to high sampling variability;
s = estimate suppressed due to high sampling variability (or cell size less than 30);
*p < 0.05; **p < 0.01.

Table 3.12: Percentage exceeding low-risk drinking guidelines among past-year drinkers, by demographic characteristics, Canada, aged 15-24, 2004

	N	%	[95% CI]	OR	OR with age alcohol initiation
Total adults aged 25+	8,793	20.7	[19.1-22.3]		
Total youth aged 15-24	1,709	34.1	[30.2-38.3]		
Sex				**	**
Male	857	40.2	[34.5-46.3]	1.672**	1.815**
Female [comparison group]	852	27.7	[22.8-33.2]	--	--
Age [comparison group is previous]					*
15-17	377	24.6	[18.0-32.7]	--	--
18-19	389	32.3	[24.6-41.1]	1.369	1.521
20-24	943	38.0	[32.6-43.7]	1.263	1.393
Region [comparison group is Canada]					
Atlantic	430	36.5	[31.6-41.7]	1.228	1.339*
Quebec	133	29.8	[22.6-38.2]	0.843	0.744
Ontario	119	37.6	[28.9-47.3]	1.108	1.211
Prairie	663	36.1	[32.4-40.0]	1.110	1.071
British Columbia	364	28.9	[24.5-33.9]	0.786*	0.773*
Household Location					
Rural [comparison group]	283	26.4	[18.7-35.9]	--	--
Non-rural	1,426	35.2	[31.0-39.8]	1.347	1.421
Income Adequacy				*	
Lowest [comparison group]	243	33.4	[23.7-44.9]	--	--
Middle	582	29.8	[23.6-36.8]	0.853	0.878
Highest	280	49.9	[39.8-60.0]	1.884*	1.945*
Not stated	604	29.9	[24.0-36.5]	0.974	1.008
Age Alcohol Initiation					**
					0.848**

Notes: *p < 0.05; **p < 0.01.

Table 3.13: Percentage drinking hazardously (AUDIT 8+) during the past year, Canada, current drinkers aged 15-24, 2004

	N	%	[95% CI]	OR	OR with age alcohol initiation
Total adults aged 25+	8,793	13.4	[12.2-14.8]		
Total youth aged 15-24	1,709	36.1	[32.1-40.2]		
Sex				**	**
Male	857	44.7	[38.8-50.8]	2.175**	2.451**
Female [comparison group]	852	26.8	[22.0-32.2]	--	--
Age [comparison group is previous]					*
15-17	377	30.9	[23.7-39.1]	--	--
18-19	389	44.6	[35.8-53.7]	1.696*	2.304**
20-24	943	34.2	[29.2-39.5]	0.633*	0.694
Region [comparison group is Canada]				**	**
Atlantic	430	44.3	[39.1-49.7]	1.381**	1.577**
Quebec	133	28.4	[21.3-36.8]	0.669*	0.559**
Ontario	119	36.8	[28.3-46.2]	0.913	1.035
Prairie	663	40.1	[36.3-44.2]	1.117	1.076
British Columbia	364	39.1	[34.1-44.3]	1.061	1.019
Household Location					
Rural [comparison group]	283	35.0	[25.8-45.5]	--	--
Non-rural	1,426	36.2	[32.0-40.7]	0.974	1.034
Income Adequacy					
Lowest [comparison group]	243	38.0	[28.1-49.0]	--	--
Middle	582	31.6	[25.4-38.5]	0.725	0.759
Highest	280	44.5	[34.7-54.7]	1.197	1.265
Not stated	604	35.0	[28.5-42.1]	0.819	0.875
Age Alcohol Initiation					**
					0.748**

Notes: *p < 0.05; **p < 0.01.

Table 3.14: Percentage reporting harms from one's own alcohol use, lifetime and past year, Canada, among lifetime and past-year drinkers aged 15-24, 2004

Types of harm Alcohol use had a harmful effect on your...	Youth 15-24 lifetime ¹ N = 1,889 % yes [CI]	Adults aged 25+ lifetime ¹ N = 10,739 [CI]	Total population lifetime ¹ N = 12,628 [CI]	Youth 15-24 past year ² N = 1,709 % yes [CI]	Adults aged 25+ past year ² N = 8,793 [CI]	Total population past year ² N = 10,502 [CI]
1. Friendships and social life	15.9 [13.1-19.0]	14.1 [13.0-15.3]	14.2 [13.2-15.3]	7.6 [5.7-10.2]	2.1** [1.6-2.8]	3.0 [2.5-3.7]
2. Physical health	18.4 [15.5-21.7]	14.3* [13.2-15.6]	14.8 [13.7-15.9]	12.0 [9.4-15.1]	4.1** [3.4-5.0]	5.4 [4.6-6.2]
3. Home life or marriage	6.0 [4.5-8.0]	8.6* [7.7-9.6]	8.1 [7.3-8.9]	2.9 [2.0-4.3]	1.7* [1.2-2.3]	1.8 [1.4-2.4]
4. Work, studies or employment opportunities	8.7 [6.8-11.1]	6.6 [5.8-7.5]	6.8 [6.1-7.7]	4.8 [3.3-7.1]	1.1** [0.7-1.6]	1.7 [1.3-2.2]
5. Financial position	11.2 [8.9-14.0]	6.2** [5.5-7.1]	6.9 [6.2-7.7]	8.7 [6.5-11.5]	1.5** [1.1-2.0]	2.7 [2.1-3.3]
6. Legal problems	3.2 [2.1-4.7]	4.0 [3.4-4.8]	3.8 [3.3-4.5]	2.1Q [1.1-3.6]	0.4Q** [0.2-0.8]	0.7Q [0.4-1.1]
7. Housing problems	s	1.2 [0.9-1.7]	1.1 [0.8-1.5]	s	s	s
8. Learning	2.5 [1.5-4.0]	2.3 [1.8-2.9]	2.3 [1.8-2.8]	1.7Q [0.8-3.3]	0.3Q** [0.1-0.6]	0.5Q [0.3-0.8]
One or more types of harm	33.7 [30.0-37.5]	22.8** [21.4-24.2]	24.2 [22.9-25.5]	21.8 [18.5-25.4]	6.3** [5.4-7.3]	8.8 [7.9-9.9]

Notes: Q = qualified due to high sampling variability; s = estimate suppressed due to high sampling variability;

*p < 0.05; **p < 0.01 = difference between youth aged 15-24 and adults aged 25+.

1. Lifetime harm: percentages are of current and former drinkers.

2. Past-year harm: percentages are of current drinkers.

Table 3.15: Proportion of respondents who reported at least one harm in lifetime due to their alcohol use, current and former drinkers aged 15-24, Canada, 2004

	N	%	[95% CI]	OR	OR with age alcohol initiation
Total	1,889	33.7	[30.0-37.5]		
Sex					
Male	945	33.8	[28.7-39.3]	1.033	1.122
Female [comparison group]	944	33.5	[28.5-38.9]	--	--
Age [comparison group is previous]					**
15-17	458	28.8	[22.3-36.4]	--	--
18-19	417	35.5	[27.7-44.2]	1.328	2.037*
20-24	1,014	34.8	[29.8-40.1]	0.969	1.093
Region [comparison group is Canada]					
Atlantic	474	32.8	[28.3-37.7]	0.931	1.035
Quebec	143	27.9	[21.2-35.8]	0.755	0.635**
Ontario	130	35.0	[27.0-43.9]	1.056	1.159
Prairie	738	38.1	[34.5-41.7]	1.232*	1.215*
British Columbia	404	35.4	[30.9-40.2]	1.094	1.081
Household Location					
Rural [comparison group]	321	37.7	[28.9-47.5]	--	--
Non-rural	1,568	33.1	[29.2-37.2]	0.782	0.817
Income Adequacy					
Lowest [comparison group]	268	44.6	[34.5-55.3]	--	--
Middle	624	32.3	[26.3-39.0]	0.597	0.618
Highest	300	30.0	[22.1-39.3]	0.525*	0.530*
Not stated	697	32.2	[26.4-38.7]	0.610	0.656
Age Alcohol Initiation					**
					0.725**

Notes: *p < 0.05; **p < 0.01.

Table 3.16: Percentage reporting at least one harm during the past year due to their own alcohol use, by demographic characteristics, type of drinker and frequency of 5+ drinks, Canada, current drinkers aged 15-24, 2004

	N	%	[95% CI]	Adjusted OR	Adjusted OR with age alcohol initiation	Adjusted OR with alcohol use predictors
Total	1,709	21.8	[18.5-25.4]			
Sex						
Male	857	22.6	[18.1-27.9]	1.115	1.127	0.772
Female [comparison group]	852	20.9	[16.5-26.1]	--	--	--
Age [comparison group is previous]					*	
15-17	377	20.5	[14.7-27.9]	--	--	--
18-19	389	29.1	[21.6-38.0]	1.546	2.029*	1.319
20-24	943	19.1	[15.1-23.9]	0.583*	0.609	0.566*
Region [comparison group is Canada]						
Atlantic	430	23.8	[19.6-28.6]	1.087	1.151	1.057
Quebec	133	s	s	s	s	s
Ontario	119	s	s	s	s	s
Prairie	663	23.0	[19.9-26.5]	1.074	1.062	1.023
British Columbia	364	22.6	[18.5-27.1]	1.031	1.027	1.145
Household Location						
Rural [comparison group]	283	24.2	[16.7-33.8]	--	--	--
Non-rural	1,426	21.4	[17.9-25.4]	0.861	0.879	0.747
Income Adequacy						
Lowest [comparison group]	243	24.4	[16.4-34.8]	--	--	--
Middle	582	21.7	[16.2-28.5]	0.860	0.875	0.935
Highest	280	18.2	[11.9-26.9]	0.684	0.685	0.682
Not stated	604	22.7	[17.4-29.0]	0.843	0.854	0.924
Age Alcohol Initiation					**	**
					0.832**	0.861**
Drinking Status						**
Light Infrequent [comparison group]	767	9.5	[6.8-13.3]			--
Light Frequent	220	32.7	[23.3-43.7]			3.475**
Heavy Infrequent	366	26.5	[18.9-35.7]			2.179*
Heavy Frequent	303	38.5	[29.5-48.4]			2.737**
Frequency of Heavy Drinking (5+)						**
Never 5+ [comparison group]	399	6.0	[3.4-10.3]			--
Less than monthly	522	13.7	[9.2-19.9]			1.961
Monthly or more	776	35.8	[30.0-42.1]			4.686**

Notes: s = estimate suppressed due to high sampling variability;
*p < 0.05; **p < 0.01.

Table 3.17: Percentage reporting types of harm experienced in past year resulting from drinking by others, Canada, total population aged 18 + and youth aged 18-24, 2004

Types of harm from drinking by others	Youth aged 18-24 past year N = 1,504 % yes [CI]	Adults aged 25+ past year N = 11,519 % yes [CI]	Total population 18+ past year N = 13,328 % yes [CI]
1. Insulted or humiliated	36.1 [31.9-40.5]	20.0** [18.8-21.3]	22.1 [20.9-23.4]
2. Family or marriage problems	13.9 [11.2-17.2]	9.9** [9.0-10.9]	10.5 [9.6-11.4]
3. Pushed or shoved	32.7 [28.6-37.0]	7.5** [6.8-8.4]	10.8 [9.9-11.7]
4. Serious arguments or quarrels	31.9 [27.9-36.2]	13.0** [12.0-14.1]	15.5 [14.4-16.6]
5. Verbal abuse	25.4 [21.8-29.4]	14.4** [13.3-15.6]	15.8 [14.7-17.0]
6. Hit or physically assaulted	10.1 [8.7-12.1]	2.2** [1.8-2.7]	3.2 [2.8-3.8]
One or more types of harm	59.6 [55.1-63.9]	28.8** [27.3-30.3]	32.7 [31.3-34.2]

Notes: Only asked of respondents aged 18 years or older.

*p < 0.05; **p < 0.01 = difference between youth aged 15-24 and adults aged 25+.

Table 3.18: Percentage reporting at least one harm during the past year because of others' drinking, by demographic characteristics, type of drinker and frequency of 5+ drinks, Canada, aged 18-24, 2004

	N	%	[95% CI]	Adjusted OR	Adjusted OR with age alcohol initiation
Total	1,504	59.6	[55.1-63.9]		
Sex					
Male	733	61.1	[54.7-67.2]	1.140	1.153
Female [comparison group]	771	57.9	[51.7-63.8]	--	--
Age [comparison group is previous]					
18-19	439	62.6	[54.3-70.2]	--	--
20-24	1,065	58.3	[53.0-63.5]	0.840	0.937
Region [comparison group is Canada]					
Atlantic	367	57.5	[51.9-63.0]	0.950	0.978
Quebec	112	54.3	[45.0-63.3]	0.831	0.756
Ontario	111	62.3	[52.6-71.1]	1.142	1.201
Prairie	590	63.6	[59.5-67.4]	1.216*	1.227*
British Columbia	324	56.6	[51.2-62.0]	0.912	0.917
Household Location					
Rural [comparison group]	217	60.9	[48.7-71.8]	--	--
Non-rural	1,287	59.4	[54.6-64.0]	0.900	1.060
Income Adequacy					
Lowest [comparison group]	252	60.7	[49.8-70.6]	--	--
Middle	544	57.0	[49.4-64.3]	0.846	0.862
Highest	255	64.0	[52.9-73.8]	1.104	1.095
Not stated	453	59.3	[51.4-66.7]	0.905	0.978
Age Alcohol Initiation					*
Monthly or more	646	72.1	[65.5-77.8]		0.902*

Notes: *p < 0.05; **p < 0.01.

Chapter 4: Cannabis Use and Harms

Highlights

- 61.4% of youth have used cannabis in their lifetime, and 37.0% have used it at least once in the past 12 months.
- The mean age at which youth reported having the first chance to try marijuana, had they wanted to, was 14.6 years. The mean reported age of first use was 15.6 years.
- Lifetime use was higher in youth aged 18 to 19 (69.9%) and 20 to 24 (68.5%) than those aged 15 to 17 (39.3%). In addition, the rate of past-year use was highest in youth aged 18 to 19 (47.2%) followed by those aged 20 to 24 (36.5%) and 15 to 17 (29.2%).
- Males were more likely than females to have used cannabis in their lifetime (64.7% versus 58.0%) and in the past year (41.4% versus 32.3%).
- Almost 1 in 10 (8.2%) Canadian youth uses marijuana on a daily basis. Among current users, more than 1 in 5 (22.3%) youth reported using it on a daily basis over the past 3 months.

Introduction

The focus of this chapter is on the use of cannabis, such as marijuana or hashish, in youth. The lifetime and past-year prevalence of cannabis use and various concerns related to its use will be explored.

Lifetime prevalence is based on the question asking respondents whether they have “ever used or tried marijuana, cannabis or hashish” and past-year prevalence is based on a follow-up question about whether they also used the drug at least once in the past 12 months.

To examine age at which respondents first had the chance to try marijuana, all respondents were asked the question, “About how old were you when you first had a chance to try marijuana or hash if you had wanted to?” Respondents who reported having used marijuana in their lifetime were asked a follow-up question, “How old were you when you started using marijuana, cannabis or hashish?”

To examine the frequency with which current users consume marijuana or hashish, past 12-month users were asked, “How often did you use marijuana, cannabis or hashish in the past 3 months?” and given the opportunity to respond never, less than monthly, monthly, weekly, daily or almost daily.

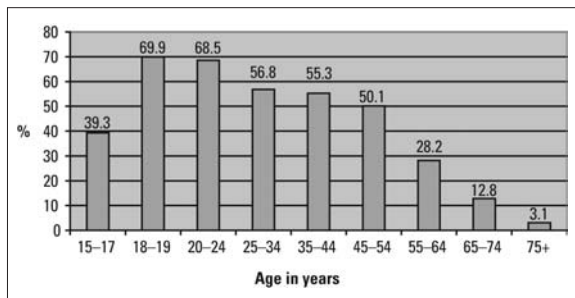
To assess cannabis problems, five items of the ASSIST screener developed by the World Health Organization (WHO) were used (WHO ASSIST Working Group, 2002). Only respondents who reported having used cannabis during the **3 months** prior to the survey were asked questions on the ASSIST. The questions were: (1) how often they had a strong desire or urge to use cannabis, (2) how often their use of cannabis led to health, social, legal or financial problems, (3) if they failed to do what was normally expected of them because of their use of cannabis, (4) whether a friend or relative or anyone else ever expressed concern about their use of cannabis, and (5) whether they ever tried and failed to control, cut down, or stop using cannabis. Items 1 through 3 refer to problems they might have experienced in the past 3-month period and items 4 and 5 refer to problems in their lifetime.

Results

Youth were more likely to have used cannabis in their lifetime (61.4% versus 41.8%) and to currently use it (37.0% versus 10.0%) than adults (Table 4.1).

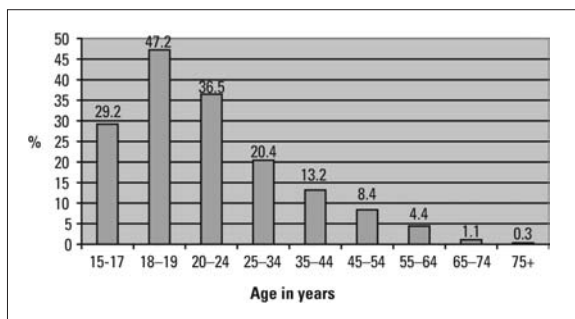
Older youth, those aged 18 to 19, were more likely than those aged 15 to 17 to have reported lifetime use of cannabis (69.9% versus 39.3%). There was no difference in reported lifetime use between those aged 18 to 19 and those 20 to 24 years of age (69.9% versus 68.5%) (Table 4.1). After age 24, however, the reported lifetime use of cannabis is significantly lower and continues a steady decline across age groups until reaching a reported rate of 3.1% among those aged 75 or older (Figure 4.1).

Figure 4.1: Percentage of Canadians who used cannabis in lifetime, Canada 2004



A similar trend is apparent for past-year reported cannabis use. Youth aged 18 to 19 were significantly more likely than those aged 15 to 17 to report using cannabis in the past 12 months (47.2% versus 29.2%). A steady decline is apparent after the age of 19, with those 20 to 24 significantly less likely than those 18 to 19 to report past-year use of cannabis (36.5% versus 47.2%), and this significant decline continues across other age categories until it drops to 1.1% among those 65 to 74 years of age (Table 4.1, Figure 4.2).

Figure 4.2: Percentage of Canadians who used cannabis in the year preceding the survey, Canada, 2004



Although these rates and charts take into account lifetime use considering use at least once ever, and past-year use considering use at least once in the past 12 months, when excluding one-time use, the pattern of use remained similar with 54.5% of youth reporting having used marijuana more than once in their lifetime, and 36.0% having used more than once in the past 12 months. These rates in youth were significantly higher than those reported by adults; only 34.9% of adults reported having used more than once in their lifetime and 9.8% having done so more than once in the past 12 months (Table 4.1).

Typically, among adults as well as the general population aged 15 or over, males were more likely than females to report lifetime, current and past 3-month use of marijuana (Table 4.1). Among youth overall, this pattern was also evident with the exception of lifetime use in which there was no difference between males and females. When broken down even further among the age categories of 15 to 17, 18 to 19 and 20 to 24, the only significant difference between males and females was among 18- to 19-year-olds in which males were more likely than females to have reported lifetime use of cannabis (77.9% versus 60.7%), and among the 20- to 24-year-old group where males were more likely than females to have reported current use (41.7% versus 29.3%) and past 3-month use (35.0% versus 24.0%). Among youth aged 15 to 17, around the age of first use, there was no difference between males and females in reported cannabis use (Table 4.1).

These results are consistent with many other findings on youth initiation into substance use. The prevalence rate for males and females is usually the same around the age of first use (in this case 15 to 17 years old). However, as we examine older cohorts, males tend to have higher rates of use than females. This is also the case for alcohol use, as examined in the previous chapter in which, among youth, there was no difference between males and females aged 15 to 24, 15 to 17, 18 to 19, or 20 to 24 in their reported rate of lifetime and past-year alcohol use; however, adults males aged 25 or over were more likely than the females to have used alcohol in their lifetime and in the past 12 months.

Predictors of Lifetime and Past 12-Month Cannabis Use

To examine the characteristics of youth who reported lifetime or past-year cannabis use, two multivariate logistic regressions were conducted, taking into account sex, age, region, household location and income adequacy as predictors (Tables 4.2 and 4.3).

In terms of the characteristics of youth who reported lifetime use of cannabis, there were main effects of age and region (Table 4.2). Youth aged 18 to 19 were more likely than those aged 15 to 17 to have reported lifetime use of cannabis (69.9% versus 39.3%); there was no difference between reported lifetime use of those aged 18 to 19 and those 20 to 24. In addition, youth from the Atlantic region were less likely (51.4% versus 61.4%) and those from the Quebec region were more likely (73.1% versus 61.4%) than youth from the rest of Canada to have reported lifetime cannabis use.

In terms of the characteristics of youth who reported past-year use of cannabis, there were significant differences in terms of sex, age, region and household location (Table 4.3). Males were more likely than females (41.4% versus 32.3%), those aged 18 to 19 were more likely than those aged 15 to 17 (47.2% versus 29.2%) and 20 to 24 (47.2% versus 36.5%), youth from Quebec were more likely than those from the rest of Canada (46.1% versus 37.0%), and those from non-rural locations were more likely than those from rural locations (38.5% versus 26.5%) to have reported past-year cannabis use.

Age of Chance to Try/Age of First Use

As with alcohol, age of cannabis initiation has also been associated with psychosocial adjustment and conduct problems in youth (Fergusson and Horwood, 1997; Pedersen, Mastekaasa and Wichstrom, 2001) as well as the subsequent use of other drugs (Fergusson and Horwood, 2000; Lynskey, et al., 2003). As such, the age of initiation of cannabis use among youth was examined and then controlled for as a predictor in the following regressions.

The mean age at which youth reported to have had the chance to try marijuana, had they wanted to, was 14.6 years; there were no differences between males and females. Among youth who had used cannabis at least once in their lifetime, the mean age at which they reported having started using was 15.6 years; again there were no differences between males and females in the reported age of first use (Table 4.4). It is noteworthy that there was a year time span between the age at which youth first had the chance to try cannabis, and actually did. One area for future exploration would be to examine the factors responsible for this gap in order to develop initiatives to prevent youth from using at all, or to prolong this delay in initiation even further.

The mean age at which youth first had the chance to try, or actually first used, cannabis was higher than that demonstrated among the total population and among adults. Among the total population, the mean age at which respondents first had the chance to try cannabis and actually first used cannabis was approximately 19 years. Among adults aged 25 to 44, the mean age at which they had the first chance to try was approximately 17 years, and 18 years for first use, whereas among those 45 or older it was approximately 24 and 23, respectively. It is important to note that the mean age at which respondents first had the chance to try includes the total population, whereas the mean age of first use takes into account only those respondents who had used (hence for those aged 45 or older, the mean age at first use was lower than the mean age to try).

These results must be interpreted with caution since from the data available it is not possible to determine whether the younger reported age of first use that is displayed by youth indicates a decrease in the age of initiation over time, or if it is the result of an age-specific recall effect or cohort effect. An age-specific recall effect refers to the tendency to shift estimates of age of onset upwards as individuals become older. More specifically, as time passes between the actual time when one first had the chance to try and the time when one is probed for this information, they may have difficulty recalling precisely the actual number, resulting in their answer being slightly off. As a result, due to this recall effect, the mean age at which adults stated they first used cannabis may be slightly different from that found for youth due to their lack of precision recalling this age. An alternative explanation for the differential mean age of first use could also be a cohort effect; adults have had more years to have actually used cannabis and this in turn results in their mean age of

actual use being higher than that found among youth. Since youth is defined as those between the ages of 15 and 24, the oldest possible age for having used is 24; this confined range influences the mean age of first use among youth, causing it to be smaller than that of adults. In adults, the oldest possible age is much higher, so if there are some adults who began using at older ages, this would result in the mean for adults being higher.

These two possible explanations are important to keep in mind when examining the differences in the mean age of use between youth and adults. While the differences in the mean age of use between youth and adults may reflect the fact that youth are currently using at an earlier age, one cannot rule out these two other possible explanations. Examining the median instead of the mean affords the advantage that extreme cases (such as someone whose age of initiation was 75) do not influence the estimate; however, it does not rule out these other confounding explanations.

In terms of region, youth from the Atlantic region had a significantly older mean age of cannabis initiation (16.1 years) than youth from the rest of Canada (15.6 years), whereas those from the Quebec region had a significantly younger mean age of cannabis initiation (15.2 years).

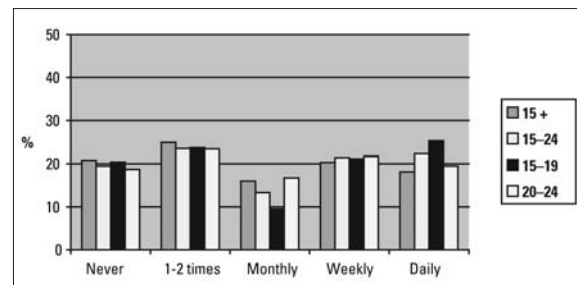
Frequency of Cannabis Use Among Youth

To examine the frequency with which respondents consume marijuana, respondents who had used cannabis in the past year were asked, “How often did you use marijuana, cannabis or hashish in the past 3 months”? Respondents were given the opportunity to respond never, less than monthly, monthly, weekly or daily/almost daily in order to examine the frequency of use among current users.

As with Canadians 15 years of age or older, the frequency of past 3-month reported marijuana use, among current users aged 15 to 24, was evenly distributed across the five categories of never, once or twice, once a month, once a week, and daily (Figure 4.3; Table 4.5). Overall, about one fifth of youth current users did not use marijuana in the past 3 months (19.5%), almost one quarter used it one or twice (23.5%), 13.3% used once a month, more than one fifth used once a week (21.4%), and more than one fifth (22.3%) used on a daily basis. In terms of the frequency of past 3-month use among current users, there were no differences between youth

and adults in terms of their frequency of use, with the exception of “daily use”; a higher proportion of youth reported consuming cannabis on a daily basis (22.3% versus 15.0%).

Figure 4.3: Frequency of past 3-month cannabis use among current users



Among youth, there are no differences apparent between frequency of cannabis use for males and females. However, among adult users of cannabis a higher proportion of females tended to report never using whereas a higher proportion of males reported weekly or daily use (Table 4.5).

In terms of the past 3-month frequency of cannabis use among the total sample of youth overall, approximately 70.3% reported never using cannabis, 8.7% reported doing so at least once or twice over the past 3 months, 4.9% reported doing so monthly, 7.9% reported doing so weekly and 8.2% of youth reported daily cannabis use (Table 4.6). Youth were more likely than adults to have reported using once or twice, monthly, weekly or daily, but less likely to have reported never. No differences were observed in the frequency of cannabis use between youth aged 15 to 19 and those aged 20 to 24. While only 2.5% of the total population aged 15 years of age or over have reported consuming cannabis on a daily basis (Table 4.6), it is important to highlight the fact that youth account for over half of these individuals. More specifically, 52.4% of Canadians who used marijuana on a daily basis were youth.

Among the total sample of youth, females were more likely than males to report having never used cannabis (75.4% versus 65.3%), whereas males were more likely than females to have reported weekly (10.2% versus 5.5%) or daily (10.8% versus 5.5%) use (Table 4.6).

Characteristics of Youth Who Use Cannabis on a Weekly/Daily Basis

In terms of the characteristics of youth who use on a weekly or daily basis compared with those who did not, among current users, there were main effects of sex, age, income and age of cannabis initiation (Table 4.7). Males who had used in the past 12 months were more likely than females to have reported daily or weekly use of cannabis (50.9% versus 34.1%, respectively), the odds of youth aged 18 to 19 reporting weekly or daily use were 4 times higher than for those aged 15 to 17 (36.3% versus 53.7%), those who did not state their income status were more likely than those in the lowest income adequacy group (52.9% versus 28.3%), and those who started using cannabis at a younger age were more likely to report weekly or daily cannabis use than those who started using later.

Cannabis Problems

Table 4.8 shows the five problem indicators of the ASSIST scale. Among youth a large proportion of past 3-month users experienced problems from their use; almost half (45.9%) experienced “a strong desire to use cannabis in the past three months” and “failed control over their use” (54.0%), almost one tenth (8.9%) experienced “health, social or legal problems”, over one tenth (12.2%) experienced “failed expectations”, and almost one third (27.3%) experienced “friends concern over their use”.

Adults were less likely than youth to have reported having experienced a “strong desire to use” (36.2% versus 45.9%), “health, social, legal problems” (4.1% versus 8.9%), “failed expectations” (6.2% versus 12.2%), “friends concern over use” (14.1% versus 27.3%), or “failed control” (34.5% versus 54.0%). Other than “failed control”, there were no differences between youth aged 15 to 19 and those aged 20 to 24 in terms of reported harms; youth aged 15 to 19 were more likely than those aged 20 to 24 to report having had “failed control” over their cannabis use (61.7% versus 47.1%).

Among past 3-month users aged 15 to 24, there were no differences between males and females in the proportion who reported harm in each of the five areas. This finding is different from that among adults in which females were more likely than males to report “failed expectations” (11.8% versus 4.1%) but less likely to report “friends concern” (8.7% versus 16.2%) or “failed control” (24.8% versus 38.2%).

To examine the characteristics of past 3-month users aged 15 to 24 who had experienced at least one problem due to their cannabis use compared with those who had not, a multivariate logistic regression was conducted taking into account sex, age, region, household location, income status and age of cannabis initiation (Table 4.9). The younger that youth started using cannabis, the more likely they were to have reported experiencing at least one problem due to their cannabis use. When taking cannabis frequency into account, however, age of cannabis initiation was no longer significant, but instead the frequency with which past 3-month cannabis users used cannabis was predictive of whether or not they reported harms. The odds of those who used daily or weekly reporting harms were over 4 times higher than that of those who used less than monthly (95.1% and 87.4% versus 61.4%).

Patterns/Reasons of Use

The most common place for youth to consume marijuana was at home (42.1%), followed by parties (37.8%), and parks, street, outdoors (12.1%). A higher proportion of adults responded that the most common place to consume marijuana was at home (69.0%), followed by a smaller proportion, than that of youth, who stated at parties (22.1%). The most frequent place of consumption was different for youth aged 15 to 19 and those aged 20 to 24. Only 23.4% of youth aged 15 to 19 usually consume marijuana at home, with the most frequent place of consumption being parties (46.7%). The most common place for 20- to 24-year-olds to consume marijuana was at home (59.4%), followed by parties (29.6%).

Youth reported that they usually consume marijuana with friends (86.0%) or friends and family (8.9%). This pattern is slightly different from that of adults, in which a much lower proportion of adults usually consume marijuana with friends (60.6%), and a higher proportion than that found in youth reported consuming marijuana alone (16.9%). In addition, 9.5% of adults responded with family, compared with 1.6% of youth.

The majority of youth stated that their main reason for using the first time was “to try out or due to curiosity” (57.0%); this is similar to that found for adults (51.7%).

When asked how respondents get their marijuana, in reference to the last time they used, the majority of youth responded that they “got it for free” (57.4%) as did adults (55.6%). The next most common method of obtaining marijuana was buying it (40.4% and 39.6%, respectively).

Summary and Discussion

Although the prevalence of cannabis use was lower than that of alcohol, a large proportion of Canadian youth used cannabis or had at some point in their lives. The prevalence of cannabis use in youth was higher than that of adults for both lifetime (61.4% versus 41.8%) and past 12-month use (37.0% versus 10.0%). As with alcohol, when it comes to cannabis use, youth are not a homogeneous group. There were no differences between males and females in terms of lifetime use; however, males were more likely than females to report current use. In addition, 15- to 17-year-olds were less likely to report either lifetime or current cannabis use than youth aged 18 to 24. In terms of frequency, males were more likely to use cannabis more often than females, as were youth aged 18 to 24 compared with 15- to 17-year-olds.

Regarding the overall prevalence rates, youth from Quebec had a higher prevalence of lifetime and current cannabis use than the national average, whereas those from the Atlantic region had a significantly lower prevalence of lifetime use. This is interesting given that youth from Quebec also had a higher prevalence of alcohol use and a younger age of alcohol initiation. Youth from the Atlantic region had a later age of alcohol initiation, and yet here we see that they have a lower prevalence of cannabis use. This finding suggests that alcohol use and age of initiation may be factors associated with cannabis use. This will be examined in Chapter 6 when the combination use of substances, and how use of one substance impacts use of another, is explored.

The mean age at which youth first had the chance to try cannabis/hashish, had they wanted to try, was 14.6 years. However, the mean age at which youth actually tried was 15.6 years, the same age as the mean age of alcohol initiation. Exploration of the factors involved with this year delay in the actual use of cannabis may be of interest to those involved in policy or prevention. As with alcohol, youth from the Atlantic region also tried cannabis at an older age than those from the rest of Canada, whereas those from the Quebec region started using at a younger age than the national mean.

The mean age at which youth started using cannabis was associated with a higher frequency of cannabis consumption; youth who started using cannabis earlier were more likely to report using weekly/daily than those who started using cannabis at a later age. Related to this, although the main effect of region was not significant, Quebec youth were more likely to use cannabis weekly/daily. This is not surprising given the relation between age of initiation and later patterns of use. When age of cannabis initiation was controlled for, however, this difference was no longer significant.

When asked what their single most important reason was for using cannabis their first time, the most common reason provided by youth, over half, was “curiosity/to try out”. Although a large proportion of youth do not use cannabis or use it infrequently, it must be pointed out that 8.2% of youth overall use cannabis on a daily basis and 22.3% of current users report doing so. In addition, of the total population aged 15 or older, 2.5% use cannabis on a daily basis, and youth comprise over half of these individuals.

Table 4.1: Lifetime and past-year cannabis use

	Sample size	Lifetime (incl. 1 time) % [CI]	Lifetime (excl. 1 time) % [CI]	Past 12 months (incl. 1 time) % [CI]	Past 12 months (excl. 1 time) % [CI]	Past 3 months % [CI]
15-24	2,082	61.4 [57.7-65.0]	54.5 [50.7-58.2]	37.0 [33.4-40.6]	36.0 [32.5-39.6]	29.7 [26.4-33.2]
Male	1,037	64.7 [59.3-69.7]	58.7* [53.3-63.9]	41.4* [36.3-46.7]	40.7** [35.6-46.0]	34.7** [29.9-39.8]
Female	1,045	58.0 [52.7-63.2]	50.1 [44.8-55.4]	32.3 [27.6-37.5]	31.0 [26.3-36.2]	24.6 [20.3-29.5]
25+	11,827	41.8** [40.1-43.4]	34.9** [33.3-36.5]	10.0** [9.0-11.0]	9.8** [8.9-10.8]	7.7** [6.9-8.7]
Male	4,684	47.5** [44.9-50.1]	41.3** [38.8-43.9]	13.7** [12.1-15.5]	13.4** [11.8-15.2]	11.6** [10.1-13.3]
Female	7,143	36.4 [34.4-38.4]	28.9 [27.1-30.8]	6.4 [5.5-7.5]	6.4 [5.5-7.4]	4.1 [3.4-5.0]
15-17	581	39.3 [32.7-46.2]	33.7 [27.5-40.5]	29.2 [23.2-35.9]	27.8 [22.0-34.5]	22.2 [17.0-28.4]
Male	306	43.7 [34.6-53.3]	36.4 [27.9-45.8]	31.3 [23.3-40.6]	29.3 [21.5-38.4]	26.2 [18.9-35.2]
Female	275	34.9 [26.0-45.1]	31.1 [22.5-41.2]	27.1 [18.9-37.2]	26.5 [18.3-36.6]	18.3 [11.6-27.6]
18-19	438	69.9** [62.2-76.6]	64.9** [57.0-72.1]	47.2** [39.1-55.5]	46.1** [38.0-54.4]	38.7** [31.0-47.0]
Male	226	77.9* [68.6-85.0]	71.5 [61.1-80.0]	50.9 [39.2-62.4]	50.5 [38.9-62.0]	42.8 [31.8-54.5]
Female	212	60.7 [48.9-71.4]	57.4 [45.7-68.4]	43.0 [32.0-54.8]	41.1 [30.3-52.9]	34.0 [24.0-45.8]
20-24	1,063	68.5 [63.4-73.3]	60.1 [54.8-65.2]	36.5* [31.6-41.6]	35.7* [30.9-40.7]	29.6 [25.1-34.6]
Male	505	68.6 [60.8-75.5]	63.5 [55.6-70.7]	42.0* [34.8-49.4]	41.7* [34.5-49.2]	35.0* [28.4-42.3]
Female	558	68.4 [61.6-74.6]	56.6 [49.3-63.6]	30.7 [24.4-37.9]	29.3 [23.2-36.4]	24.0 [18.2-30.9]

Note: *p < 0.05; **p < 0.01 = indicates significant difference in overall prevalence rates between youth 15 and 24 and adults 25+; between each youth age category and the previous youth age group; and between males and their female counterparts within each age and use category.

Table 4.2: Lifetime use of cannabis, total population aged 15-24, Canada 2004

	N	%	[95% CI]	OR
Total	2,082	61.4	[57.7-65.0]	
Sex				
Male	1,038	64.7	[59.3-69.7]	1.325
Female [comparison group]	1,045	58.0	[52.7-63.2]	--
Age [comparison group is previous]				**
15-17	581	39.3	[32.7-46.2]	--
18-19	438	69.9	[62.2-76.6]	3.558**
20-24	1,063	68.5	[63.4-73.3]	0.923
Region [comparison is Canada]				
Atlantic	531	51.4	[46.7-56.0]	0.716**
Quebec	148	73.1	[65.4-79.6]	1.851**
Ontario	146	59.5	[51.0-67.4]	0.923
Prairie	809	57.0	[53.5-60.5]	0.878
British Columbia	448	58.0	[53.3-62.5]	0.931
Household Location				
Rural [comparison group]	363	59.7	[50.6-68.3]	--
Non-rural	1,719	61.7	[57.6-65.6]	0.969
Income Adequacy				
Lowest [comparison group]	288	71.1	[61.4-79.2]	--
Middle	674	59.7	[52.9-66.1]	0.629
Highest	313	68.6	[58.7-77.0]	0.936
Not stated	807	56.0	[50.1-61.9]	0.705

Note: *p < 0.05; **p < 0.01.

Table 4.3: Current cannabis users, total population youth aged 15-24, Canada, 2004

	N	%	[95% CI]	OR
Total	2,085	37.0	[33.4-40.6]	
Sex				*
Male	1,039	41.4	[36.3-46.7]	1.435*
Female [comparison group]	1,046	32.3	[27.6-37.5]	--
Age [comparison group is previous]				**
15-17	581	29.2	[23.2-35.9]	--
18-19	439	47.2	[39.1-55.5]	2.107**
20-24	1,065	36.5	[31.6-41.6]	0.601*
Region [comparison is Canada]				
Atlantic	531	33.2	[28.9-37.8]	0.936
Quebec	148	46.1	[38.2-54.1]	1.527**
Ontario	146	34.0	[26.7-42.1]	0.840
Prairie	810	34.4	[31.1-37.8]	0.909
British Columbia	540	34.9	[30.7-39.5]	0.917
Household Location				*
Rural [comparison group]	364	26.5	[19.3-35.2]	--
Non-rural	1,721	38.5	[34.6-42.5]	1.704*
Income Adequacy				
Lowest [comparison group]	289	38.4	[29.2-48.5]	--
Middle	675	34.1	[28.2-40.5]	0.844
Highest	313	48.7	[39.1-58.3]	1.475
Not stated	808	33.6	[28.2-39.5]	0.826

Note: *p < 0.05; **p < 0.01.

Table 4.4: Mean age first chance to try and first use cannabis by sex and age

	Sample size (total population)	Mean (Median) age first chance to try	Sample size (lifetime users)	Mean (Median) age first use
Total population 15+	9,884	18.6 (16)	6,040	18.8 (17)
Male	4,492	18.7 (16)	2,911	18.8 (17)
Female	5,392	18.6 (16)	3,129	18.8 (17)
15-24	1,779	14.6 (15)	1,177	15.6 (16)
Male	901	14.6 (15)	615	15.6 (16)
Female	878	14.5 (15)	562	15.5 (15)
25-44	4,321	16.6 (16)	2,863	17.6 (17)
Male	1,874	16.5 (16)	1,324	17.5 (17)
Female	2,447	16.6 (16)	1,539	17.8 (17)
45+	3,650	23.5 (20)	1,937	22.9 (20)
Male	1,666	23.4 (20)	950	22.9 (19)
Female	1,984	23.5 (20)	987	22.9 (20)

The sample size for the total population is greater than the sum of the age groups due to respondents having missing data for age.

Table 4.5: Frequency of past 3-month use among current users by age and sex

	Sample size	Never % [CI]	Once/twice % [CI]	Once a month % [CI]	Once a week % [CI]	Daily % [CI]
15-24	730	19.5 [15.0-24.9]	23.5 [18.7-29.1]	13.3 [9.9-17.5]	21.4 [16.7-27.1]	22.3 [17.6-27.7]
Male	423	16.2 [10.9-23.3]	20.7 [14.9-27.9]	12.3 [8.6-17.3]	24.7 [18.2-32.5]	26.2 [19.8-33.7]
Female	307	24.0 [16.9-32.8]	27.4 [19.8-36.5]	14.5 [9.0-22.5]	17.1 [11.0-25.6]	17.1 [11.1-25.4]
25+	1,116	21.8 [18.0-26.1]	25.9 [21.5-30.9]	17.9 [14.2-22.3]	19.5 [15.7-23.9]	15.0* [11.8-18.8]
Male	665	14.9 [11.0-19.9]	25.6 [20.0-32.2]	19.1 [14.4-24.9]	22.2 [17.2-28.3]	18.2 [13.8-23.6]
Female	451	35.4* [28.2-43.4]	26.5 [20.3-33.9]	15.5 [10.6-22.3]	14.0* [9.4-20.2]	8.6* [5.6-12.9]
15+	1,846	20.8 [17.8-24.1]	24.9 [21.6-28.5]	16.0 [13.4-19.0]	20.3 [17.2-23.7]	18.1 [15.3-21.2]
Male	1,088	15.4 [12.1-19.4]	23.7 [19.4-28.5]	16.5 [13.1-20.5]	23.2 [19.1-27.9]	21.3 [17.5-25.6]
Female	758	29.8** [24.5-35.6]	26.9 [21.9-32.6]	15.2 [11.3-20.1]	15.4* [11.5-20.5]	12.7** [9.3-17.3]
15-19	349	20.4 [14.0-28.9]	23.7 [17.0-32.0]	9.5Q [6.3-14.0]	21.1 [14.6-29.5]	25.3 [18.3-34.0]
Male	197	15.9 [8.6-27.5]	19.0 [11.8-29.1]	11.0Q [6.5-18.1]	24.6 [15.5-36.7]	29.5 [19.8-41.5]
Female	152	26.0 [15.9-39.5]	29.6 [18.9-43.1]	s	s	s
20-24	378	18.7 [13.0-26.0]	23.4 [16.9-31.4]	16.7* [11.4-24.0]	21.7 [15.4-29.7]	19.5 [13.9-26.6]
Male	223	16.4 [9.7-26.4]	22.1 [14.1-32.9]	13.4Q [8.2-21.2]	24.7 [16.4-35.6]	23.4 [15.7-33.3]
Female	155	21.9 [13.2-34.1]	25.2 [15.6-38.2]	s	s	s

Note: Q = qualified due to high sampling variability; s = estimate suppressed due to high sampling variability (or cell size less than 30); *p < 0.05; **p < 0.01 = difference between youth 15-24 and adults aged 25 or older; difference between youth aged 15-19 and those aged 20-24; difference between males and females within each age group.

Table 4.6: Frequency of past 3-month use among total sample by age and sex

	Sample size	Never % [CI]	Once/twice % [CI]	Once a month % [CI]	Once a week % [CI]	Daily % [CI]
15-24	2,082	70.3 [66.8-73.6]	8.7 [6.8-11.0]	4.9 [3.6-6.6]	7.9 [6.1-10.3]	8.2 [6.4-10.5]
Male	1,036	65.3 [60.2-70.2]	8.5 [6.1-11.9]	5.1 [3.5-7.3]	10.2 [7.4-14.0]	10.8 [8.0-14.4]
Female	1,046	75.4** [70.5-79.7]	8.9 [6.2-12.4]	4.7 [2.9-7.6]	5.5* [3.5-8.6]	5.5* [3.5-8.5]
25+	11,827	92.3** [91.3-93.1]	2.6** [2.1-3.2]	1.8** [1.4-2.3]	1.9** [1.5-2.4]	1.5** [1.2-1.9]
Male	4,685	88.4 [86.7-89.9]	3.5 [2.6-4.6]	2.6 [1.9-3.5]	3.0 [2.3-4.0]	2.5 [1.8-3.3]
Female	7,142	95.9** [95.0-96.6]	1.7** [1.3-2.3]	1.0** [0.7-1.5]	0.9** [0.6-1.3]	0.6** [0.4-0.8]
15+	13,909	88.9 [87.9-89.8]	3.5 [3.0-4.1]	2.2 [1.9-2.7]	2.8 [2.4-3.4]	2.5 [2.1-3.0]
Male	5,721	84.7 [83.0-86.2]	4.3 [3.4-5.3]	3.0 [2.3-3.8]	4.2 [3.4-5.2]	3.8 [3.1-4.7]
Female	8,188	92.8** [91.8-93.8]	2.7** [2.2-3.5]	1.5** [1.1-2.1]	1.6** [1.2-2.2]	1.3** [0.9-1.8]
15-19	1,019	70.2 [65.0-74.8]	8.9 [6.3-12.4]	3.5 [2.4-5.3]	7.9 [5.4-11.5]	9.5 [6.7-13.3]
Male	532	65.8 [58.4-72.5]	7.7 [4.7-12.4]	4.5 [2.6-7.5]	10.0 [6.1-15.9]	12.0 [7.8-18.0]
Female	487	74.8 [67.5-80.9]	10.1 [6.2-16.0]	s	s	s
20-24	1,063	70.4 [65.4-74.9]	8.5 [6.0-11.9]	6.1 [4.1-9.0]	7.9 [5.5-11.3]	7.1 [5.0-10.0]
Male	504	65.0 [57.7-71.6]	9.3 [5.7-14.6]	5.6 [3.4-9.1]	10.4 [6.7-15.8]	9.8 [6.5-14.6]
Female	559	76.0* [69.1-81.8]	7.8 [4.7-12.6]	s	s	s

Note: s = estimate suppressed due to high sampling variability (or cell size less than 30);
 *p < 0.05; **p < 0.01 = difference between youth 15-24 and adults aged 25 or older; difference between youth aged 15-19 and those aged 20-24; difference between males and females within each age group.

Table 4.7: Weekly or daily use of cannabis versus other use, current cannabis users 15-24, Canada 2004

	N	%	[95% CI]	OR	OR with age cannabis initiation
Total	730	43.7	[37.7, 49.9]		
Sex				*	*
Male	423	50.9	[43.0, 58.7]	1.943*	2.022
Female [comparison group]	307	34.1	[25.8, 43.6]	--	--
Age [comparison group is previous]					**
15-17	154	36.3	[25.2, 49.1]	--	--
18-19	195	53.7	[41.7, 65.3]	2.350*	3.802**
20-24	378	41.2	[33.2, 49.7]	0.669	0.825
Region [comparison group is Canada]					
Atlantic	170	36.8	[29.1, 45.1]	0.776	0.930
Quebec	68	51.8	[39.9, 63.4]	1.582*	1.450
Ontario	54	40.0Q	[27.4, 54.1]	0.872	0.852
Prairie	276	39.4	[33.7, 45.5]	0.852	0.825
British Columbia	159	44.5	[36.9, 52.4]	1.096	1.056
Household Location					
Rural [comparison group]	97	41.3	[26.3, 58.1]	--	--
Non-rural	630	43.9	[37.6, 50.5]	1.145	1.507
Income Adequacy				*	*
Lowest [comparison group]	103	28.3	[17.4, 42.6]	--	--
Middle	230	41.2	[31.1, 52.0]	1.688	1.757
Highest	143	43.5	[30.4, 57.6]	1.774	1.909
Not stated	251	52.9	[42.6, 63.0]	3.099**	3.390**
Age Cannabis Initiation					**
					0.711**

Notes: Q = qualified due to high sampling variability;
*p < 0.05; **p < 0.01.

Table 4.8: Frequency reporting cannabis harm, as assessed by ASIST, among past 3-month users

	Sample size	Strong desire to use % [CI]	Health, social, legal problems % [CI]	Failed expectations % [CI]	Friends concern % [CI]	Failed control % [CI]
15-24	598	45.9 [39.3-52.6]	8.9 [5.9-13.3]	12.2 [8.7-16.7]	27.3 [22.0-33.2]	54.0 [47.2-60.7]
Male	364	45.8 [37.5-54.4]	9.2 [5.5-14.9]	13.8 [9.4-19.9]	30.4 [23.6-38.2]	58.5 [49.8-66.7]
Female	234	45.9 [35.3-56.9]	8.6 [4.2-16.7]	9.8 [5.2-17.6]	22.6 [15.1-32.5]	47.4 [36.8-58.3]
25+	868	36.2* [30.7-42.0]	4.1* [2.4-7.1]	6.2* [4.0-9.5]	14.1** [10.8-18.3]	34.5** [29.4-40.0]
Male	546	38.5 [31.6-45.9]	4.0 [2.0-7.7]	4.1 [2.3-7.2]	16.2 [11.8-21.8]	38.2 [31.6-45.2]
Female	322	29.9 [22.3-38.9]	4.5 [1.7-11.5]	11.8* [6.1-21.6]	8.7* [5.6-13.3]	24.8** [18.4-32.5]
15+	1,466	40.4 [36.2-44.8]	6.2 [4.5-8.6]	8.8 [6.7-11.4]	19.8 [16.8-23.2]	42.9 [38.6-47.3]
Male	910	41.3 [35.9-46.8]	6.0 [4.0-8.9]	7.8 [5.7-10.7]	21.7 [17.8-26.1]	46.0 [40.6-51.5]
Female	556	38.7 [31.9-45.9]	6.7 [3.8-11.6]	10.7 [6.8-16.4]	15.9 [11.5-21.6]	36.6* [30.0-43.8]
15-19	284	48.4 [38.8-58.2]	8.3 [4.6-14.5]	13.2 [8.2-20.5]	26.7 [19.5-35.4]	61.7 [51.9-70.7]
Male	166	45.3 [33.2-57.9]	s	13.3 [7.7-22.0]	28.2 [19.1-39.5]	64.8 [51.9-75.8]
Female	118	53.0 [37.7-67.7]	s	s	24.6 [13.9-39.6]	57.3 [41.9-71.5]
20-24	314	43.5 [34.6-52.8]	9.5 [5.4-16.4]	11.3 [7.1-17.6]	27.8 [20.6-36.3]	47.1* [38.1-56.4]
Male	198	46.3 [35.0-58.0]	s	s	32.4 [22.9-43.5]	53.0 [41.3-64.4]
Female	116	39.3 [25.7-54.7]	s	s	20.8 [11.3-35.2]	38.1 [24.9-53.5]

Note: s = estimate suppressed due to high sampling variability (or cell size less than 30);

*p < 0.05 **; p < 0.01 = differences in overall rates between youth aged 15-24 and adults aged 25+; overall rates between youth aged 15-19 and those aged 20-24; between males and females within each age group.

Table 4.9: Past 3-month users who experienced at least one problem due to cannabis use versus past 3-month users who did not, past 3-month users aged 15-24, Canada, 2004

	N	%	[95% CI]	OR	OR with cannabis use variable
Total	591	77.6	[71.8, 82.6]		
Sex					
Male	358	79.7	[72.5, 85.4]	1.494	1.107
Female [comparison group]	233	74.6	[64.3, 82.7]	--	--
Age [comparison group is previous]				*	
15-17	119	83.7	[70.9, 91.5]	--	--
18-19	161	85.3	[75.9, 91.5]	1.514	0.809
20-24	311	71.3	[62.2, 78.9]	0.468	0.495
Region [comparison group is Canada]					
Atlantic	148	69.9	[60.9, 77.5]	0.747	0.826
Quebec	55	70.9	[57.7, 81.3]	0.603	0.432*
Ontario	41	84.4	[70.2, 92.5]	1.840	1.980
Prairie	216	77.7	[71.4, 82.9]	1.003	1.145
British Columbia	131	80.4	[72.5, 86.4]	1.202	1.237
Household Location					
Rural [comparison group]	79	83.9	[67.1, 93.0]	--	--
Non-rural	512	77.1	[70.8, 82.3]	0.774	0.687
Income Adequacy					
Lowest [comparison group]	83	75.3	[57.8, 87.1]	--	--
Middle	187	76.1	[64.5, 84.8]	0.861	0.684
Highest	115	78.2	[63.9, 87.9]	0.922	0.787
Not stated	206	79.5	[69.7, 86.8]	0.802	0.439
Age Cannabis Initiation				*	
				0.789*	0.870
Frequency of Cannabis Use					**
Less than monthly [comparison group]	167	61.4	[48.8-72.4]		
Monthly	126	62.4	[46.9-75.8]		0.914
Weekly	141	87.4	[76.9-93.5]		4.331**
Daily	154	95.1	[85.6-94.8]		15.227**

Notes: *p < 0.05; **p < 0.01.

Chapter 5: Other Drug Use and Harms

Highlights

- Among youth, cannabis was the most frequently reported drug used during one's lifetime (61.4%), followed by hallucinogens (16.4%), then cocaine (12.5%), ecstasy (11.9%), speed (9.8%) and inhalants (1.8%). The lifetime use of each of inhalants, heroin, steroids and drugs by injection was about 1%.
- A greater percentage of youth than adults reported use of any of 5 illicit drugs (24.2% versus 15.2%) and any of 6 illicit drugs in their lifetime (62.1% versus 42.3%).
- The rate of lifetime and past-year illicit drug use other than cannabis (24.2% and 11.3%, respectively) was highest among 18- to 19-year-olds and youth from the Quebec region. In addition, the rate of lifetime and past-year illicit drug use including cannabis (62.1% and 37.9%, respectively) was also higher among 18- to 19-year-olds and youth from the Quebec region.
- Youth who had used in their lifetime were more likely than adults to report harm from their use of any of 8 illicit drugs (34.5% versus 20.7%) or any of 5 illicit drugs (59.5% versus 41.7%).

Introduction

The focus of this chapter is on the use of drugs other than cannabis in youth. The lifetime and past-year prevalence of 8 drug-use behaviours: cocaine or crack; hallucinogens, PCP or LSD; speed or amphetamines; heroin; ecstasy (MDMA) or other similar drugs; inhalants (glue, gasoline or other solvents); steroids; and injection drug use, along with various concerns related to their use, will be explored.

Lifetime prevalence is based on the question asking respondents whether they “ever used or tried” the given drug, and past-year prevalence is based on a follow-up question about whether they also used the drug at least once in the past 12 months.

In addition, six derived variables were examined: (1) any lifetime and past-year use of any of 6 illicit drugs, including cannabis (cannabis; cocaine or crack; hallucinogens, PCP or LSD; speed or amphetamines; heroin; ecstasy [MDMA]); (2) any lifetime and past-year use of any of 5 illicit drugs, excluding cannabis; and (3) any lifetime and past-year use of any of 8 drugs (including steroids and inhalants). The rationale for examining use of any of 5 illicit drugs in addition to any of 6 or any

of 8 is because the variables any of 6 and any of 8 include those respondents who have used cannabis in their lifetime or past year. Since approximately 62% of youth have used cannabis in their lifetime, and about 37% have done so in the past year, use of cannabis blurs the results for use of the other illicit drugs. As such, examining use of any of 5 illicit drugs allows the examination of those youth who have engaged in an even less common activity—those who have used any of the 5 main illicit drugs. Examining use of any of 8 drugs allows us to examine the proportion of youth who have used at least one illicit substance when taking into account all possible substances (cocaine, speed, ecstasy, heroin, hallucinogens, cannabis, steroids and inhalants).

To examine age at first use of the different drugs, all those who had used in their lifetime were asked the question, “How old were you when you first started using [drug name]?”

The consequences and harms caused by drug use were examined in youth 15 to 24 years of age. These harms can take several forms, including the general harms to one's physical and social well-being (e.g. negative effects on friendships and social life, work and family) and symptoms that put people at risk for substance use disorders (e.g. uncontrolled use, impaired functioning).

The CAS assessed general harms with eight items reported during one's lifetime and during the 12 months before the survey. These eight items reflect whether the respondent felt that his or her drug use had a harmful effect on his or her (1) friendships and social life, (2) physical health, (3) home life and marriage, (4) work and studies, (5) financial position, (6) legal problems, (7) housing and (8) learning.

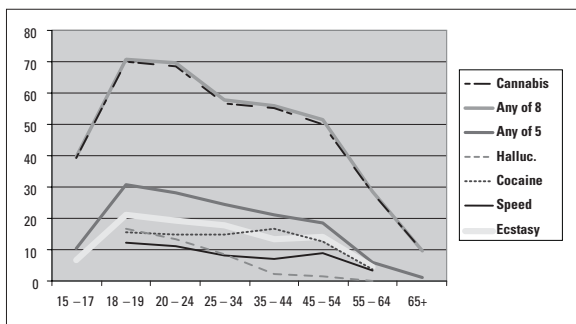
Results

Lifetime and Past-Year Prevalence of Use

Table 5.1, as replicated from the detailed report (Adlaf et al., 2005), presents the rates of lifetime use of the various illicit drugs by age. The rate of use of ecstasy was higher among youth than older age groups, with 10.1% aged 15 to 19 and 13.4% aged 20 to 24 reporting lifetime use, in comparison with 4.1% overall. In addition, the rate of reported use of cannabis, hallucinogens, cocaine, at least one of 5 illicit drugs, at least one of 6 illicit drugs and at least one of 8 illicit drugs peaked among the 20- to 24-year-old group and then decreased from age 25 onwards.

Figure 5.1 highlights this change in the prevalence rates across age. The figure shows that while the rates do not vary greatly, there is a steep increase between age 15 and 17, and 18 and 19 in the proportion of respondents who have used any drugs in their lifetime, and then the proportion begins a steady decline after age 19 onwards.

Figure 5.1: Change in lifetime prevalence across age



Overall, 61.4% of youth have used cannabis in their lifetime, 16.4% have used hallucinogens, 12.5% have used cocaine, 11.9% have used ecstasy, 9.8% have used speed, and 1.8% have used inhalants (Table 5.2). Females were less likely than males to use hallucinogens in their lifetime (12.2% versus 20.4%) and any of 5 illicit drugs in their lifetime (20.8% versus 27.4%).

Youth 20 to 24 years of age were more likely than 15- to 19-year-olds to have used cannabis (68.5% versus 53.4%), cocaine (15.0% versus 9.8%), hallucinogens (19.2% versus 13.2%), any of 5 illicit drugs (28.1% versus 19.8%), any of 6 illicit drugs (69.3% versus 54.0%), or any of 8 illicit drugs (69.5% versus 54.1%) in their lifetime (Table 5.2). Generally, females were less likely than males to have used illicit substances in their lifetime. There were no differences in past 12-month use of any of these substances between youth aged 15 to 19 and those 20 to 24 years of age. In terms of gender differences for past 12-month use, there were no differences between males and females aged 15 to 19 for illicit drug use. For those aged 20 to 24 years, however, males were more likely than females to have used cannabis (42.0% versus 30.7%), any of 5 illicit drugs (16.8% versus 5.9%), any of 6 illicit drugs (43.8% versus 31.1%), or any of 8 illicit drugs (43.9% versus 31.1%) in the past 12 months (Table 5.2).

Regarding differences in lifetime use between the age categories 15 to 17, 18 to 19 and 20 to 24 (Table 5.3), 18- to 19-year-olds were more likely than 15- to 17-year-olds to have used cannabis (69.9% versus 39.3%), hallucinogens (21.0% versus 6.5%), any of 5 illicit drugs (30.6% versus 10.5%), any of 6 illicit drugs (70.9% versus 39.5%) and any of 8 illicit drugs (70.9% versus 39.6%) in their lifetime. There were no differences in lifetime illicit drug use between youth 18 to 19 and 20 to 24 years of age. Youth 18 to 19 years of age were more likely than those 15 to 17 and 20 to 24 to have used cannabis in the past 12 months (47.2% versus 29.2% and 36.5%, respectively). In addition, youth 18 to 19 were more likely than those 15 to 17 to currently have used any of 5 illicit drugs (17.8% versus 5.2%), any of 6 illicit drugs (48.6% versus 29.5%) and any of 8 illicit drugs (48.6% versus 29.6%). Youth aged 20 to 24 were less likely than 18- to 19-year-olds to have used any of 6 illicit drugs (37.6% versus 48.6%) or any of 8 illicit drugs (37.7% versus 48.6%) in their lifetime. There were no differences for any substance use between males and females aged 15 to 17. Generally, for youth 18 to 19 and 20 to 24, males had a higher prevalence of use than females. This reflects the finding for cannabis that was displayed in the previous chapter, in which there is no sex difference near the age of initiation.

Characteristics Associated with Lifetime and Past-Year Use of Any of 5 Illicit Drugs

When controlling for all demographic characteristics, there was a significant main effect of sex, age and region in predicting lifetime use of any of 5 illicit drugs among youth (cocaine, speed, ecstasy, hallucinogens, heroin) (Table 5.4). Males were more likely than females (27.4% versus 20.8%), youth aged 15 to 17 were less likely than those 18 to 19 and 20 to 24 years of age (10.5% versus 30.6% and 28.1%, respectively), and youth from the Atlantic and Ontario regions were less likely (17.6%) and those from Quebec (35.9%) were more likely to have used any of 5 illicit drugs in their life.

Regarding past-year use of any of 5 illicit drugs among youth, there were significant main effects again in terms of sex, age and region (Table 5.5). Males were almost two times more likely than females to be current users of any of 5 illicit drugs (14.8% versus 7.5%). In addition, as with lifetime use, youth 18 to 19 years of age were more likely than those 15 to 17 years of age to have used any of 5 drugs in the past 12 months (17.8% versus 5.2%); as opposed to lifetime use; however, those aged 20 to 24 were less likely than 18- to 19-year-olds to report past 12-month use of any of 5 illicit drugs. Youth from the Quebec region were more likely than those from the rest of Canada to currently use any of 5 illicit drugs (17.6%).

Characteristics Associated with Lifetime and Past-Year Use of Any of 6 Illicit Drugs

In terms of the characteristics of youth reporting lifetime use of any of 6 illicit drugs (cannabis, cocaine, speed, ecstasy, hallucinogens, heroin), there were significant main effects of age and region (Table 5.6). Youth 18 to 19 years of age were more likely than those aged 15 to 17 to have used any of 6 illicit drugs in their lifetime (70.9% versus 39.5%), and youth from the Atlantic region were less likely (51.9%) and those from the Quebec region more likely (73.8%) to have done so.

Regarding current use of any of 6 illicit drugs, there were significant main effects of sex, age, region and household location when taking all the demographic characteristics into account (Table 5.7). Unlike that for lifetime use of any of 6 illicit drugs, males were more likely than females to be current users (42.5% versus 33.2%). In addition, as with lifetime use, youth 18 to 19 years of age were also more likely than those 15 to 17 years of age to currently use any of 6 illicit drugs (48.6% versus 29.5%); however, unlike that demonstrated for lifetime use, youth 20 to 24 years of age were less likely than 18- to 19-year-olds (37.6% versus 48.6%) to do so. Youth from the Quebec region were more likely than those from the rest of Canada to currently use any of 6 illicit drugs (47.4%), and those from non-rural households were more likely than those from rural households to currently do so (39.4% versus 27.9%).

Age of First Use

For purposes of policy and intervention, the mean age of use of the various illicit drugs (cannabis, speed, hallucinogens, ecstasy) was examined (Table 5.8). For these substances, youth generally started using cannabis at the earliest age; the mean age of cannabis use among youth was slightly less than 16 years, and this was followed by hallucinogens at 17 years, speed at slightly less than 18 years, cocaine at 18 years and ecstasy at a little over 18 years. Overall, there were no differences between males and females in the mean age of first use of the various substances.

Reasons for Using/Not Using Illicit Drugs

Respondents who had used at least one illicit drug at least once in their lifetime were asked, "Thinking of the very first time you used the drug(s) you mentioned, what was the single most important reason why you started using it/them?" Almost half of youth (49.3%) stated that the single most important reason for starting to use drugs was "to try out or because of curiosity". This was followed by "to get high" stated by 11.2% of youth and because "family or friends are using" stated by 10.8%.

To examine why people who try drugs continue to use them, respondents who had used drugs in the past 3 months were asked, "What is the most important reason why you are still using it/them?" The most common response to this question among youth was that they "didn't know" why they are still using them (19.7%), followed by "for recreation purposes" (17.7%) and "to get or feel high" (10.3%).

To examine the reasons why some youth never used illicit drugs, those who had never used any illicit drugs in their lifetime were asked, "What is the single most important reason why you don't use drugs?" The most frequent response among youth was "because it is a health risk" (40.0%), followed by "because I am not interested in drugs" (30.4%) and "drugs are addictive" (5.5%).

Harms and Problems

Table 5.9 presents the percentage of users who have reported lifetime harms from their use of any of 8 drugs (cannabis, cocaine, speed, hallucinogens, ecstasy, inhalants, heroin, steroids). Users were asked if they have experienced harms in their lifetime as a result of their drug use on friendships and social life; physical health; home life or marriage; work, studies or employment opportunities; financial position; legal problems; housing; or learning.

A higher percentage of youth than adults reported lifetime harms as a result of their drug use on their friendships and social life (14.8% versus 9.3%); physical health (20.3% versus 13.5%); home life or marriage (11.4% versus 7.8%); work, studies or employment opportunities (13.4% versus 7.8%); financial position (12.0% versus 7.3%); learning (9.6% versus 4.9%), and experienced one or more types of harm overall in their lifetime as a result of their drug use (34.5% versus 20.7%). There were no differences between youth 15 to 19 years of age and those 20 to 24 years of age in terms of lifetime reported harms. When examining all the different types of harms combined, however, 15- to 19-year-olds were more likely than those aged 20 to 24 to have reported experiencing at least one harm in their lifetime resulting from their drug use (41.2% versus 29.9%).

Table 5.10 presents the proportion of users who have experienced harms from use of any of 5 illicit drugs (cocaine, speed, hallucinogens, ecstasy, heroin) in their lifetime. Similarly, a higher proportion of youth than adults reported harms due to their use of drugs in the areas of physical health (39.9% versus 27.6%); work, studies or employment opportunities (26.2% versus 16.8%); financial position (26.5% versus 17.6%); learning (18.5% versus 10.1%), and a higher proportion reported at least one or more types of harms in their lifetime (59.5% versus 41.7%). Within the youth subgroups, again there were no differences between those 15 to 19 years of age and those 20 to 24 years of age in any of the different types of reported harms, or in the proportion of respondents reporting at least one or more types of harms in their lifetime.

To examine the characteristics of youth who have reported at least one or more problems as a result of their use of any of the 5 illicit drugs (cocaine, speed, ecstasy, hallucinogens, heroin) in their lifetime, a multivariate logistic regression was conducted taking into account sex, age, region, household location and income adequacy (Table 5.11). Overall, there were no differences in terms of sex, age, region, household location or income between those youth who reported problems and those who did not, among the lifetime users.

Summary and Discussion

Excluding cannabis, hallucinogens are the most prevalent illicit drug used in the lifetime by youth, followed by cocaine, ecstasy, speed and inhalants. When examining lifetime and past 12-month use of illicit drugs across age, there is a peak for the prevalence of use among those aged 18 to 19, after which age the prevalence of use begins a steady decline.

As is the case with alcohol and cannabis use, youth are not a homogeneous group in terms of their illicit drug consumption: 18- to 19-year-olds were more likely than those aged 15 to 17 to have used illicit drugs in their lifetime, and more likely than 15- to 17- and 20- to 24-year-olds to currently use. In addition, males were in general more likely than females to have used illicit drugs in their lifetime and currently. Youth from the Atlantic and Ontario regions were less likely than those from the rest of Canada to have reported lifetime use of at least one illicit drug, whereas those from the Quebec region were more likely to have reported both lifetime and current use of at least one illicit drug. These findings reflect those demonstrated for alcohol and cannabis use. One potential explanation might be that those who use alcohol and cannabis are more likely to use other illicit drugs, and since those from Quebec are more likely to use alcohol and cannabis and those from the Atlantic region less likely, then we would expect similar patterns for use of illicit drugs. Another possible explanation for this finding could pertain to age of cannabis initiation and its relation to subsequent illicit drug use (Fergusson and Horwood, 2000; Lynskey et al., 2003). Since in the

previous chapters we saw that youth from the Atlantic and Ontario regions had later ages of cannabis initiation, whereas those from Quebec had earlier ages, if age of cannabis initiation is linked to subsequent illicit drug use, it should not be surprising that Quebec youth demonstrate higher rates of illicit drug use and those from the Atlantic region demonstrate lower rates. Alcohol and cannabis use as well as age of cannabis initiation will all be examined as predictors of subsequent illicit drug use in the next chapter.

In terms of the age of initiation of illicit drug use, cannabis had the lowest mean age of initiation ($M=16$) followed by hallucinogens ($M = 17$), and then speed, cocaine and ecstasy ($M = 18$). Among youth who had used at least one illicit drug other than cannabis in their lifetime, the most important reason provided for why they started using them, 49.3%, was “to try out or because of curiosity”; however, when asked why they still used, the most common answer provided by almost one fifth of youth was that they “didn’t know”. Those who had never used any illicit drugs provided “because they are a health risk” as their single most important reason for never doing drugs.

Table 5.1: Lifetime other drug use, by sex and age group, Canada, aged 15+, 2004 (N = 13,909)

	Lifetime Use									
	Total % [CI]	Sex		Age						
		Male % [CI]	Female % [CI]	15-19 % [CI]	20-24 % [CI]	25-34 % [CI]	35-44 % [CI]	45-54 % [CI]	55-64 % [CI]	65+ % [CI]
Sample size	13,909	5,721	8,188	1,020	1,065	2,342	2,720	2,706	1,853	1,898
Cannabis	44.5 [43.0-46.0]	50.1 [47.8-52.5]	39.2 [37.3-41.1]	53.4 [48.0-58.8]	68.5** [63.4-73.3]	56.8** [53.3-60.3]	55.3 [51.8-58.8]	50.1* [46.5-53.8]	28.2** [24.7-32.1]	9.2** [6.9-12.1]
Hallucinogens	11.4 [10.5-2.4]	16.0 [14.4-17.8]	7.1 [6.2-8.1]	13.2 [9.9-17.5]	19.2* [15.7-23.3]	17.8 [15.3-20.6]	13.4* [11.2-16.0]	14.1 [11.7-16.8]	4.5** [3.0-6.7]	s
Cocaine	10.6 [9.7-11.6]	14.1 [12.6-15.8]	7.3 [6.4-8.3]	9.8 [6.8-14.0]	15.0* [12.0-18.5]	15.0 [12.7-17.5]	16.5 [14.1-19.3]	12.5* [10.3-15.0]	3.7** [2.3-5.7]	s
Speed	6.4 [5.6-7.2]	8.7 [7.4-10.2]	4.1 [3.5-5.0]	8.3 [5.7-11.8]	11.2 [8.4-14.6]	8.0 [6.3-10.2]	6.9 [5.1-9.1]	8.9 [6.9-11.4]	3.2** [2.0-5.2]	s
Ecstasy	4.1 [3.5-4.7]	5.2 [4.3-6.3]	3.0 [2.4-3.7]	10.1 [7.3-13.9]	13.4 [10.4-17.2]	8.7* [6.8-11.0]	2.3** [1.5-3.6]	1.4 [0.8-2.3]	0.1Q** [0.0-0.2]	s
Inhalants	1.3 [1.0-1.6]	1.9 [1.4-2.5]	3.0 [2.4-3.7]	1.4Q [0.6-3.2]	2.1Q [1.1-4.0]	1.8 [1.1-2.9]	1.3 [0.8-2.1]	1.8 [1.1-3.1]	0.6Q [0.2-2.0]	s
Injection use	1.1 [0.8-1.4]	1.6 [1.1-2.2]	0.6 [0.4-0.8]	s	1.3Q [0.7-2.7]	1.2Q [0.7-2.1]	1.1 [0.6-2.0]	2.3 [1.4-3.7]	s	s
Heroin	0.9 [0.6-1.2]	1.3 [0.9-1.9]	0.5 [0.3-0.7]	s	s	1.4 [0.7-2.6]	1.3 [0.7-2.4]	1.3 [0.7-2.2]	s	s
Steroids	0.6 [0.4-0.8]	1.0 [0.7-1.5]	s	s	s	s	1.2 [0.6-2.3]	s	s	s
Any 5 illicit drugs	16.5 [15.4-17.6]	21.1 [19.3-23.0]	12.2 [11.0-13.4]	19.8 [15.7-24.6]	28.1* [23.9-32.8]	24.6 [21.7-27.6]	21.0 [18.4-24.0]	18.5 [15.8-21.4]	6.1** [4.4-8.4]	1.0** [0.5-2.1]
Any 6 illicit drugs	45.1 [43.6-46.6]	50.6 [48.2-52.9]	39.9 [38.0-41.8]	54.0 [48.6-59.4]	69.3** [64.2-74.0]	57.7** [54.2-61.2]	55.6 [52.1-59.0]	51.3 [47.6-54.9]	28.5** [25.0-32.4]	9.5** [7.2-12.5]
Any 8 drugs	45.2 [43.7-46.7]	50.9 [48.6-53.3]	39.9 [38.0-41.8]	54.1 [48.6-59.4]	69.5** [64.4-74.2]	57.8** [54.3-61.3]	56.1 [52.6-59.5]	51.3 [47.6-55.0]	28.6** [25.0-32.4]	9.7** [7.3-12.6]

Reproduced from the Detailed Report (Adlaf et al., 2005).

Notes: Q = qualified due to high sampling variability;

s = estimate suppressed due to high sampling variability;

*p < 0.05; **p < 0.01 = difference between age group and previous.

Any 5 illicit drugs include cocaine, speed, ecstasy, hallucinogens and heroin.

Any 6 illicit drugs include cannabis, cocaine, speed, ecstasy, hallucinogens and heroin.

Any 8 drugs include cannabis, cocaine, speed, ecstasy, hallucinogens, inhalants, steroids and heroin.

Table 5.2: Contrast between age groups with 2 sub-categories, Lifetime, past 12-month and past 3-month drug use, by sex and age group, aged 15-24, 2004 (N = 2,085)

	15-19			20-24			15-24		
	Total % [CI]	Males % [CI]	Females % [CI]	Total % [CI]	Males % [CI]	Females % [CI]	Total % [CI]	Males % [CI]	Females % [CI]
Sample size	1,020	533	487	1,065	506	559	2,085	1,039	1,046
Cannabis									
Lifetime	53.4 [48.0-58.8]	60.2 [52.8-67.3]	46.3* [38.8-54.1]	68.5** [63.4-73.3]	68.6 [60.8-75.5]	68.4 [61.6-74.6]	61.4 [57.7-65.0]	64.7 [59.3-69.7]	58.0 [52.7-63.2]
Past 12 months	37.5 [32.4-42.9]	40.8 [33.6-48.4]	34.1 [27.2-41.8]	36.5 [31.6-41.6]	42.0 [34.8-49.5]	30.7* [24.4-37.9]	37.0 [33.4-40.6]	41.4 [36.3-46.7]	32.3* [27.6-37.5]
Past 3 months	29.8 [25.2-35.0]	34.2 [27.5-41.6]	25.2 [19.1-32.5]	29.6 [25.1-34.6]	35.0 [28.4-42.3]	24.0* [18.2-30.9]	29.7 [26.4-33.2]	34.7 [29.8-39.8]	24.6** [20.3-29.5]
Cocaine									
Lifetime	9.8 [6.8-14.0]	10.3 [6.0-16.9]	9.4 [5.6-15.2]	15.0* [12.0-18.5]	18.0 [13.5-23.7]	11.8 [8.2-16.5]	12.5 [10.3-15.1]	14.4 [11.1-18.4]	10.6 [7.9-14.2]
Past 12 months	5.5 [3.3-9.0]	s	s	5.4 [3.7-7.8]	7.3 [4.7-11.2]	s	5.5 [4.0-7.4]	7.2 [4.9-10.6]	3.6* [2.2-5.9]
Past 3 months	3.5 [1.9-6.3]	s	s	3.5 [2.2-5.5]	5.1Q [3.0-8.4]	s	3.5 [2.4-5.1]	4.7 [2.9-7.4]	s
Hallucinogens									
Lifetime	13.2 [9.9-17.5]	16.9 [11.8-23.8]	9.3* [5.7-14.9]	19.2* [15.7-23.3]	23.4 [18.1-29.7]	14.8* [10.5-20.5]	16.4 [13.9-19.3]	20.4 [16.5-24.8]	12.2** [9.2-16.0]
Past 12 months	4.1 [2.4-6.8]	s	s	3.0Q [1.9-4.8]	4.5Q [2.6-7.7]	s	3.5 [2.5-5.0]	5.2 [3.4-8.0]	s
Past 3 months	s	s	s	s	s	s	2.0 [1.1-3.4]	s	s
Speed									
Lifetime	8.3 [5.7-11.8]	s	s	11.2 [8.4-14.6]	14.6 [10.3-20.2]	7.6* [4.7-12.2]	9.8 [7.9-12.2]	11.3 [8.5-14.9]	8.3 [5.8-11.6]
Past 12 months	s	s	s	s	s	s	3.9 [2.7-5.6]	s	s
Past 3 months	s	s	s	s	s	s	s	s	s
Ecstasy									
Lifetime	10.1 [7.3-13.9]	9.0 [5.4-14.6]	11.3 [7.3-17.0]	13.4 [10.4-17.2]	16.9 [12.1-23.0]	9.9* [6.7-14.4]	11.9 [9.7-14.4]	13.2 [10.0-17.1]	10.5 [7.9-14.0]
Past 12 months	4.6 [2.7-7.6]	s	s	4.3 [2.7-6.7]	6.8 [4.0-11.3]	s	4.4 [3.1-6.2]	5.9 [3.8-9.1]	2.8*Q [1.7-4.8]
Past 3 months	s	s	s	s	s	s	2.4 [1.5-3.7]	s	s
Inhalants									
Lifetime	s	s	s	s	s	s	1.8 [1.1-2.9]	s	s
Past 12 months	s	s	s	s	s	s	s	s	s
Past 3 months	s	s	s	s	s	s	s	s	s

Table 5.2: Continued

	15-19			20-24			15-24		
	Total % [CI]	Males % [CI]	Females % [CI]	Total % [CI]	Males % [CI]	Females % [CI]	Total % [CI]	Males % [CI]	Females % [CI]
Heroin									
Lifetime	s	s	s	s	s	s	s	s	s
Past 12 months	s	s	s	s	s	s	s	s	s
Past 3 months	s	s	s	s	s	s	s	s	s
Steroids									
Lifetime	s	s	s	s	s	s	s	s	s
Past 12 months	s	s	s	s	s	s	s	s	s
Past 3 months	s	s	s	s	s	s	s	s	s
Any 5 illicit drugs									
Lifetime	19.8 [15.7-24.6]	20.7 [14.9-28.0]	18.8 [13.5-25.6]	28.1* [23.9-32.8]	33.5 [27.0-40.7]	22.5* [17.4-28.6]	24.2 [21.2-27.5]	27.4 [22.9-32.4]	20.8* [17.0-25.2]
Past 12 months	11.0 [7.9-15.1]	12.6 [7.8-19.6]	9.3 [6.0-14.3]	11.5 [8.8-14.9]	16.8 [12.3-22.6]	5.9** [3.5-9.8]	11.3 [9.1-13.8]	14.8 [11.4-19.1]	7.5** [5.4-10.4]
Any 6 illicit drugs									
Lifetime	54.0 [48.6-59.4]	60.4 [53.0-67.5]	47.3* [39.7-55.0]	69.3** [64.2-74.0]	69.7 [62.0-76.4]	69.0 [62.1-75.1]	62.1 [58.4-65.7]	65.3 [60.0-70.2]	58.8 [53.4-63.9]
Past 12 months	38.3 [33.2-43.7]	40.9 [33.8-48.5]	35.6 [28.5-43.3]	37.6 [32.7-42.7]	43.8 [36.5-51.4]	31.1* [24.8-38.2]	37.9 [34.4-41.6]	42.5 [37.3-47.8]	33.2* [28.4-38.4]
Any 8 drugs									
Lifetime	54.1 [48.6-59.4]	60.5 [53.0-67.5]	47.4* [39.7-55.1]	69.5** [64.4-74.2]	69.9 [62.2-76.7]	69.1 [62.2-75.2]	62.2 [58.5-65.8]	65.5 [60.2-70.4]	58.9 [53.6-64.0]
Past 12 months	38.4 [33.3-43.8]	41.0 [33.8-48.6]	35.7 [28.6-43.4]	37.7 [32.8-42.8]	43.9 [36.6-51.5]	31.1* [24.8-38.2]	38.0 [34.4-41.7]	42.5 [37.4-47.9]	33.3* [28.4-38.4]
Past 3 months	31.9 [27.1-37.2]	36.1 [29.2-43.7]	27.5 [21.2-34.9]	30.9 [26.3-35.8]	36.7 [29.9-44.1]	24.8* [18.9-31.7]	31.3 [28.0-34.9]	36.4 [31.5-41.7]	26.0** [21.6-31.0]

Notes: Q = qualified due to high sampling variability; s = estimate suppressed due to high sampling variability or cell size less than 30;

*p < 0.05; **p < 0.01 = differences between males and females or between 15-19 and 20-24 age categories.

Any 5 illicit drugs include cocaine, speed, ecstasy, hallucinogens and heroin.

Any 6 illicit drugs include cannabis, cocaine, speed, ecstasy, hallucinogens and heroin.

Any 8 drugs include cannabis, cocaine, speed, ecstasy, hallucinogens, inhalants, steroids and heroin.

Table 5.3: Contrast between age groups with 3 sub-categories, Lifetime, past 12-month and past 3-month drug use, by sex and age group, aged 15-24, 2004 (N = 2,085)

	15-17			18-19			20-24		
	Total % [CI]	Males % [CI]	Females % [CI]	Total % [CI]	Males % [CI]	Females % [CI]	Total % [CI]	Males % [CI]	Females % [CI]
Sample size	581	306	275	439	227	212	1,065	506	559
Cannabis									
Lifetime	39.3 [32.7-46.2]	43.7 [34.6-53.3]	34.9 [26.0-45.1]	69.9** [62.2-76.6]	77.9 [68.6-85.0]	60.7* [48.9-71.4]	68.5 [63.4-73.3]	68.6 [60.8-75.5]	68.4 [61.6-74.6]
Past 12 months	29.2 [23.2-35.9]	31.3 [23.3-40.6]	27.1 [18.9-37.2]	47.2** [39.1-55.5]	50.9 [39.2-62.4]	43.0 [32.0-54.8]	36.5* [31.6-41.6]	42.0 [34.8-49.5]	30.7* [24.4-37.9]
Past 3 months	22.2 [17.0-28.4]	26.2 [18.9-35.2]	18.3 [11.6-27.6]	38.7** [31.0-47.0]	42.8 [31.8-54.5]	34.0 [24.0-45.8]	29.6 [25.1-34.6]	35.0 [28.4-42.3]	24.0* [18.2-30.9]
Cocaine									
Lifetime	s	s	s	15.7 [10.2-23.4]	s	s	15.0 [12.0-18.5]	18.0 [13.5-23.7]	11.8 [8.2-16.5]
Past 12 months	s	s	s	10.1 [5.7-17.2]	s	s	5.4 [3.7-7.8]	7.3 [4.7-11.2]	s
Past 3 months	s	s	s	s	s	s	3.5 [2.2-5.5]	5.1Q [3.0-8.4]	s
Hallucinogens									
Lifetime	6.5 [4.0-10.4]	s	s	21.0** [14.8-29.0]	27.1 [17.7-39.1]	s	19.2 [15.7-23.3]	23.4 [18.1-29.7]	14.8* [10.5-20.5]
Past 12 months	s	s	s	s	s	s	3.0Q [1.9-4.8]	4.5Q [2.6-7.7]	s
Past 3 months	s	s	s	s	s	s	s	s	s
Speed									
Lifetime	s	s	s	12.3 [7.9-18.8]	s	s	11.2 [8.4-14.6]	14.6 [10.3-20.2]	7.6* [4.7-12.2]
Past 12 months	s	s	s	s	s	s	s	s	s
Past 3 months	s	s	s	s	s	s	s	s	s
Ecstasy									
Lifetime	s	s	s	16.8 [11.4-24.0]	15.5 [8.7-26.1]	18.3 [10.8-29.1]	13.4 [10.4-17.2]	16.9 [12.1-23.0]	9.9* [6.7-14.4]
Past 12 months	s	s	s	s	s	s	4.3 [2.7-6.7]	6.8 [4.0-11.3]	s
Past 3 months	s	s	s	s	s	s	s	s	s
Inhalants									
Lifetime	s	s	s	s	s	s	s	s	s
Past 12 months	s	s	s	s	s	s	s	s	s
Past 3 months	s	s	s	s	s	s	s	s	s

Table 5.3: Continued

	15-17			18-19			20-24		
	Total % [CI]	Males % [CI]	Females % [CI]	Total % [CI]	Males % [CI]	Females % [CI]	Total % [CI]	Males % [CI]	Females % [CI]
Heroin									
Lifetime	s	s	s	s	s	s	s	s	s
Past 12 months	s	s	s	s	s	s	s	s	s
Past 3 months	s	s	s	s	s	s	s	s	s
Steroids									
Lifetime	s	s	s	s	s	s	s	s	s
Past 12 months	s	s	s	s	s	s	s	s	s
Past 3 months	s	s	s	s	s	s	s	s	s
Any 5 illicit drugs									
Lifetime	10.5 [7.0-15.4]	s	s	30.6** [23.3-38.9]	32.8 [22.5-45.1]	28.0 [18.8-39.5]	28.1 [23.9-32.8]	33.5 [27.0-40.7]	22.5* [17.4-28.6]
Past 12 months	5.2 [2.9-8.9]	s	s	17.8** [12.0-25.5]	22.1 [13.2-34.7]	s	11.5 [8.8-14.9]	16.8 [12.3-22.6]	5.9** [3.5-9.8]
Any 6 illicit drugs									
Lifetime	39.5 [32.9-46.4]	43.9 [34.7-53.4]	35.2 [26.2-45.4]	70.9** [63.3-77.5]	78.1 [68.8-85.3]	62.6* [50.7-73.2]	69.3 [64.2-74.0]	69.7 [62.0-76.4]	69.0 [62.1-75.1]
Past 12 months	29.5 [23.5-36.2]	31.3 [23.3-40.6]	27.7 [19.4-37.8]	48.6** [40.4-56.9]	51.2 [39.6-62.7]	45.6 [34.4-57.2]	37.6* [32.7-42.7]	43.8 [36.5-51.4]	31.1* [24.8-38.2]
Any 8 drugs									
Lifetime	39.6 [33.1-46.5]	44.0 [34.9-53.5]	35.3 [26.4-45.5]	70.9** [63.3-77.5]	78.1 [68.8-85.3]	62.6* [50.7-73.2]	69.5 [64.4-74.2]	69.9 [62.2-76.7]	69.1 [62.2-75.2]
Past 12 months	29.6 [23.7-36.3]	31.4 [23.4-40.7]	27.8 [19.6-38.0]	48.6** [40.4-56.9]	51.2 [39.6-62.7]	45.6 [34.4-57.2]	37.7* [32.8-42.8]	43.9 [36.6-51.5]	31.1* [24.8-38.2]
Past 3 months	23.3 [18.0-29.6]	26.4 [19.1-35.4]	20.3 [13.3-29.7]	41.9** [33.9-50.3]	46.5 [35.1-58.2]	36.6 [26.3-48.4]	30.9* [26.3-35.8]	36.7 [29.9-44.1]	24.8* [18.9-31.7]

Notes: Q = qualified due to high sampling variability; s = estimate suppressed due to high sampling variability or cell size less than 30;

*p < 0.05; **p < 0.01.

Any 5 illicit drugs include cocaine, speed, ecstasy, hallucinogens and heroin.

Any 6 illicit drugs include cannabis, cocaine, speed, ecstasy, hallucinogens and heroin.

Any 8 drugs include cannabis, cocaine, speed, ecstasy, hallucinogens, inhalants, steroids and heroin.

Table 5.4: Percentage reporting lifetime use of any of 5 illicit drugs (cocaine, speed, ecstasy, hallucinogens, heroin), by demographic characteristics, Canada, aged 15-24, 2004

	N	%	[95% CI]	OR
Total adults aged 25+	11,519	15.2	[14.1-16.4]	
Total youth aged 15-24	2,085	24.2	[21.2-27.5]	
Sex				*
Male	1,039	27.4	[22.9-32.4]	1.432*
Female [comparison group]	1,046	20.8	[17.0-25.2]	--
Age [comparison group is previous]				**
15-17	581	10.5	[7.0-15.4]	--
18-19	439	30.6	[23.3-38.9]	3.876**
20-24	1,065	28.1	[23.9-32.8]	0.848
Region [comparison group is Canada]				**
Atlantic	531	17.6	[14.3-21.6]	0.717**
Quebec	148	35.9	[28.6-44.0]	1.837**
Ontario	146	17.6Q	[12.2-24.8]	0.644*
Prairie	810	23.4	[20.6-26.5]	0.989
British Columbia	450	26.4	[22.5-30.7]	1.191
Household Location				
Rural [comparison group]	364	22.9	[16.0-31.8]	--
Non-rural	1,721	24.3	[21.1-27.9]	0.995
Income Adequacy				
Lowest [comparison group]	289	29.3	[21.2-38.9]	--
Middle	675	22.7	[17.9-28.3]	0.723
Highest	313	30.2	[22.2-39.7]	1.096
Not stated	808	20.8	[16.3-26.1]	0.779

Notes: Q = qualified due to high sampling variability;

*p < 0.05; **p < 0.01;

CI = confidence interval;

OR = adjusted for all variables in the table.

Table 5.5: Percentage reporting past-year use of any of 5 illicit drugs (cocaine, speed, ecstasy, hallucinogens, heroin), by demographic characteristics, Canada, aged 15-24, 2004

	N	%	[95% CI]	OR
Total adults aged 25+	11,519	1.5	[1.1-1.9]	
Total youth aged 15-24	2,085	11.3	[9.1-13.8]	
Sex				**
Male	1,039	14.8	[11.4-19.1]	2.135**
Female [comparison group]	1,046	7.5	[5.4-10.4]	--
Age [comparison group is previous]				**
15-17	581	5.2Q	[2.9-9.0]	--
18-19	439	17.8	[12.0-25.5]	4.026**
20-24	1,065	11.5	[8.8-14.8]	0.568*
Region [comparison group is Canada]				
Atlantic	531	8.0	[5.8-11.1]	0.748
Quebec	148	17.6Q	[12.3-24.6]	1.798**
Ontario	146	s	s	s
Prairie	810	10.0	[8.1-12.3]	0.906
British Columbia	450	13.1	[10.3-16.6]	1.258
Household Location				
Rural [comparison group]	364	10.6	[6.3-17.5]	--
Non-rural	1,721	11.4	[9.0-14.2]	0.979
Income Adequacy				
Lowest [comparison group]	289	13.4	[8.1-21.3]	--
Middle	675	9.4	[6.3-13.8]	0.657
Highest	313	15.9	[10.2-23.9]	1.193
Not stated	808	10.0	[6.9-14.4]	0.760

Notes: Q = qualified due to high sampling variability; s = estimate suppressed due to high sampling variability or cell size less than 30;
 *p < 0.05; **p < 0.01;
 CI = confidence interval;
 OR = adjusted for all variables in the table.

Table 5.6: Percentage reporting lifetime use of any of 6 illicit drugs (cannabis, cocaine, speed, ecstasy, hallucinogens, heroin), by demographic characteristics, Canada, aged 15-24, 2004

	N	%	[95% CI]	OR
Total adults aged 25+	11,519	42.3	[40.7-44.0]	
Total youth aged 15-24	2,085	62.1	[58.4-65.7]	
Sex				
Male	1,039	65.3	[60.0-70.2]	1.322
Female [comparison group]	1,046	58.8	[53.4-63.9]	--
Age [comparison group is previous]				**
15-17	581	39.5	[33.0-46.3]	--
18-19	439	70.9	[63.2-77.5]	3.716**
20-24	1,065	69.3	[64.2-74.0]	0.910
Region [comparison group is Canada]				**
Atlantic	531	51.9	[47.2-56.5]	0.711**
Quebec	148	73.8	[66.1-80.2]	1.866**
Ontario	146	60.1	[51.6-68.0]	0.922
Prairie	810	57.8	[54.3-61.3]	0.885
British Columbia	450	58.5	[53.8-63.0]	0.923
Household Location				
Rural [comparison group]	364	60.0	[50.8-68.5]	--
Non-rural	1,721	62.4	[58.3-66.3]	0.994
Income Adequacy				
Lowest [comparison group]	289	71.5	[61.8-79.6]	--
Middle	675	60.7	[53.9-67.1]	0.648
Highest	313	68.6	[53.9-67.1]	0.916
Not stated	808	56.7	[50.7-62.5]	0.719

Notes: *p < 0.05; **p < 0.01;
 CI = confidence interval;
 OR = adjusted for all variables in the table.

Table 5.7: Percentage reporting past-year use of any of 6 illicit drugs (cannabis, cocaine, speed, ecstasy, hallucinogens, heroin), by demographic characteristics, Canada, aged 15-24, 2004

	N	%	[95% CI]	OR
Total adults aged 25+	11,519	10.3	[9.3-11.3]	
Total youth aged 15-24	2,085	37.9	[34.4-41.6]	
Sex				*
Male	1,039	42.5	[37.3-47.8]	1.447*
Female [comparison group]	1,046	33.2	[28.4-38.4]	--
Age [comparison group is previous]				**
15-17	581	29.5	[23.6-36.1]	--
18-19	439	48.6	[40.4-56.9]	2.197**
20-24	1,065	37.6	[32.8-42.6]	0.596*
Region [comparison group is Canada]				*
Atlantic	531	33.8	[29.5-38.4]	0.914
Quebec	148	47.4	[39.5-55.5]	1.538**
Ontario	146	34.5	[27.2-42.6]	0.820
Prairie	810	35.2	[31.9-38.7]	0.903
British Columbia	450	37.0	[32.6-41.5]	0.961
Household Location				*
Rural [comparison group]	364	27.9	[20.5-36.7]	--
Non-rural	1,721	39.4	[35.5-43.4]	1.651*
Income Adequacy				
Lowest [comparison group]	289	40.1	[30.8-50.3]	--
Middle	675	35.3	[29.4-41.8]	0.830
Highest	313	48.9	[39.4-58.5]	1.387
Not stated	808	34.4	[28.9-40.3]	0.796

Notes: *p < 0.05; **p < 0.01;
 CI = confidence interval;
 OR = adjusted for all variables in the table.

Table 5.8: Mean age of substance use by age and sex, lifetime users aged 15-24, Canada, 2004

Drug	Total	Males	Females
Cannabis	N = 1,177 M = 15.6 [15.34-15.78]	N = 615 M = 15.6 [15.28-15.95]	N = 562 M = 15.5 [15.21-15.77]
Cocaine	N = 254 M = 18.1 [17.51-18.62]	N = 140 M = 18.2 [17.54-18.96]	N = 114 M = 17.8 [16.91-18.69]
Speed	N = 151 M = 17.7 [17.13-18.33]	N = 86 M = 17.8 [17.13-18.43]	N = 65 M = 17.7 [16.52-18.83]
Hallucinogens	N = 332 M = 17.1 [16.46-17.64]	N = 203 M = 17.4 [16.65-18.17]	N = 129 M = 16.4 [15.49-17.35]
Ecstasy	N = 243 M = 18.4 [17.69-19.17]	N = 128 M = 18.3 [17.72-18.91]	N = 115 M = 18.6 [17.05-20.10]

Note: None of the differences between males and females is statistically significant.
 N = sample size;
 M = mean.

Table 5.9: Percentage reporting harms from one's own drug use, lifetime drug users including cannabis,¹ Canada, 2004

Types of harm Drug use had a harmful effect on your...	Total population N = 6,180 % yes	Adults aged 25+ N = 4,970 % yes	Youth aged 15-24			18-19 N = 513 % yes	20-24 N = 701 % yes
			Total N = 1,210 % yes	Female N = 581 % yes	Male N = 629 % yes		
1. Friendships and social life	10.7 [9.4-12.1]	9.3 [8.0-10.9]	14.8** [11.7-18.6]	12.4 [8.6-17.6]	16.9 [12.4-22.6]	15.5 [10.7-22.0]	14.3 [10.5-19.2]
2. Physical health	15.1 [13.6-16.7]	13.5 [11.9-15.3]	20.3** [16.8-24.3]	19.5 [14.7-25.5]	21.0 [16.3-26.8]	22.1 [16.3-29.2]	19.1 [15.0-24.0]
3. Home life or marriage	8.7 [7.6-10.1]	7.8 [6.6-9.3]	11.4* [8.8-14.8]	8.9 [5.8-13.6]	13.7 [9.8-18.8]	10.8 [6.9-16.5]	11.9 [8.6-16.4]
4. Work, studies or employment opportunities	9.2 [8.0-10.6]	7.8 [6.5-9.3]	13.3** [10.3-17.1]	10.8 [7.4-15.5]	15.5 [11.0-21.4]	15.9 [10.6-23.1]	11.6 [8.4-15.7]
5. Financial position	8.4 [7.3-9.7]	7.3 [6.1-8.7]	12.0** [9.3-15.3]	9.8 [6.6-14.3]	13.8 [10.0-18.9]	13.0 [8.6-19.3]	11.2 [8.2-15.2]
6. Legal problems	4.2 [3.4-5.2]	3.9 [3.0-5.1]	4.7 [3.0-7.1]	s	7.2 [4.4-11.7]	s	4.4 [2.7-7.1]
7. Housing	1.9 [1.4-2.6]	1.8 [1.3-2.7]	s	s	s	s	s
8. Learning	6.1 [5.1-7.2]	4.9 [3.9-6.1]	9.6** [7.1-12.8]	8.8 [5.8-13.0]	10.3 [6.8-15.3]	12.2 [8.0-18.4]	7.7 [5.2-11.4]
One or more types of harm	23.8 [22.0-25.8]	20.7 [18.7-22.8]	34.5** [30.1-39.3]	31.5 [25.5-38.3]	37.2 [30.9-43.9]	41.2 [34.0-48.9]	29.9* [24.7-35.7]

Note: s = estimate suppressed due to high sampling variability;

*p < 0.05; **p < 0.01 = significant difference between youth aged 15-24 and adults aged 25+; between males and females; between youth 15-19 and those 20-24.

1. Lifetime harm: Percentages are of current and former drug users (respondents reporting lifetime use of any of the following 8 drugs: cannabis, cocaine, speed, hallucinogens, ecstasy, inhalants, heroin, and steroids).

Table 5.10: Percentage reporting harms from one's own drug use, lifetime excluding cannabis,¹ Canada, aged 15-24, 2004

Types of harm Drug use had a harmful effect on your...	Total population 15+ N = 2,157 % yes	Adults aged 25+ N = 1,676 % yes	Youth aged 15-24			18-19 N = 167 % yes	20-24 N = 314 % yes
			Total N = 481 % yes	Female N = 218 % yes	Male N = 263 % yes		
1. Friendships and social life	22.3 [19.4-25.5]	21.1 [17.8-24.8]	26.4 [20.5-33.4]	24.1 [16.0-34.6]	28.1 [20.1-37.9]	23.7 [14.6-36.0]	28.1 [20.8-36.9]
2. Physical health	30.3 [27.1-33.8]	27.6 [23.9-31.5]	39.9** [32.9-47.4]	39.8 [29.5-51.0]	40.1 [30.8-50.1]	41.2 [29.4-54.2]	39.1 [30.8-48.2]
3. Home life or marriage	18.9 [16.2-22.0]	17.5 [14.5-21.0]	24.1 [18.1-31.2]	19.7 [12.1-30.4]	27.3 [19.1-37.3]	20.4 [11.7-33.0]	26.4 [19.0-35.5]
4. Work, studies or employment opportunities	18.9 [16.2-22.0]	16.8 [13.9-20.3]	26.2** [20.1-33.4]	24.6 [16.3-35.2]	27.4 [19.2-37.6]	28.6 [18.1-42.2]	24.7 [17.9-33.2]
5. Financial position	19.6 [16.9-22.6]	17.6 [14.6-21.0]	26.5* [20.5-33.4]	22.6 [15.0-32.6]	29.3 [21.0-39.2]	29.2 [18.8-42.3]	24.8 [18.1-32.9]
6. Legal problems	10.0 [7.9-12.5]	9.8 [7.4-12.8]	10.9 [6.9-16.9]	s	16.0 [9.6-25.5]	s	10.0 [5.9-16.2]
7. Housing	4.4 [3.0-6.3]	4.5 [3.0-6.6]	s	s	s	s	s
8. Learning	12.0 [9.8-14.6]	10.1 [7.8-13.0]	18.5** [13.3-25.1]	18.6 [11.6-28.6]	18.4 [11.6-27.8]	23.0 [13.9-35.7]	15.6 [10.1-23.4]
One or more types of harm	45.7 [42.1-49.4]	41.7 [37.6-46.0]	59.5** [52.1-66.6]	60.3 [49.8-70.0]	59.0 [48.7-68.5]	63.3 [50.6-74.5]	57.2 [48.1-65.8]

Notes: s = estimate suppressed due to high sampling variability;

*p < 0.05; **p < 0.01 = significant difference between youth aged 15-24 and adults aged 25+; between males and females; between youth aged 15-19 and those 20-24.

1. Lifetime harm: Percentages are of current and former drug users (respondents reporting lifetime use of any of the following 5 drugs; cocaine, speed, hallucinogens, ecstasy, heroin).

Table 5.11: Percentage who experienced at least one problem versus those who did not, lifetime users excluding cannabis,¹ aged 15-24, Canada, 2004

	N	%	[95% CI]	OR without substance use variables
Total	481	59.5	[52.1-66.6]	
Sex				
Male	263	59.0	[48.7-68.5]	0.989
Female [comparison group]	218	60.3	[49.8-70.0]	--
Age [comparison group is previous]				
15-17	56	67.2	[46.7-82.8]	--
18-19	111	61.8	[45.4-75.8]	0.797
20-24	314	57.2	[47.8-66.0]	0.872
Region [comparison group is Canada]				
Atlantic	91	55.7	[44.1-66.7]	0.822
Quebec	53	56.8	[43.3-69.5]	0.917
Ontario	27	s	s	s
Prairie	191	59.5	[52.2-66.4]	1.052
British Columbia	119	59.3	[50.2-67.8]	0.988
Household Location				
Rural [comparison group]	64	62.2	[41.8-79.1]	--
Non-rural	417	59.2	[51.2-66.7]	0.957
Income Adequacy				
Lowest [comparison group]	77	59.4	[41.7-74.9]	--
Middle	173	64.0	[51.8-74.5]	1.206
Highest	91	47.8	[31.5-64.6]	0.622
Not stated	140	63.3	[50.3-74.6]	1.076

Notes: CI = confidence interval;

OR = adjusted for all variables in the table;

s = estimate suppressed due to high sampling variability or cell size less than 30;

*p < 0.05; **p < 0.01.

1. Lifetime harm: Percentages are of current and former drug users (respondents reporting lifetime use of any of the following 5 drugs: cocaine, speed, hallucinogens, ecstasy, heroin).

Chapter 6: Poly Drug Use

Highlights

- In their lifetime, 37.9% of youth reported using no illicit drug (excluding steroids and inhalants), 38.0% reported using cannabis only, 23.7% reported using some other illicit drug in addition to cannabis and only 0.4% reported using some other illicit drug only.
- Youth do not use cannabis or other illicit drugs in isolation; rather, most youth who currently use cannabis also consume alcohol (98.7%) and most youth who currently use illicit drugs also consume cannabis (91.3%) and alcohol (99.6%).
- When broken down into a user-type variable with four categories that are mutually exclusive, 24.2% of youth are illicit drug users (regardless of cannabis or alcohol use), 37.9% are cannabis users (never illicit drugs, regardless of alcohol use), 29.0% are alcohol users (never illicit or cannabis) and 8.9% are non-users.
- With user-type broken down into all possible combinations of user, 23.7% of youth are lifetime illicit/cannabis/alcohol users, 37.7% are cannabis/alcohol users, 29.0% are alcohol-only users and 8.9% are non-users.

Introduction

The focus of this chapter is on the combination use of drugs among youth. In examining substance use among youth, it is important to recognize that many users of one illicit drug are often also users of other substances. This chapter will examine the different combinations of substance usage in youth, explore the different combination use/patterns of tobacco smoking, alcohol, cannabis and illicit drugs. It will also examine the demographic characteristics that are associated with use of the various substances and how these characteristics are influenced when taking into account use of other substances.

Regressions will examine the same outcome variables that the previous three chapters have examined. However, in addition to the variables that were controlled for in previous chapters, use of other substances and age of initiation of other substances will also be controlled for so that the impact of use of one substance on another and age of initiation of one substance on the use of another can be examined.

Two derived variables will be examined in this chapter.

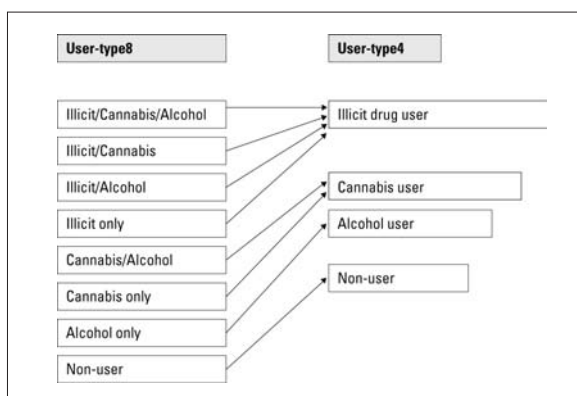
User-type8 Variable

A user-type variable was created to examine the different combination patterns of lifetime use that youth engage in when taking into account use of any of 5 illicit drugs (cocaine, heroin, speed, ecstasy, hallucinogens), use of cannabis and use of alcohol.

For the user-type8 variable, the different combination patterns of use are illicit/cannabis/alcohol, illicit/cannabis, illicit/alcohol, illicit only, cannabis/alcohol, cannabis only, alcohol only and non-user. Categories are exclusive in that all respondents are classified into only one group and membership into each group is determined by having used at least once in lifetime (Figure 6.1).

User-type4 Variable

A second user-type variable was created by modifying user-type8 to more succinctly identify the patterns of usage among youth. For the usertype4 variable, the categories in the usertype8 variable were condensed to examine the proportion of youth who used illicit drugs, cannabis but never other illicit drugs, alcohol but neither cannabis nor illicit drugs, or nothing in their lifetime. Having been classified into the “at least cannabis” group does not mean one has not had experience with alcohol and being classified in the “at least other illicit” does not imply having had no experience with either cannabis or alcohol. As a matter of fact, this classification scheme produces an increasing gradient of exposure to multiple substances. One assumption being made in studying this variable is a “milestone” effect, an assumption of irreversibility. That is, having used at least once, you can never go back to the status of never user (see Figure 6.1). This variable was first examined in a Canadian Addiction Survey: Public Opinions and Attitudes report (Racine, Flight and Sawka, in progress).

Figure 6.1: User-type8 and user-type4 variables

It is important to point out that cannabis is indeed another type of illicit substance; however, it will be examined separately in the present analysis because of its relatively high prevalence of use in the youth population.

In this chapter, to examine combination substance use among youth, the previously discussed two variables will be examined in youth 15 to 24 years of age and, where applicable, compared to the distribution among the total population 15+. In addition, to examine the characteristics of youth who use alcohol, cannabis and at least one of five illicit drugs, multivariate logistic regressions will be conducted with use of other substances as predictors in an attempt to explore the impact of use of different substances on use of others.

Results

Combination Use of Illicit Drugs

Because many users of one illicit drug are often users of another, the configuration of lifetime and past-year use of cannabis and other drugs was examined. Among youth, the most common pattern of lifetime use was cannabis only (38.0%), followed by no illicit drug use (37.9%), other illicit drug and cannabis (23.7%), and use of other illicit drugs only (0.4%) (Table 6.1). When looking at past-year use, no illicit drug use was the most common pattern of use (62.1%), followed by cannabis only (26.7%), other illicit drug and cannabis (10.3%), and other illicit drug only (1.0%).

The pattern of lifetime use for youth was much different from that of adults. No use of illicit drugs was the most common pattern of use among adults (57.5%), followed by cannabis only (27.3%), other illicit drug and cannabis (14.5%), and other illicit drug only (0.7%). Ten percent more youth than adults reported using only cannabis during their lifetime (38.0%), and 20% fewer youth reported having never used any illicit drugs (37.9%). Among lifetime users, however, there was little difference in the user-type patterns between youth and adults: almost equal proportions used cannabis only, other illicit drug and cannabis, and other illicit drug only (Table 6.1).

For past-year use among the total populations, the reported rates of cannabis use only was higher among youth than adults (26.7% versus 8.8%), as was the rate of other illicit drugs in addition to cannabis (10.3% versus 1.2%), whereas the rate of non-users was lower among youth than adults (62.1% versus 89.7%). For past-year use among users, unlike the pattern demonstrated among lifetime users, the reported rates of cannabis-only use was higher among adults than among youth (85.5% versus 70.3%) while other illicit drug use in addition to cannabis was higher among youth than among adults (27.1% versus 11.5%) (Table 6.1).

User-type Patterns (excluding tobacco smoking, inhalants, steroids)

User-type4

Table 6.2 presents a breakdown of the type of users that respondents fall into when considering the user-type4 categories: 24.2% of youth were illicit drug users; 37.9% were cannabis users; 29.0% were alcohol-only users; and 8.9% were non-users. A higher proportion of youth than adults were illicit drug users (24.2% versus 15.2%), cannabis users (37.9% versus 27.1%) and non-users (8.9% versus 6.1%), whereas a lower proportion of youth were alcohol-only users (29.0% versus 51.6%).

Among youth, males were significantly more likely than females to be illicit drug users (27.4% versus 20.8%), whereas females were significantly more likely to be alcohol-only users (32.4% versus 25.6%); there were no differences between males and females in terms of the proportion who were cannabis users or non-users.

More Detailed User-type8 Pattern

Table 6.3 demonstrates that a very small proportion of respondents who fell into the cannabis or illicit drug user-type categories were users of only these substances. Instead, the majority of illicit drug users also consumed cannabis and alcohol, and the majority of cannabis users also consumed alcohol. The most common pattern of use for youth was cannabis and alcohol (37.7%), followed by alcohol only (29.0%), illicit, cannabis and alcohol (23.7%), and non-users of any substance (8.9%). Unlike youth, the most common lifetime pattern of use among adults was alcohol only (51.6%), followed by lower proportions of cannabis and alcohol (26.8%), and illicit drugs, cannabis and alcohol (14.4%).

Combination Substance Use

Table 6.4 presents the combination use of substances. More specifically the table presents how the use of one particular substance may vary depending on use, or non-use, of another substance. From the table, it is apparent that youth who had smoked tobacco in their lifetime were more likely to have used alcohol in their lifetime (96.9%), in contrast with those who never smoked (88.2%). In addition, those who had smoked were also more likely to have used alcohol in the past 12 months than non-smokers (95.4% versus 80.8%). Smokers were also more likely than non-smokers to have used cannabis in their lifetime (87.9% versus 47.3%), cannabis in the past 12 months (65.5% versus 27.3%), and illicit drugs in their life (42.5% versus 9.2%).

Examining alcohol use, those who reported using alcohol in their lifetime were also more likely to report having smoked in their lifetime, used cannabis in their lifetime and in the past 12 months, and to have used illicit drugs in their lifetime or in the past 12 months. It must be pointed out that the estimates for prevalence of use of the various substances among those who reported never using alcohol in their lifetime are suppressed due to cell sizes less than 30. The majority of youth reported having used alcohol in their life, and as such only a small minority overall have never used. As a result of the small number of non-alcohol users to begin with, the number of users of other substances among these non-users was even smaller, resulting in

suppression of the estimates. Regarding past 12-month use of alcohol, youth who reported using alcohol in the past 12 months were also more likely than those who did not, to report having smoked in their lifetime, having used cannabis in their lifetime (70.8% versus 16.2%) and in the past 12 months, and illicit drugs in their lifetime and past 12 months.

This trend was also apparent among users and non-users of cannabis. Specifically, cannabis users were more likely than non-users to report smoking in their lifetime (53.4% versus 12.4%), alcohol use in their lifetime (99.6% versus 76.8%) or in the past 12 months (95.5% versus 62.8%), or illicit drug use in their lifetime or in the past 12 months. Those who had used cannabis in the past 12 months were also more likely than those who had not to report smoking (59.7% versus 22.7%), lifetime alcohol use (99.9% versus 85.5%) and past-year use (98.7% versus 73.6%), as well as illicit drug use in their lifetime (49.6% versus 9.1%) and in the past 12 months.

Similarly, youth who had used any of 5 illicit drugs in their lifetime were more likely than those who had not, to report smoking (74.0% versus 28.1%), lifetime alcohol use (99.7% versus 87.9%), past 12-month alcohol use (97.3% versus 78.2%), lifetime cannabis use (98.2% versus 50.0%), and past 12-month cannabis use (76.2% versus 24.6%). Those who currently used illicit drugs were also more likely than those who had not to report smoking (74.6% versus 33.8%), lifetime alcohol use (99.7% versus 89.7%), past-year alcohol use (99.6% versus 80.8%), lifetime cannabis use (99.7% versus 56.6%), and past 12-month cannabis use (91.3% versus 30.1%).

Alcohol Use in Combination with Other Substances

To examine the impact of use of cannabis and other illicit drugs on different measures of alcohol use, the following regressions examine different outcome measures for alcohol both with and without controlling for lifetime cannabis use and lifetime illicit drug use.

Past 12-month use

Without taking other substance use variables into account, youth 18 to 19 years of age were more likely than those 15 to 17 years of age to report having consumed alcohol in the past 12 months, as were youth from the Quebec region in comparison with other regions (Table 6.5). When taking lifetime cannabis and illicit drug use into account, 18- to 19-year-olds were still more likely than 15- to 17-year-olds to report current alcohol use, as were residents from the Quebec region. In addition, the odds of using alcohol in the past 12 months were 8 times higher for youth who had used cannabis in the past 12 months than for those who had not (95.5% versus 62.8%).

Heavy drinking versus light drinking

Without taking use of other substances into account, males were more than twice as likely as females to drink heavily (frequently/infrequently), 18- to 19-year-olds were twice as likely as 15- to 17-year-olds, and youth from the Atlantic region were more likely and those from Quebec less likely to drink heavily (Table 6.6). In addition, youth who started drinking at an earlier age were more likely to drink heavily. When taking use of cannabis or other illicit drugs into account, males and youth from the Atlantic region were still more likely to drink heavily, and those from Quebec were still less likely. When controlling for cannabis and illicit drug use, youth from the Prairie region were also more likely to drink heavily. Interestingly, when the prevalence of use of cannabis and other illicit drugs was equal among those aged 15 to 17, 18 to 19 and 20 to 24, 18- to 19-year-olds were no more likely to drink heavily than 15- to 17-year-olds; however, 20- to 24-year-olds were now less likely than the other two age groups to drink heavily. This suggests that when not controlling for cannabis or illicit drug use, those aged 18 to 19 are more likely than 15- to 17-year-olds to drink heavily because they also use cannabis and illicit drugs at higher rates, and therefore when cannabis and illicit drug use is controlled for, there is no difference between the two groups in terms of heavy drinking. On the other hand, it is noteworthy to point out that even when 18- to 19- and 20- to 24-year-olds consumed cannabis and illicit drugs at the same rate, the older group were less likely to drink heavily. In addition, the odds of drinking heavily were 2 times higher for those who had used cannabis or other illicit drugs in their lifetime than for those who had not used these substances.

Table 6.7 examines the characteristics of youth who reported drinking lightly. When not taking other substance use variables into account, the pattern is the opposite of that for heavy drinking: males were less likely than females, 18- to 19-year-olds were less likely than 15- to 17-year-olds, youth from the Atlantic region were less likely and those from Quebec more likely to drink lightly, and those youth who had started drinking later were significantly more likely to drink lightly. When considering cannabis and other illicit drug use, however, males remained less likely, Atlantic residents less likely and Quebec residents more likely. Age was no longer significantly related to light drinking and there was no difference between 15- to 17- and 18- to 19-year-olds. When controlling for cannabis and illicit drugs, youth from the Prairie region were significantly less likely to drink lightly. Youth who had used cannabis or other illicit drugs in their lifetimes were less likely to drink lightly than those who did not.

Monthly and weekly heavy drinking

When not taking other substance use into account, males were more likely than females, 18- to 19-year-olds were more likely than 15- to 17-year-olds, and residents from the Atlantic region were more likely than those of the other regions to have reported monthly heavy drinking (Table 6.8). In addition, youth who started drinking earlier were more likely to drink heavily monthly. When controlling for cannabis and other illicit drug use, males and Atlantic region residents remained more likely to drink heavily monthly; however, when 15- to 17- and 18- to 19-year-olds consumed cannabis and illicit drugs similarly, there was no difference between the two age groups in prevalence of monthly heavy drinking. In addition, youth from the Quebec region were now significantly less likely to report drinking heavily monthly, and the odds of drinking heavily monthly were 3 times higher among youth who had used cannabis in their lifetime and 1.5 times higher among those who had used illicit drugs in their lifetime in comparison to youth who had not used these substances.

Table 6.9 examines the characteristics of respondents who reported weekly heavy drinking. When not taking other substance use into account, males were more likely than females, 18- to 19-year-olds were more likely than 15- to 17-year-olds, and youth who had started drinking earlier were more likely than those who started later to report drinking heavily at least weekly over the past year. When taking lifetime cannabis or other illicit drug use into account, males were still more likely than females and those who had started drinking earlier were still more likely than those who started later to have reported drinking heavily weekly, but age was no longer related to this pattern of drinking; 18- to 19-year-olds were no longer more likely than 15- to 17-year-olds to drink heavily weekly when they consumed cannabis and illicit drugs at the same rates. In addition, lifetime cannabis use was not related to weekly heavy drinking, youth who used cannabis were no more likely to drink heavily weekly than those who did not, but the odds of drinking heavily were almost double for those who had used 1 of 5 illicit drugs in their lifetime.

Harms due to alcohol use

When not taking any other substance use into account, 18- to 19-year-olds were more likely than 15- to 17-year-olds and those who had started drinking younger were more likely than those who started older to report lifetime harm due to their alcohol use (Table 6.10). Although Quebec youth were less likely and Prairie youth more likely, the main effect of region was not significant. When controlling for lifetime cannabis use and other illicit drug use, however, there was no difference between 15- to 17-year-olds and 18- to 19-year-olds in terms of harms due to drinking. In addition, there was a main effect of region, with Quebec youth less likely and Prairie youth more likely than those from other regions to have experienced harm due to their drinking. Age of alcohol initiation was related to harm; the younger the age of initiation, the more likely the youth were to report harm, as was lifetime cannabis and illicit drug use, with the odds of reporting harm due to alcohol use almost double for users of each.

Cannabis Use in Combination with Other Substances

To examine the impact of use of other substances, namely alcohol and other illicit drugs, on one's use of cannabis, the following regressions examine cannabis use with and without controlling for use of alcohol and lifetime use of illicit drugs. In addition, lifetime cannabis use will be examined among the total population of youth as well as among youth who drank in their lifetime. Regressions are examined among youth who drank in their lifetime for the purpose of examining and controlling for age of alcohol initiation (which is possible only among those who have indeed drunk).

Lifetime use of cannabis among total population of youth

Without taking other substance use variables into account, 18- to 19-year-olds were more likely than 15- to 17-year-olds, and residents from Quebec were more likely, and those from the Atlantic region less likely, than those from other regions to have used cannabis in their lifetime (Table 6.11). When controlling for lifetime alcohol and illicit drug use, there was no difference between 15- to 17- and 18- to 19-year-olds' rates of lifetime cannabis use when both age groups had used alcohol or illicit drugs at similar rates. Youth from the Atlantic region were still less likely and those from Quebec more likely to have used cannabis. In addition, the odds of having used cannabis were more than 5 times higher among youth who drank light infrequently compared to those who were abstainers and former drinkers, 2.5 times higher among light frequent drinkers in comparison with light infrequent drinkers, and 3 times higher among heavy frequent drinkers in comparison with heavy infrequent drinkers. Those who had used illicit drugs in their lifetime were much more likely than those who had not to use cannabis.

Lifetime cannabis use among youth who had drunk in their lifetime

Since 90.8% of youth had used alcohol in their lifetime, reported cannabis use was examined among this population of youth (Table 6.12). When not controlling for alcohol pattern or illicit drug use, among those who had drunk, 15- to 17-year-olds and youth from the Atlantic region were less likely and those from Quebec were more likely to report using cannabis. When controlling for alcohol age of initiation, pattern of use and illicit

drug use, however, youth from Quebec were no longer more likely to use cannabis, whereas those from Ontario were. In addition, the younger that youth started drinking, the more likely they were to report having used cannabis in their lifetime. Also, the odds of having ever used cannabis were 2.6 times higher for light infrequent drinkers than former drinkers, double for light frequent in comparison with light infrequent drinkers, and 2.5 times higher for heavy frequent drinkers when compared with heavy infrequent drinkers. In addition, youth who had used any of 5 illicit drugs in their lifetime were more likely than those who had not reported lifetime cannabis use.

Illicit Drug Use in Combination with Other Substances

To examine the impact of use of other substances, namely alcohol and cannabis on one's use of illicit drugs, the following regressions examine lifetime illicit drug use with and without controlling for use of alcohol and cannabis. In addition, lifetime illicit drug use will be examined among the total population of youth as well as among youth who had drunk in their lifetime, and those who had used cannabis in their lifetime. Regressions are examined among youth who had drunk in their lifetime for the purpose of examining and controlling for age of alcohol initiation (which is only possible among those who have indeed drunk). In addition, a regression was also conducted among youth who had drunk and consumed cannabis in their lifetime, so that the impact of age of cannabis initiation on lifetime illicit drug use could be examined.

Lifetime use of illicit drugs among total population of youth

When not taking other substance use variables into account, males were more likely than females, 18- to 19-year-olds were more likely than 15- to 17-year-olds, and residents from the Atlantic region and Ontario region were less likely and those from the Quebec region were more likely to report use of any illicit drug in their lifetime (Table 6.13). When controlling for alcohol status and lifetime cannabis use, however, males are no longer more likely than females to use illicit drugs, but 18- to 19-year-olds are still more likely than 15- to 17-year-olds and residents of Atlantic and Ontario regions are still less likely and those from Quebec more likely to have used illicit drugs. In addition, youth from the British Columbia region are also more likely to report lifetime

illicit drug use. Alcohol status and cannabis use predicted illicit drug use; those who had drunk heavily/frequently in the past year were more likely to have used illicit drugs, as were youth who had used cannabis in their lifetime.

Lifetime use of illicit drugs among youth who had drunk in lifetime

In examining the lifetime use of illicit drugs among youth who drank in their lifetime, it is evident that age of alcohol initiation is related to illicit drug use; the younger that youth started drinking, the more likely they were to have used/tried illicit drugs in their lifetime (Table 6.14).

Lifetime use of illicit drugs among youth who had drunk in lifetime and used cannabis in their lifetime

In examining the lifetime use of illicit drugs among youth who had drunk and used cannabis in their lifetime, it is evident that not only does cannabis use predict later illicit drug use, but age of cannabis initiation is also associated with later illicit drug use; the younger that youth started using cannabis, the more likely they were to report lifetime other illicit drug use (Table 6.15).

Summary and Discussion

This chapter examined how users of one illicit drug are usually users of another, as well as how use of one illicit drug can predict use of another. In looking at their use of illicit drugs, most youth use cannabis only (38.0%), followed by those who have never used any illicit drug (37.9%), those who use other illicit drugs in addition to cannabis (23.7%), and other illicit drug-only users (0.4%). This pattern is different from that of adults, in which the most common pattern was those who have never used any illicit drugs (57.5%).

Use of one substance was highly related to use of another substance among youth; tobacco smokers were more likely than non-smokers to report alcohol, cannabis and illicit drug use. This was also demonstrated for alcohol users versus non-users, cannabis users versus non-users, and illicit drug users versus non-users.

The relation of lifetime cannabis and other illicit drug use upon youths' alcohol use was examined. The odds of currently using alcohol were 8.3 times higher among youth who had used cannabis in their lifetime; the odds of drinking heavily were double among youth who had used cannabis or other illicit drugs in their lifetimes; and the odds of drinking heavily monthly and reporting at least one alcohol-related problem during the lifetime were 1.5 to 3 times higher among youth who had used cannabis or other illicit drugs in their lifetime.

The impact of alcohol use pattern and lifetime illicit drug use on whether or not youth used cannabis in their lifetime was examined. When controlling for alcohol use pattern and illicit drug use, 15- to 17-year-olds were no longer less likely to report using cannabis in their lifetime, Quebec youth were still more likely and Atlantic region youth still less likely to report lifetime cannabis use. This indicates that even when these youth consumed alcohol at equal proportions, Quebec youth were still more likely and Atlantic youth still less likely to consume cannabis. Thus, the higher prevalence of cannabis use by Quebec youth and lower prevalence by Atlantic region youth cannot be explained solely by their rates of alcohol use. In addition, as alcohol use pattern increased in severity (from light and infrequent to heavy and frequent) so too did the likelihood of using cannabis in their lifetime. The odds of using cannabis were 34 times higher among those who had used other illicit drugs in their lifetime. The relation of alcohol and illicit drug use on lifetime cannabis use was also examined among drinkers so that the age of alcohol initiation could be controlled for and examined for its impact on cannabis use. When controlling for alcohol pattern and age of initiation, Quebec youth were no longer more likely to report using cannabis. This is interesting in that it suggests that Quebec youth may be more likely to use cannabis because they have a younger age of alcohol initiation; thus, when we control for age of alcohol initiation, they are no longer more likely to use cannabis. More in-depth investigation of this hypothesis is beyond the scope of this report. In relation, even when controlling for alcohol use and age of alcohol initiation, Atlantic youth are still less likely to report cannabis use, suggesting that the reason for their lower prevalence of cannabis use is not solely accounted for by their older age of alcohol initiation. Age of alcohol initiation was, however, inversely related to lifetime cannabis use; the younger that youth started drinking, the more likely they were to use cannabis in their lifetime.

The impact of alcohol and cannabis use on whether or not youth used other illicit drugs was also examined. When controlling for lifetime alcohol and cannabis use, youth from Quebec were still more likely and those from the Atlantic region still significantly less likely to report lifetime illicit drug use. More specifically, differences in illicit drug use between the two regions cannot be accounted for by the higher prevalence of cannabis use among Quebec youth and the lower prevalence among those from the Atlantic region. Even when youth from all regions consumed cannabis and alcohol at the same proportions, Atlantic region youth were still less likely to use illicit drugs, whereas Quebec youth were still more likely. Alcohol use pattern and cannabis use were directly related to lifetime illicit drug use: users of alcohol according to patterns increasing in severity were more likely to use illicit drugs, as were cannabis users versus non-users.

When age of alcohol initiation and drinking pattern was controlled for, Atlantic region youth were no longer less likely to consume illicit drugs. Since solely controlling for prevalence of alcohol use did not impact the lower prevalence of illicit drug use in the Atlantic region, the change in significance when age of alcohol initiation is controlled for suggests that the lower prevalence of illicit drug use in the Atlantic region might be associated with the later age of alcohol initiation in this region (among drinkers). Again, further examination of this hypothesis is beyond the scope of this study. Despite this finding, however, controlling for age of alcohol initiation had no impact on youth from Quebec; they remained more likely to use illicit drugs, suggesting that factors other than a younger age of alcohol initiation might be associated with their higher prevalence of illicit drug use. Age of alcohol initiation was inversely related to illicit drug use among lifetime drinkers. The younger that youth started drinking, the more likely they were to use illicit drugs in their lifetime.

When controlling for age of cannabis initiation, those youth who started using cannabis earlier were more likely to consume illicit drugs in their lifetime. Controlling for age of cannabis initiation did not impact region, but youth from Quebec were still more likely to report illicit drug use in their lifetime. Thus, although age of cannabis initiation has been shown to predict subsequent illicit drug use, the regional differences demonstrated in illicit drug use were not solely accounted for by this factor, suggesting that other factors are also at play in terms of why youth from the Quebec region have a higher prevalence of lifetime illicit drug use.

In summary, use of one substance seems to be a good predictor of use of other substances. In addition, age of alcohol initiation was found to predict use of cannabis and other illicit drugs, and age of cannabis initiation was found to predict use of other illicit drugs. These results emphasize that there are many pathways into the use of so-called “hard” drugs—and introduction to cannabis is but one of them. However, demonstrated here it is apparent that introduction to legal substances, such as alcohol, may also play a role. These findings underscore the importance of targeting age of alcohol and cannabis initiation for preventative purposes; however, results also demonstrate that more factors are at play in terms of predicting youths’ use of cannabis and illicit drugs.

Table 6.1: Illicit drug use, lifetime and past-year combination drug use, Canada, aged 25+ and aged 15-24, 2004

Drug Used	Lifetime				Past Year			
	Adults 25+ total sample N = 11,519 % [CI]	Youth 15-24 total sample N = 2,085 % [CI]	Adults 25+ lifetime users N = 4,970 % [CI]	Youth 15-24 lifetime users N = 1,210 % [CI]	Adults 25+ total sample N = 11,519 % [CI]	Youth 15-24 total sample N = 2,085 % [CI]	Adults 25+ past 12-month users N = 1,149 % [CI]	Youth 15-24 past 12-month users N = 755 % [CI]
None	57.5 [55.8-59.1]	37.9 [34.3-41.6]	--	--	89.7 [88.7-90.7]	62.1 [58.4-65.6]	--	--
Cannabis only	27.3 [25.9-28.8]	38.0 [34.3-41.8]	64.1 [61.7-66.5]	61.1 [56.4-65.6]	8.8 [7.9-9.7]	26.7 [23.5-30.1]	85.5 [81.7-88.7]	70.3 [64.6-75.5]
Other illicit drug and cannabis	14.5 [13.3-15.6]	23.7 [20.7-27.0]	34.2 [31.9-36.6]	38.2 [33.7-42.9]	1.2 [0.9-1.6]	10.3 [8.2-12.8]	11.5 [8.6-15.1]	27.1 [22.1-32.8]
Other illicit drug only	0.7 [0.5-1.1]	0.4Q [0.2-1.0]	1.7 [1.1-2.5]	s	0.3 [0.2-0.5]	1.0Q [0.5-1.8]	s	2.6Q [1.4-4.8]

Notes: Q = qualified due to high sampling variability;
s = estimate suppressed due to high sampling variability;
CI = confidence interval.

Table 6.2: Youth by user-type⁴, Canada, aged 15-24 and 25+, 2004

	Youth 15-24			Adults 25+		
	Total % [CI]	Males % [CI]	Females % [CI]	Total % [CI]	Males % [CI]	Females % [CI]
Sample size	2,085	1,039	1,046	11,519	4,590	6,929
Illicit drug use	24.2 [21.2-27.5]	27.4 [23.0-32.4]	20.8* [17.0-25.2]	15.2** [14.1-16.4]	19.9 [17.9-22.0]	10.8** [9.7-12.1]
Cannabis use	37.9 [34.3-41.7]	37.9 [32.7-43.3]	38.0 [32.9-43.3]	27.1** [25.7-28.6]	28.0 [25.8-30.4]	26.3 [24.5-28.2]
Alcohol only	29.0 [25.7-32.4]	25.6 [21.3-30.5]	32.4* [27.7-37.5]	51.6** [49.9-53.3]	47.4 [44.8-50.0]	55.5** [53.4-57.6]
Non-user	8.9 [6.9-11.6]	9.1 [6.2-13.2]	8.8 [6.1-12.6]	6.1* [5.3-7.0]	4.7 [3.6-6.1]	7.4** [6.4-8.6]

Note: *p < 0.05; **p < 0.01 = significant difference between youth aged 15-24 and adults aged 25+, or between males and females within each group.

Table 6.3: User-type8, Canada, aged 15-24 and 25+, 2004

	Youth 15-24			Adults 25+		
	Total % [CI]	Males % [CI]	Females % [CI]	Total % [CI]	Males % [CI]	Females % [CI]
Sample size	2,085	1,039	1,046	11,519	4,590	6,929
Illicit/Cannabis/Alcohol	23.7 [20.7-27.0]	27.2 [22.7-32.2]	20.1 [16.3-24.4]	14.4 [13.2-15.5]	19.2 [17.3-21.3]	9.8 [8.7-11.0]
Illicit/Cannabis	s	s	s	s	s	s
Illicit/Alcohol	s	s	s	0.7 [0.4-1.0]	s	s
Illicit only	s	s	s	s	s	s
Cannabis/Alcohol	37.7 [34.1-41.5]	37.7 [32.5-43.2]	37.7 [32.6-43.1]	26.8 [25.4-28.3]	27.8 [25.5-30.1]	25.9 [24.1-27.8]
Cannabis only	s	s	s	0.3 [0.2-0.5]	s	s
Alcohol only	29.0 [25.7-32.4]	25.6 [21.3-30.5]	32.4 [27.7-37.5]	51.6 [49.9-53.3]	47.4 [44.8-50.0]	55.5 [53.4-57.6]
Non-user	8.9 [6.9-11.6]	9.1 [6.2-13.2]	8.8 [6.1-12.6]	6.1 [5.3-7.0]	4.7 [3.6-6.1]	7.4 [6.4-8.6]

Note: s = estimate suppressed due to high sampling variability.

Table 6.4: Prevalence of substance use as a function of use and non-use of other substances, Canada, aged 15-24, 2004

	Smoked lifetime ¹	Alcohol lifetime	Alcohol 12 months	Cannabis lifetime	Cannabis 12 months	Illicit drugs lifetime ²	Illicit drugs 12 months
Smoking lifetime							
Yes	--	96.9	95.4	87.9	65.5	42.5	21.0
No	--	88.2*	80.8**	47.3**	27.3**	9.2**	s
Alcohol lifetime							
Yes	40.4	--	--	67.4	40.7	26.5	12.4
No	s	--	--	s	s	s	s
Alcohol current							
Yes	42.1	--	--	70.8	44.0	28.4	13.5
No	s	--	--	16.2**	s	s	s
Cannabis lifetime							
Yes	53.4	99.6	95.5	--	--	38.5	18.3
No	12.4**	76.8**	62.8**	--	--	s	s
Cannabis current							
Yes	59.7	99.9	98.7	--	--	49.6	27.8
No	22.7**	85.5**	73.6**	--	--	9.1**	s
Illicit drugs life							
Yes	74.0	99.7	97.3	98.2	76.2	--	--
No	28.1**	87.9**	78.2**	50.0**	24.6**	--	--
Illicit drugs current							
Yes	74.6	99.7	99.6	99.7	91.3	--	--
No	33.8**	89.7**	80.8**	56.6**	30.1**	--	--

Notes: s = estimate suppressed due to cell size less than 30;

*p < 0.05; **p < 0.01 = significant difference in prevalence of use (of substance listed in top row) between respondents who used substance listed in first column and those who did not.

1. Respondents who reported having smoked 100 cigarettes in their lifetime.

2. Use of at least 1 of 5 illicit drugs (cocaine, heroin, hallucinogens, ecstasy, speed).

Table 6.5: Proportion of respondents who consumed alcohol in past 12 months, Canada, total population aged 15-24, 2004

	N	%	[95% CI]	OR	OR with substance use variables
Total	2,085	82.9	[79.8-85.6]		
Sex					
Male	1,039	83.5	[79.0-87.1]	1.048	0.878
Female [comparison group]	1,046	82.3	[77.7-86.1]	--	--
Age [comparison group is previous]				**	**
15-17	581	62.3	[55.1-69.0]	--	--
18-19	439	90.8	[85.6-94.2]	5.815**	3.594**
20-24	1,065	89.5	[85.7-92.3]	0.794	0.835
Region [comparison group is Canada]					
Atlantic	531	81.6	[77.8-85.0]	0.976	1.158
Quebec	148	89.8	[83.7-93.7]	1.773*	1.390*
Ontario	146	80.3	[72.6-86.2]	0.732	0.758
Prairie	810	81.4	[78.5-84.1]	0.893	0.932
British Columbia	450	80.7	[76.7-84.1]	0.884	0.880
Household Location					
Rural [comparison group]	364	82.1	[74.5-87.7]	--	--
Non-rural	1,721	83.0	[79.6-86.0]	0.977	0.959
Income Adequacy					
Lowest [comparison group]	289	90.2	[83.9-94.3]	--	--
Middle	675	84.3	[78.5-88.8]	0.687	0.837
Highest	313	89.1	[80.7-94.1]	1.069	1.209
Not stated	808	75.8	[70.1-80.7]	0.547	0.591
Lifetime Use of Cannabis					**
Yes	1,194	95.5	[93.2-97.0]		8.304**
No [comparison group]	888	62.8	[56.6-68.6]		--
Lifetime Use of Any 5 Illicit Drugs					
Yes	481	97.3	[94.4-98.7]		1.964
No [comparison group]	1,597	78.2	[74.3-81.7]		--

Notes: *p < 0.05; **p < 0.01;
 CI = confidence interval;
 OR = adjusted for all variables in the table.

Table 6.6: Proportion of respondents who reported drinking heavily (frequently/infrequently) over the past year, Canada, current drinkers aged 15-24, 2004

	N	%	[95% CI]	OR	OR with substance use variables
Total	1,709				
Sex				**	**
Male	857	42.7	[37.0-48.6]	2.485**	2.287**
Female [comparison group]	852	24.0	[19.4-29.2]	--	--
Age [comparison group is previous]				*	
15-17	377	28.8	[22.0-36.6]	--	--
18-19	389	42.5	[34.0-51.5]	2.163**	1.586
20-24	943	31.6	[26.9-36.7]	0.654	0.614*
Region [comparison group is Canada]				**	**
Atlantic	430	48.8	[43.5-54.1]	1.992**	2.310**
Quebec	133	19.4	[13.5-27.1]	0.380**	0.316**
Ontario	119	35.8	[27.5-45.0]	1.014	0.981
Prairie	663	40.8	[37.0-44.8]	1.200	1.280*
British Columbia	364	37.8	[32.9-42.9]	1.087	1.090
Household Location					
Rural [comparison group]	283	36.7	[27.3-47.3]	--	--
Non-rural	1,426	33.2	[29.2-37.5]	0.847	0.819
Income Adequacy					
Lowest [comparison group]	243	26.8	[19.0-36.5]	--	--
Middle	582	34.0	[27.6-41.0]	1.496	1.504
Highest	280	40.9	[31.3-51.1]	1.882	1.881
Not stated	604	32.3	[26.4-38.9]	1.274	1.281
Age of Alcohol Initiation				**	
				0.843**	0.919
Lifetime Use of Cannabis					
Yes	1,125	39.0	[34.3-43.9]		2.126**
No [comparison group]	581	20.7	[15.4-27.1]		--
Lifetime Use of Any 5 Illicit Drugs					
Yes	463	49.7	[42.2-57.3]		2.307**
No [comparison group]	1,239	26.9	[22.9-31.2]		--

Notes: *p < 0.05; **p < 0.01;
 CI = confidence interval;
 OR = adjusted for all variables in the table.

Table 6.7: Proportion of respondents who reported drinking lightly (frequently/infrequently) over the past year, Canada, current drinkers aged 15-24, 2004

	N	%	[95% CI]	OR	OR with substance use variables
Total	1,709				
Sex				**	**
Male	857	57.3	[51.4-63.0]	0.402**	0.437**
Female [comparison group]	852	76.0	[70.8-80.6]	--	--
Age [comparison group is previous]				*	
15-17	377	71.2	[63.4-78.0]	--	--
18-19	389	57.5	[48.5-66.0]	0.462**	0.630
20-24	943	68.4	[63.3-73.1]	1.529	1.628*
Region [comparison group is Canada]				**	**
Atlantic	430	51.2	[45.9-56.5]	0.502**	0.433**
Quebec	133	80.6	[72.9-86.5]	2.634**	3.163**
Ontario	119	64.2	[55.0-72.5]	0.986	1.019
Prairie	663	59.2	[55.2-63.0]	0.833	0.781*
British Columbia	364	62.2	[57.1-67.1]	0.920	0.917
Household Location					
Rural [comparison group]	283	63.3	[52.7-72.7]	--	--
Non-rural	1,426	66.8	[62.5-70.8]	1.180	1.221
Income Adequacy					
Lowest [comparison group]	243	73.2	[63.5-81.0]	--	--
Middle	582	66.0	[59.0-72.4]	0.669	0.665
Highest	280	59.1	[48.9-68.7]	0.531	0.532
Not stated	604	67.7	[61.1-73.6]	0.785	0.780
Age of Alcohol Initiation				**	
				1.186**	1.088
Lifetime Use of Cannabis					**
Yes	1,125	61.0	[56.1-65.7]		0.470**
No [comparison group]	581	79.3	[72.9-84.6]		--
Lifetime Use of Any 5 Illicit Drugs					**
Yes	463	50.3	[42.7-57.8]		0.434**
No [comparison group]	1,239	73.1	[68.8-77.1]		--

Notes: *p < 0.05; **p < 0.01;
 CI = confidence interval;
 OR = adjusted for all variables in the table.

Table 6.8: Proportion of respondents who drank heavily monthly, Canada, current drinkers aged 15-24, Canada, 2004

	N	%	[95% CI]	OR	OR with substance use variables
Total	1,709	46.0	[41.9-50.2]		
Sex				**	*
Male	857	52.0	[46.0-57.9]	1.701**	1.548*
Female [comparison group]	852	39.7	[34.2-45.5]	--	--
Age [comparison group is previous]				**	
15-17	377	35.7	[28.2-43.9]	--	--
18-19	389	51.8	[43.0-60.6]	2.352**	1.760*
20-24	943	47.0	[41.4-52.6]	0.872	0.838
Region [comparison group is Canada]				**	**
Atlantic	430	54.3	[49.1-59.5]	1.517**	1.718**
Quebec	133	41.8	[33.7-50.4]	0.754	0.673*
Ontario	119	46.6	[37.5-55.9]	0.979	0.919
Prairie	663	48.8	[44.8-52.7]	1.040	1.100
British Columbia	364	44.2	[39.1-49.4]	0.858	0.856
Household Location					
Rural [comparison group]	283	40.6	[30.9-51.1]	--	--
Non-rural	1,426	46.8	[42.3-51.3]	1.302	1.270
Income Adequacy					
Lowest [comparison group]	243	47.4	[36.7-58.3]	--	--
Middle	582	44.3	[37.3-51.6]	0.902	0.926
Highest	280	49.4	[39.4-59.5]	1.032	1.023
Not stated	604	45.3	[38.5-52.2]	1.020	10.55
Age of Alcohol Initiation				**	
				0.834**	0.912
Lifetime Use of Cannabis					**
Yes	1,125	54.4	[49.4-59.4]		2.804**
No [comparison group]	581	25.5	[19.5-32.5]		--
Lifetime Use of Any 5 Illicit Drugs					**
Yes	463	61.8	[54.3-68.8]		1.585*
No [comparison group]	1,239	39.3	[34.5-44.3]		--

Notes: *p < 0.05; **p < 0.01;
 CI = confidence interval;
 OR = adjusted for all variables in the table.

Table 6.9: Proportion of respondents who drank heavily weekly, Canada, current drinkers, aged 15-24, 2004

	N	%	[95% CI]	OR	OR with substance use variables
Total	1,709	13.8	[11.2-17.0]		
Sex				**	*
Male	857	17.4	[13.4-22.4]	1.971**	1.811*
Female [comparison group]	852	10.0	[6.9-14.3]	--	--
Age [comparison group is previous]				**	
15-17	377	7.6Q	[4.4-12.7]	--	--
18-19	389	16.1	[10.4-24.2]	2.755**	1.851
20-24	943	14.9	[11.4-19.3]	0.996	1.008
Region [comparison group is Canada]					
Atlantic	430	15.4	[11.9-19.7]	1.336	1.481*
Quebec	133	s	s	s	s
Ontario	119	s	s	s	s
Prairie	663	12.8	[10.4-15.7]	0.900	0.910
British Columbia	364	12.5	[9.5-16.3]	0.875	0.862
Household Location					
Rural [comparison group]	283	14.7	[8.8-23.6]	--	--
Non-rural	1,426	13.7	[10.8-17.2]	0.849	0.824
Income Adequacy					
Lowest [comparison group]	243	15.0	[8.6-24.9]	--	--
Middle	582	12.2	[8.2-17.8]	0.829	0.878
Highest	280	20.5	[13.1-30.6]	1.499	1.458
Not stated	604	11.2	[7.8-15.9]	0.835	0.841
Age of Alcohol Initiation				**	*
				0.775**	0.846**
Lifetime Use of Cannabis					
Yes	1,125	17.7	[14.2-21.8]		2.432
No [comparison group]	581	s	s		s
Lifetime Use of Any 5 Illicit Drugs					**
Yes	463	25.7	[19.6-33.0]		2.267**
No [comparison group]	1,239	9.1	[6.5-12.6]		--

Notes: Q = qualified due to high sampling variability;
s = estimate suppressed due to high sampling variability or cell size less than 30;
*p < 0.05; **p < 0.01;
CI = confidence interval;
OR = adjusted for all variables in the table.

Table 6.10: Proportion of respondents who reported at least one problem in lifetime due to their alcohol use, Canada, current and former drinkers aged 15-24, 2004

	N	%	[95% CI]	OR	OR with substance use variables
Total	1,889	33.7	[30.0-37.5]		
Sex					
Male	945	33.8	[28.7-39.3]	1.122	1.005
Female [comparison group]	944	33.5	[28.5-38.9]	--	--
Age [comparison group is previous]				**	
15-17	458	28.8	[22.3-36.4]	--	--
18-19	417	35.5	[27.7-44.2]	2.037*	1.375
20-24	1,014	34.8	[29.8-40.1]	1.093	1.100
Region [comparison group is Canada]					**
Atlantic	474	32.8	[28.3-37.7]	1.035	1.116
Quebec	143	27.9	[21.2-35.8]	0.635**	0.558**
Ontario	130	35.0	[27.0-43.9]	1.159	1.213
Prairie	738	38.1	[34.5-41.7]	1.215*	1.268*
British Columbia	404	35.4	[30.9-40.2]	1.081	1.044
Household Location					
Rural [comparison group]	321	37.7	[28.9-47.5]	--	--
Non-rural	1,568	33.1	[29.2-37.2]	0.817	0.798
Income Adequacy					
Lowest [comparison group]	268	44.6	[34.5-55.3]	--	--
Middle	624	32.3	[26.3-39.0]	0.618	0.651
Highest	300	30.0	[22.1-39.3]	0.530*	0.498*
Not stated	697	32.2	[26.4-38.7]	0.656	0.654
Age of Alcohol Initiation				**	**
				0.725**	0.787**
Lifetime Use of Cannabis					**
Yes	1,183	41.1	[36.4-45.9]		1.912**
No [comparison group]	703	18.2	[13.6-24.0]		--
Lifetime Use of Any 5 Illicit Drugs					**
Yes	478	52.7	[45.3-60.0]		2.164**
No [comparison group]	1,404	26.9	[22.9-31.3]		--

Notes: *p < 0.05; **p < 0.01;
 CI = confidence interval;
 OR = adjusted for all variables in the table.

Table 6.11: Percentage reporting lifetime use of cannabis, Canada, aged 15-24, 2004

	N	%	[95% CI]	OR	OR with substance use variables
Total	2,082	61.4	[57.7-65.0]		
Sex					
Male	1,038	64.7	[59.3-69.7]	1.325	1.044
Female [comparison group]	1,045	58.0	[52.7-63.2]	--	--
Age [comparison group is previous]				**	
15-17	581	39.3	[32.7-46.2]	--	--
18-19	438	69.9	[62.2-76.6]	3.558**	1.713
20-24	1,063	68.5	[63.4-73.3]	0.923	1.013
Region [comparison group is Canada]				**	*
Atlantic	531	51.4	[46.7-56.0]	0.716**	0.693**
Quebec	148	73.1	[65.4-79.6]	1.851**	1.510*
Ontario	146	59.5	[51.0-67.4]	0.923	1.200
Prairie	809	57.0	[53.5-60.5]	0.878	0.854
British Columbia	448	58.0	[53.3-62.5]	0.931	0.932
Household Location					
Rural [comparison group]	363	59.7	[50.6-68.3]	--	--
Non-rural	1,719	61.7	[57.6-65.6]	0.969	0.882
Income Adequacy					
Lowest [comparison group]	288	71.1	[61.4-79.2]	--	--
Middle	674	59.7	[52.9-66.1]	0.629	0.873
Highest	313	68.6	[58.7-77.0]	0.936	1.050
Not stated	807	56.0	[50.1-61.9]	0.705	1.036
Alcohol Status Past 12 Months [comparison is previous]					**
Abstainer/Former drinker	376	16.2	[10.8-23.6]		--
Light Infrequent drinker	768	58.6	[52.5-64.3]		5.458**
Light Frequent drinker	221	81.1	[71.1-88.2]		2.521**
Heavy Infrequent	367	70.5	[60.8-78.6]		0.709
Heavy Frequent	304	92.9	[88.3-95.8]		3.367**
Lifetime Use of Any 5 illicit Drugs					**
Yes	481	98.2	[96.0-99.2]		33.744**
No [comparison group]	1,595	50.0	[45.6-54.4]		--

Notes: *p < 0.05; **p < 0.01;
 CI = confidence interval;
 OR = adjusted for all variables in the table.

Table 6.12: Percentage reporting lifetime use of cannabis, by demographic characteristics, Canada, lifetime drinkers aged 15-24, 2004

	N	%	[95% CI]	OR	OR with substance use variables
Total					
Sex					
Male	943	71.0	[65.7-75.8]	1.376	1.254
Female [comparison group]	943	63.6	[58.1-68.7]	--	--
Age [comparison group is previous]				**	**
15-17	458	50.2	[42.5-57.9]	--	--
18-19	416	72.1	[64.3-78.8]	2.500	2.815**
20-24	1,012	72.0	[66.9-76.6]	0.988	1.198
Region [comparison group is Canada]				**	*
Atlantic	474	56.9	[51.9-61.7]	0.706**	0.714*
Quebec	143	75.7	[68.0-82.0]	1.684**	1.350
Ontario	130	67.7	[58.8-75.4]	1.047	1.451*
Prairie	737	62.4	[58.7-65.9]	0.873	0.805
British Columbia	402	63.5	[58.6-68.1]	0.921	0.888
Household Location					
Rural [comparison group]	320	66.5	[57.1-74.7]	--	--
Non-rural	1,566	67.5	[63.4-71.3]	0.939	0.856
Income Adequacy					
Lowest [comparison group]	267	73.0	[62.9-81.1]	--	--
Middle	623	65.3	[58.3-71.6]	0.712	0.878
Highest	300	73.5	[63.7-81.4]	1.011	1.081
Not stated	696	64.0	[57.9-69.6]	0.816	1.094
Age of Alcohol Initiation					**
					0.697**
Alcohol Status Past 12 Months Among Lifetime Drinkers [comparison is previous]					**
Former drinker	180	31.7	[21.0-44.8]		--
Light Infrequent drinker	767	58.6	[52.5-64.3]		2.650**
Light Frequent drinker	220	81.1	[71.1-88.2]		2.314*
Heavy Infrequent	367	70.5	[60.8-78.6]		0.780
Heavy Frequent	303	92.9	[88.3-95.8]		2.545*
Lifetime Use of Any 5 Illicit Drugs					**
Yes	478	98.3	[96.0-99.3]		23.658**
No [comparison group]	1,402	56.6	[51.9-61.1]		--

Notes: *p < 0.05; **p < 0.01;
 CI = confidence interval;
 OR = adjusted for all variables in the table.

Table 6.13: Percentage reporting lifetime use of any of 5 illicit drugs (cocaine, speed, ecstasy, hallucinogens, heroin), Canada, aged 15-24, 2004

	N	%	[95% CI]	OR	OR with substance use variables
Total	2,085	24.2	[21.2-27.5]		
Sex				*	
Male	1,039	27.4	[22.9-32.4]	1.432*	1.197
Female [comparison group]	1,046	20.8	[17.0-25.2]	--	--
Age [comparison group is previous]				**	*
15-17	581	10.5	[7.0-15.4]	--	--
18-19	439	30.6	[23.3-38.9]	3.876**	2.298*
20-24	1,065	28.1	[23.9-32.8]	0.848	0.908
Region [comparison group is Canada]				**	**
Atlantic	531	17.6	[14.3-21.6]	0.717**	0.707*
Quebec	148	35.9	[28.6-44.0]	1.837**	1.840**
Ontario	146	17.6Q	[12.2-24.8]	0.644*	0.541**
Prairie	810	23.4	[20.6-26.5]	0.989	1.029
British Columbia	450	26.4	[22.5-30.7]	1.191	1.380*
Household Location					
Rural [comparison group]	364	22.9	[16.0-31.8]	--	--
Non-rural	1,721	24.3	[21.1-27.9]	0.995	1.031
Income Adequacy					
Lowest [comparison group]	289	29.3	[21.2-38.9]	--	--
Middle	675	22.7	[17.9-28.3]	0.723	0.713
Highest	313	30.2	[22.2-39.7]	1.096	0.931
Not stated	808	20.8	[16.3-26.1]	0.779	0.835
Alcohol Status Past 12 Months [comparison is previous]					**
Abstainer/Former drinker	376	s	s		--
Light Infrequent drinker	765	19.3	[15.0-24.4]		1.904
Light Frequent drinker	221	26.5	[18.8-35.8]		0.832
Heavy Infrequent	366	29.8	[22.1-38.8]		1.755
Heavy Frequent	301	53.5	[43.5-63.2]		2.225*
Lifetime Use of Cannabis					**
Yes	1,194	38.5	[34.0-43.3]		33.493**
No [comparison group]	888	s	s		s

Notes: Q = qualified due to high sampling variability;
s = estimate suppressed due to high sampling variability or cell size less than 30;
*p < 0.05; **p < 0.01;
CI = confidence interval;
OR = adjusted for all variables in the table.

Table 6.14: Percentage reporting lifetime use of any of 5 illicit drugs (cocaine, speed, ecstasy, hallucinogens, heroin), Canada, lifetime drinkers aged 15-24, 2004

	N	%	[95% CI]	OR	OR with substance use variables
Total	1,882	26.5	[23.3-30.1]		
Sex					
Male	941	30.1	[25.3-35.5]	1.432	1.289
Female [comparison group]	941	22.8	[18.7-27.6]	--	--
Age [comparison group is previous]				**	*
15-17	458	13.7	[9.2-19.9]	--	--
18-19	414	31.5	[24.0-40.1]	3.065**	2.702*
20-24	1,010	29.4	[25.1-34.2]	0.864	0.988
Region [comparison group is Canada]				**	**
Atlantic	474	19.4	[15.7-23.7]	0.710**	0.745
Quebec	143	37.2	[29.7-45.4]	1.749**	1.699**
Ontario	129	20.1	[13.9-28.0]	0.668*	0.588*
Prairie	735	25.6	[22.5-29.0]	0.998	0.996
British Columbia	401	29.2	[24.9-33.9]	1.206	1.349*
Household Location					
Rural [comparison group]	320	25.6	[17.9-35.2]	--	--
Non-rural	1,562	26.7	[23.1-30.5]	0.988	1.077
Income Adequacy					
Lowest [comparison group]	266	30.0	[21.6-40.0]	--	--
Middle	623	24.9	[19.7-30.9]	0.766	0.753
Highest	300	32.4	[23.9-42.2]	1.113	0.996
Not stated	693	23.7	[18.6-29.7]	0.833	0.907
Age of Alcohol Initiation					**
					0.823**
Alcohol Status Past 12 Months [comparison is previous]					**
Former drinker	180	s	s		s
Light Infrequent drinker	765	19.3	[15.0-24.4]		1.970
Light Frequent drinker	221	26.5	[18.8-35.8]		0.864
Heavy Infrequent	366	29.8	[22.1-38.8]		1.687
Heavy Frequent	301	53.5	[43.5-63.2]		2.029*
Lifetime Use of Cannabis					**
Yes	1,179	38.6	[34.0-43.3]		24.590**
No [comparison group]	701	s	s		s

Notes: s = estimate suppressed due to high sampling variability or cell size less than 30;

*p < 0.05; **p < 0.01;

CI = confidence interval;

OR = adjusted for all variables in the table.

Table 6.15: Percentage reporting lifetime use of any of 5 illicit drugs (cocaine, speed, ecstasy, hallucinogens, heroin), Canada, lifetime drinkers and cannabis users, aged 15-24, 2004

	N	%	[95% CI]	OR with substance use variables
Total	1,179	38.6	[34.0-43.3]	
Sex				
Male	617	41.9	[35.4-48.6]	1.435
Female [comparison group]	562	34.7	[28.5-41.5]	--
Age [comparison group is previous]				**
15-17	226	26.7	[18.2-37.3]	--
18-19	269	42.2	[32.4-52.7]	3.335**
20-24	684	40.3	[34.5-46.3]	1.277
Region [comparison group is Canada]				*
Atlantic	266	33.1	[27.1-39.6]	0.860
Quebec	108	48.2	[39.0-57.6]	1.546*
Ontario	89	s	s	0.557**
Prairie	459	39.8	[35.3-44.5]	0.995
British Columbia	257	45.2	[39.2-51.4]	1.355*
Household Location				
Rural [comparison group]	183	38.1	[26.8-50.8]	--
Non-rural	996	38.6	[33.7-43.8]	1.041
Income Adequacy				
Lowest [comparison group]	169	40.7	[29.5-53.1]	--
Middle	402	37.1	[29.6-45.3]	0.765
Highest	209	44.1	[33.2-55.5]	1.136
Not stated	399	35.8	[28.3-44.1]	0.966
Age of Alcohol Initiation				
				0.993
Alcohol Status Past 12 Months [comparison is previous]				**
Former drinker	58	s	s	--
Light Infrequent drinker	394	31.6	[24.7-39.4]	2.790
Light Frequent drinker	173	32.4	[23.1-43.3]	0.846
Heavy Infrequent	255	40.4	[30.3-51.3]	1.577
Heavy Frequent	265	57.5	[46.8-67.5]	1.779
Age of Cannabis Initiation				**
				0.703**

Notes: s = estimate suppressed due to high sampling variability or cell size less than 30;

*p < 0.05; **p < 0.01;

CI = confidence interval;

OR = adjusted for all variables in the table.

Chapter 7: Driving and Substance Use

Highlights

- 32.5% of youth reported having been a passenger with someone under the influence of alcohol, and 39.6% reported doing so with someone under the influence of cannabis in the past 12 months.
- 20.9% of youth reported driving under the influence of alcohol during the past 12 months. The mean number of times youth reported driving while intoxicated with alcohol was 1.6 times (taking those who reported “never” into account).
- 39.8% of youth reported driving under the influence of cannabis during the past 12 months. The mean number of times, including “never”, youth reported doing so over the past year was 10 times.

Introduction

While the focus of previous chapters has been on the prevalence of substance use and harms associated with such use, this chapter examines a specific risk behaviour: driving while under the influence of alcohol or cannabis or being a passenger with someone who has been.

Driving while impaired because of cannabis or alcohol, or being a passenger with someone who has done so, was examined using a variety of questions. To identify the proportion of respondents who had been a passenger with an intoxicated driver, respondents were asked, “In the past 12 months, have you been a passenger in a car or other vehicle driven by someone who had two or more drinks of alcohol in the previous hour?” and “In the past 12 months, have you been a passenger in a car or other vehicle driven by someone who had been using marijuana/hash in the previous 2 hours?” To examine the proportion of respondents who drove while under the influence, respondents who drank alcohol in the past 12 months, and responded yes to driving in the past 12 months, respondents were asked, “During the past 12 months, how many times, if any, have you driven a motor vehicle after having two or more drinks in the previous hour?” Similarly, those who had used cannabis in the past 12 months, in addition to responding “yes” to having driven in the past 12 months, were asked, “During the past 12 months, how many times, if any, have you driven a motor vehicle within 2 hours of using cannabis or marijuana/hash?”

Results

Proportion Who Had Been Passenger

A higher rate of youth than adults reported in the past 12 months having been a passenger with someone who had been drinking (32.5% versus 14.9%) (Table 7.1). In addition, 39.6% of youth reported being a passenger with someone who had been using cannabis, also higher than the rate reported by adults (7.6%).

The rate at which respondents reported being a passenger with someone who had consumed alcohol decreases steadily from the age of 15 to 24, to 25 to 44, and 45 to 64 (32.5%, 20.1%, 13.3%, respectively) as does those who reported being a passenger with someone who had consumed cannabis (39.6%, 12.8%, 5.4%, respectively) (Table 7.2).

Proportion of Youth Who Have Driven While Under the Influence of a Substance

A higher proportion of respondents, both adults and youth, reported driving after using cannabis or hashish than after consuming alcohol over the past year, and youth were more likely than adults to report doing so (39.8% versus 20.9%) (Table 7.1).

In addition, the proportion of youth who reported driving after consuming alcohol is much higher than that reported by adults (20.9% versus 13.5%). The mean number of times that youth reported driving while under the influence of alcohol during the past 12 months, including those who never did, was 1.6 times (N=401), compared with an average of 1.2 times for adults.

A significant difference was not apparent between the proportion of youth and adults who reported driving after consuming cannabis (39.8% versus 29.9%). The number of times that youth reported driving while under the influence of cannabis in the past year was much higher than that reported for alcohol. The mean for youth, including those who responded never, was approximately 10 times (N=160) over the past year, compared with an average of 7 times for adults.

One question is whether this finding of a higher rate of driving while under the influence of cannabis than alcohol is indeed due to a higher actual rate of this behaviour, or a difference in the reporting of one behaviour over the other. It is interesting that youth seem more likely to report driving after using cannabis than after drinking.

Table 7.2 examines the proportion of respondents who reported driving after consuming alcohol in the previous hour or cannabis in the previous 2 hours as a function of age. Youth were more likely than those 25 to 44 years of age to report driving while under the influence of alcohol. There were no age differences apparent in terms of reported driving while under the influence of cannabis.

Characteristics of Youth Who Were a Passenger with Someone Under the Influence

Since the questions dealing with driving under the influence were asked only to respondents in panel C, who had both driven as well as used alcohol or marijuana in the previous 12 months, the sample size for these questions was reduced. As a result of these small sample sizes, it was not possible to examine the demographic characteristics of youth that are associated with driving while under the influence of alcohol or cannabis.

The only demographic characteristic that was associated with being a passenger with someone who had drunk in the past hour was income adequacy (Table 7.3). When comparing each category to those in the lowest income adequacy group, no differences were apparent within the income categories. It appears that youth in the highest income adequacy group were the most likely to have been a passenger with someone who had consumed alcohol in the previous hour; more precisely, they were more likely than those in the middle and not stated groups. Further research with increased sample sizes is needed to examine this finding further.

Table 7.4 presents the proportion of youth who reported being a passenger with someone who had used cannabis 2 hours previously. Males were more likely than females (47.4% versus 30.5%), and youth aged 18 to 19 were more likely than those aged 15 to 17 to report having been a passenger with someone who had used cannabis (53.4% versus 28.8%).

Summary and Discussion

A large proportion of youth have been a passenger with someone who had consumed alcohol or cannabis prior to driving (32.5% and 39.6%, respectively). In addition, one fifth of youth reported driving while under the influence of alcohol in the past 12 months. The mean number of times youth reported doing so was 1.6 times. What is surprising is that the proportion of youth who reported driving while under the influence of cannabis is almost double that of alcohol, 39.8% versus 20.9%. In addition, the mean number of times was approximately 10 times higher for cannabis than for alcohol.

Further investigation needs to examine whether the significantly higher rates of cannabis-impaired driving that are reported by youth are the result of an actual higher rate in this behaviour, or the result of differences in reporting. Alcohol-impaired driving has been the target of a multitude of media and advertising campaigns about the seriousness and dangerousness of this act, whereas cannabis-impaired driving has received relatively little media debate until now. As such, do more youth actually drive cannabis impaired because they believe this act is less serious than driving while alcohol impaired, or are youth simply more willing to report cannabis-impaired driving due to a perceived larger stigma associated with alcohol-impaired driving? This question needs to be addressed given the higher prevalence of cannabis-impaired driving by youth; however, such examination is beyond the scope of this report. Regardless of the answer, this is an area in which further exploration will provide very useful results for preventative purposes.

Table 7.1: Proportion who were passenger/driver by age, Canada, 2004

	Youth 15-24 years % [95% CI] N = 694	Adults 25+ % [95% CI] N = 3,926	Total population 15+ % [95% CI] N = 4,620
Passenger (asked of all panel)			
Passenger with someone who had been drinking	32.5** [26.6-39.1] 222	14.9 [12.9-17.2] 543	17.8 [15.8-20.0] 777
Passenger with someone who had used cannabis/hash	39.6** [33.2-46.3] 234	7.6 [6.2-9.4] 279	12.9 [11.2-14.9] 517
Driver (asked of respondents in panel who had used alcohol past 12 months)	Youth 15-24 years % [95% CI] N = 401	Adults 25+ % [95% CI] N = 2,647	Total Population 15+ % [95% CI] N = 3,048
Driven after using alcohol	20.9* [14.8-28.7] 85	13.5 [11.3-16.2] 330	14.5 [12.3-16.9] 418
Driver (asked of respondents in panel who had used cannabis past 12 months)	N = 160	N = 338	N = 498
Driven after using cannabis/hash	39.8 [27.5-53.5] 75	29.9 [22.0-39.3] 101	33.3 [26.5-41.0] 176

Note: * Indicates a significant difference between proportion of youth and those of adults.

Table 7.2: Percentage who were a passenger with someone who had consumed alcohol or cannabis or drove after consuming alcohol or cannabis by age, Canada, 2004

Age	Passenger with someone who had used alcohol % [CI]	Passenger with someone who had used cannabis % [CI]	Driver after consuming alcohol % [CI]	Driver after consuming cannabis % [CI]
15-24	32.5 [26.6-39.1] 222	39.6 [33.2-46.3] 234	20.9 [14.8-28.7] 85	39.8 [27.5-53.5] 75
25-44	20.1** [16.8-23.8] 344	12.8** [10.1-16.1] 218	12.7* [10.2-15.8] 187	34.2 [24.4-45.7] 80
45-64	13.3** [10.3-17.1] 175	5.4** [3.5-8.2] 60	14.7 [10.8-19.5] 120	s
65+	s	s	s	s

Note: s = estimate suppressed due to high sampling variability or cell size less than 30;
*p < 0.05; **p < 0.01 = difference between age group and the previous group.

Table 7.3: Percentage reporting being a passenger with someone who reported having drunk 2 hours before driving, Canada, aged 15-24, 2004

	N	%	[95% CI]	Adjusted OR
Total	694	32.5	[26.6-39.1]	
Sex				
Male	346	36.1	[27.4-45.8]	1.223
Female [comparison group]	348	28.4	[21.1-37.1]	--
Age [comparison group is previous]				
15-17	195	25.4	[16.4-37.1]	--
18-19	143	34.7	[22.0-50.1]	1.506
20-24	356	34.5	[26.3-43.7]	0.979
Region [comparison group is Canada]				
Atlantic	165	25.5	[19.0-33.4]	0.776
Quebec	53	s	s	s
Ontario	41	s	s	s
Prairie	279	33.0	[27.6-38.9]	1.083
British Columbia	156	35.4	[28.2-43.2]	1.262
Household Location				
Rural [comparison group]	130	32.1	[19.5-47.9]	--
Non-rural	564	32.6	[26.2-39.8]	0.878
Income Adequacy				*
Lowest [comparison group]	96	33.4	[18.9-51.9]	--
Middle	213	27.0	[18.3-37.9]	0.723
Highest	100	57.7	[40.6-73.2]	2.610
Not stated	285	25.2	[17.7-34.6]	0.696

Notes: s = estimate suppressed due to high sampling variability or cell size less than 30;

*p < 0.05; **p < 0.01;

CI = confidence interval;

OR = adjusted for all variables in the table.

Table 7.4: Percentage who reported being a passenger with someone who had used cannabis/hash 2 hours before driving, Canada, aged 15-24, 2004

	N	%	[95% CI]	Adjusted OR
Total	692	39.6	[33.2-46.3]	
Sex				*
Male	346	47.4	[38.1-57.0]	1.932*
Female [comparison group]	346	30.5	[22.7-39.5]	--
Age [comparison group is previous]				*
15-17	195	28.8	[19.4-40.5]	--
18-19	143	53.4	[39.3-67.1]	2.658*
20-24	354	38.8	[30.1-48.3]	0.528
Region [comparison group is Canada]				
Atlantic	164	34.5	[26.9-43.0]	0.970
Quebec	53	s	s	s
Ontario	41	s	s	s
Prairie	279	32.8	[27.4-38.8]	0.851
British Columbia	155	29.8	[23.2-37.4]	0.693
Household Location				
Rural [comparison group]	130	30.9	[19.1-45.9]	--
Non-rural	562	40.9	[33.9-48.3]	1.524
Income Adequacy				
Lowest [comparison group]	97	41.1	[24.8-59.6]	--
Middle	212	32.5	[22.9-43.7]	0.596
Highest	100	58.1	[41.1-73.4]	1.558
Not stated	283	36.7	[27.2-47.3]	0.787

Notes: s = estimate suppressed due to high sampling variability or cell size less than 30;

*p < 0.05; **p < 0.01;

CI = confidence interval;

OR = adjusted for all variables in the table.

Chapter 8: Changes Across Time

Highlights

- The rate of youth who were current drinkers, former drinkers and abstainers has remained relatively consistent across surveys conducted in 1989, 1994 and 2004.
- The lifetime and past-year reported use of marijuana among youth has increased steadily in the 15-year time span from the NADS (33.5% and 15.5%) to the CADS (39.2% and 22.2%) and the CAS (61.4% and 37.0%).
- There has been a consistent increase in the rate of use of cocaine, speed and LSD from the CADS to the CAS.

Introduction

This chapter compares results from the CAS with the NADS of 1989 and the CADS of 1994. The NADS and CADS are ancestors of the CAS. The CADS of 1994 was built and expanded on the NADS of 1989, and the CAS (2004) represents an expansion of both surveys.

Although comparable questions were asked across all three surveys, results were not subjected to a systematic trend analysis. Instead, following the method employed in the detailed report (Adlaf et al., 2005) confidence intervals were calculated for the NADS and CADS specifically for the purpose of making statements about the significance of results and differences between the three surveys. Confidence interval overlap was used to determine whether differences between the surveys were statistically significant. If there was no overlap between the confidence intervals for two estimates, these estimates were considered significantly different.

For more detailed information on the NADS (1989) and CADS (1994), please refer to *Canadian Addiction Survey (CAS): A National Survey of Canadians' Use of Alcohol and Other Drugs: Prevalence of Use and Related Harms: Detailed Report* (Adlaf et al., 2005).

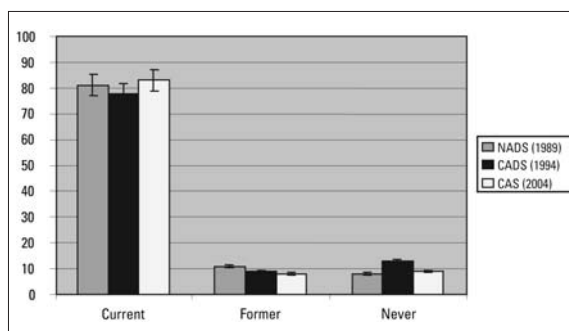
Results

Alcohol

Prevalence of alcohol use by youth over time

Figure 8.1 examines the change in prevalence of alcohol use by youth between the three surveys: the 1989 NADS, the 1994 CADS and the 2004 CAS. The rate of current drinkers, former drinkers and abstainers among youth has remained relatively consistent across time; although a slightly higher proportion of youth today reported being current drinkers (83%) than in 1989 (81%) and 1994 (77%), this difference was not statistically significant.

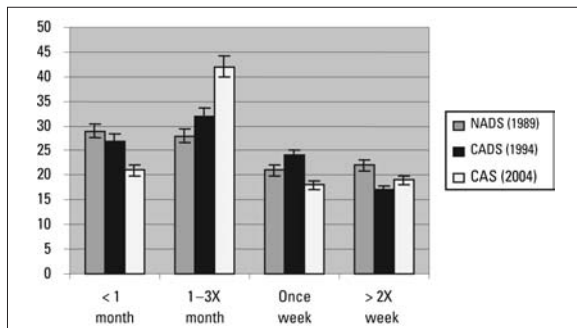
Figure 8.1: Prevalence of alcohol use, Canada, aged 15–24, 1989, 1994 and 2004



Frequency of alcohol consumption by youth over time

Figure 8.2 examines the frequency of past 12-month alcohol consumption by youth across time. There has been a slight decrease from 1994 to 2004 in the proportion of youth current drinkers who reported drinking “less than once a month” and a slight increase in the proportion of those who indicate drinking “1 to 3 times a month.” The proportion of youth reporting “once a week” or “more than twice a week” has fluctuated over the years, but overall there has been no significant change.

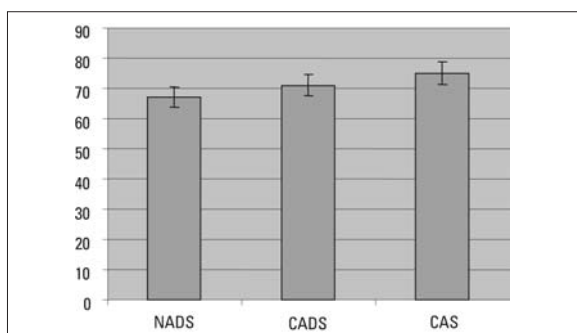
Figure 8.2: Frequency of alcohol consumption over the past 12 months, current drinkers, Canada, aged 15–24, 1989, 1994 and 2004



Heavy drinking by youth over time

Figure 8.3 demonstrates that the proportion of young current drinkers who reported consuming 5 or more drinks on at least one occasion over the past year was slightly higher in 2004 (75%) than in 1989 (67%); however, this increase was not statistically significant.

Figure 8.3: Proportion consuming 5 or more drinks on at least one occasion in past 12 months, Canada, current drinkers aged 15–24, 1989, 1994 and 2004



Changes in the rate of current drinkers aged 15 to 24 by region

Table 8.1 shows that the rate of current drinkers 15 to 24 years of age has remained fairly consistent across time. A comparison of the regional rates of past-year drinkers across the three surveys reveals only one case of a significant change; rates were significantly lower in 1994 in the Prairie region than in 1989.

Changes in the pattern of drinking among youth

Although the prevalence of past-year and lifetime alcohol consumption among youth has remained relatively stable over time, it is important to examine whether their drinking patterns have also remained stable, or if youth in 2004 tend to engage in more or less harmful patterns of drinking than they did 10 and 15 years ago. Table 8.2 reveals that the drinking patterns of youth over time have changed relatively little, with the exception of more youth drinking heavily infrequently in 2004 than in 1989 and 1994 (13.1% versus 8.5% and 9.0%).

Changes in reported harms from one's own alcohol use, lifetime and past year

Aside from patterns of drinking, it is important to examine whether youth today are reporting more harms from their own alcohol use than they did in the past. Table 8.3 reveals that with the exception of a slight increase from 1994 to 2004 in the proportion of youth who reported harms to friendships or social life (11.0% versus 15.9%), the lifetime reported harms by youth have remained fairly stable. Table 8.4 reveals that over time there has been no change in the past-year reported harms due to one's own alcohol use by youth. These findings are not surprising given the previous findings demonstrating that the prevalence of alcohol use, as well as patterns of use, have changed relatively little.

Changes in harms due to others' alcohol use

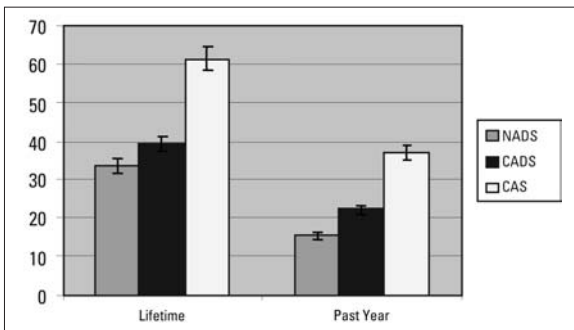
Table 8.5 examines harm and victimization experienced by youth as a result of the alcohol use of others. Youth in 2004 reported experiencing more family problems as a result of others' use of alcohol than did youth in 1994 (13.9% versus 7.8%). In addition, a higher proportion of youth in 2004 reported having been a passenger with a drunk driver than those in 1989 or 1994 (32.5% versus 23.1% and 19.7%, respectively). No other changes across time were evident for the other types of harm examined.

Cannabis

Differences over time in reported lifetime and current cannabis use by youth

Figures 8.4 to 8.7 examine changes in reported marijuana use among youth over time. The past-year reported use of marijuana among youth has increased steadily in the 15-year time span from the NADS (15.5%) to the CADS (22.2%) and the CAS (37.0%). The lifetime use of cannabis among youth, however, remained relatively stable from the NADS to the CADS (33.6% versus 39.2%) but increased significantly in the 10-year time span from the CADS to the CAS (39.2% versus 61.4%) (Figure 8.4).

Figure 8.4: Percentage of young Canadians who used cannabis in their lifetime and in past year, Canada, aged 15–24, 1989, 1994 and 2004



Changes in lifetime cannabis use broken down by sex and age

The lifetime use of cannabis was fairly stable for both males and females from the NADS to the CADS (36.8% versus 44.6% for males; 30.3% versus 33.6% for females), but rose significantly from the CADS to the CAS for both (44.6% versus 64.7% for males; 33.6% versus 58.0% for females) (Figure 8.5 and 8.6). This increase in the prevalence of lifetime use from the CADS to the CAS but not the NADS to the CADS was most pronounced for both males and females aged 17 to 19 and 20 to 24 but not for those aged 15 to 16. Instead, for both males and females aged 15 to 16, the lifetime cannabis use increased significantly from the NADS to the CADS, but the prevalence remained fairly steady in the 10-year period between the CADS and the CAS (Figures 8.5 and 8.6).

Figure 8.5: Percentage of young Canadians who used cannabis in lifetime, males, Canada, 1989, 1994 and 2004

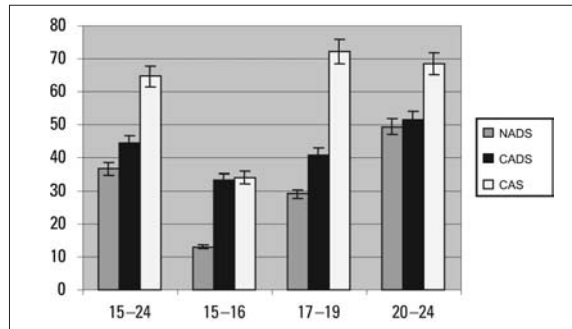
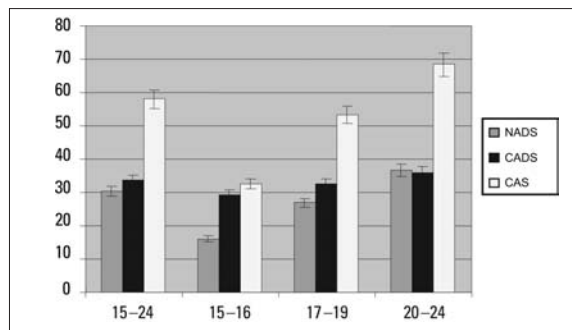


Figure 8.6: Percentage of young Canadians who used cannabis in lifetime, females, Canada, 1989, 1994 and 2004



Changes in current cannabis use broken down by sex and age

Figures 8.7 and 8.8 reveal that unlike that demonstrated for lifetime cannabis use, among both males and females there has been a steady and consistent increase in cannabis use from 1989 to 1994 and 2004 (19.2%, 26.7% and 41.4%, respectively).

As with lifetime use, among males aged 15 to 16 the rate of current cannabis use increased significantly from 1989 to 1994 (10.4% versus 25.6%) but remained fairly consistent from 1994 to 2004 (25.6% versus 27.3%). Among 17- to 19-year-old males, the increase from 1989 to 1994 was not significant (16.6% versus 28.8%), but there was a significant increase between 1994 and 2004 (28.8% versus 47.0%). This pattern was also demonstrated for males aged 20 to 24 (23.7% versus 26.0% versus 42.0%) (Figure 8.7).

Although the rate of current cannabis use was higher in 1994 than in 1989 and again higher in 2004, for females aged 15 to 16, these changes were not significant (11.2% versus 22.7% versus 23.5%). For females aged 17 to 19, there was a significant increase over the 15-year time span (9.8%, 21.4% and 39.6%). For females aged 20 to 24, the rate of use remained fairly consistent from 1989 to 1994 (13.0% versus 13.1%) and increased in 2004 (30.7%).

Figure 8.7: Percentage of young Canadians who used cannabis in past 12 months, males, Canada, 1989, 1994 and 2004

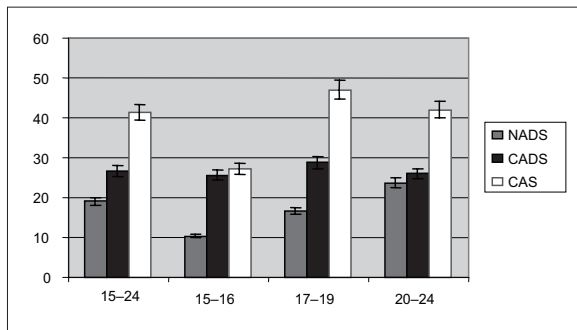
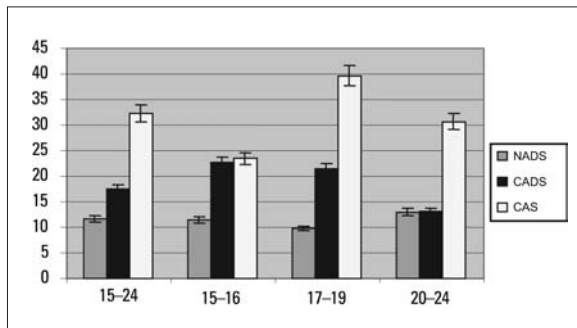


Figure 8.8: Percentage of young Canadians who used cannabis in past 12 months, females, Canada, 1989, 1994 and 2004



Changes in the frequency of cannabis use

Among youth overall there were no differences between the NADS and the CADS in frequency of cannabis consumption; however, in the 10-year time span between the CADS and the CAS there was a significant increase in the proportion of current users who used cannabis “at least once a week” over the past 3 months (43.7% versus 27.9%) (Table 8.6).

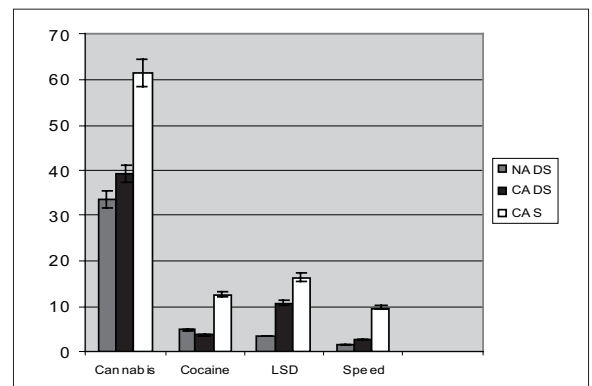
In terms of changes in the pattern of use among the different age groups of youth, some changes were apparent. For youth aged 15 to 19, there was a decrease from 1994 to 2004 in the proportion who stated that they used cannabis “1 to 3 times a month” (20.9% versus 9.5%). For youth aged 20 to 24, there was an increase from 1989 to 1994 in the proportion that used “less than monthly” (42.9% versus 67.3%), perhaps accounted for by a significant decrease in the proportion who used “1 to 3 times a month” (30.5% versus 12.7%). This increase in 1994 in the proportion of 20- to 24-year-olds used “less than monthly” decreased again from 1994 to 2004 (67.3% versus 42.1%). The decrease in 2004 can be accounted for by an increase in the proportion that used at least weekly (41.2% versus 20.0%).

Illicit Drugs

Differences over time in reported lifetime prevalence of illicit drugs among youth

Across surveys, there has been a consistent increase in the rate of use of cannabis, cocaine/crack, LSD, speed and heroin among youth. More specifically, the rate of use of cannabis increased from 33.6% in 1989 to 61.4% in 2004, cocaine increased from 4.9% to 12.5%, LSD increased from 3.5% to 16.4%, and speed increased from 1.8% to 9.8% (Figure 8.9).

Figure 8.9: Trends in the prevalence of lifetime cannabis, cocaine, LSD (acid) and speed (amphetamines) use, Canada, aged 15–24, 1989, 1994 and 2004



Overall, the proportion of youth who reported having used at least one of cannabis (including one time only), cocaine/crack, LSD in the CADS and hallucinogens in the CAS, speed and heroin in their lifetime has increased significantly from the CADS to the CAS (39.7% versus 62.0%), as has the proportion who reported past-year use (22.7% versus 37.9%). In addition, these rates of use have increased for both males and females over time (Table 8.7).

As is evident in Table 8.8, in 2004 the lifetime use of illicit drugs such as cannabis, cocaine/crack, LSD or hallucinogens, and the combination of LSD/speed/heroin had increased significantly for youth overall and by sex.

Lifetime harm from one's own drug use

Table 8.9 presents the trend from 1994 to 2004 in the proportion of youth who reported experiencing harm in each of the areas examined as a result of their use of cannabis (excluding one time only), cocaine/crack, LSD/hallucinogens, speed, heroin, steroids or solvents. As evident from the table, the rate of lifetime harms experienced by youth as a result of their illicit drug use has remained relatively consistent across time for all areas examined: friendships and social life, physical health, home life or marriage, work/studies/employment opportunities, and financial position.

Driving

Table 8.10 presents the changes over time in the proportion of youth who have driven after having two or more drinks in the previous hour or within 2 hours of using cannabis/hash. The rate of driving while impaired by alcohol has not changed significantly over time for youth (27.2% versus 25.4% versus 20.9%), nor has the rate of driving while impaired by cannabis/hash (25.8% versus 31.9% versus 39.8%).

Summary and Discussion

It is apparent from the data presented that over time the rate of use of some substances among youth, and the rate of experienced harms, have changed for some substances but not for others. More specifically, for alcohol, the picture is very clear: there has been relatively little change over the past 15 years in the prevalence of use, patterns of use and alcohol-related harms.

Contrary to this, there has been a significant increase in the lifetime and past 12-month use of cannabis over the past 15 years, with rates more than doubling among youth. When examining the trend broken down into the youth subgroups, however, it is apparent that this increase is fairly steady for 17- to 19- and 20- to 24-year-olds; however, for the 15- to 16-year-old age group there was an increase from 1989 to 1994 but the rate of use has remained fairly steady since that time. Reasons for the differential trend in cannabis use for 15- to 16-year-olds versus those 17 to 24 are beyond the scope of this study; nonetheless, this finding is interesting and in warrant of greater scrutiny.

Over the past 15 years, there has also been an increase in the rate of other illicit drugs such as cocaine, LSD and speed. However, it is important to note that while the rate of illicit drug use has increased for youth over the past 15 years, the increase in prevalence is not mirrored by an equal increase in drug-related harms. This does not mean that prevention and intervention efforts are not necessary; the rates of use are still quite high among the 15- to 24-year age group, and much higher than that demonstrated by adults.

While the CAS allowed comparison of estimates in 2004 with those of earlier years, it is important to point out that examining changes across the three separate surveys does have limitations. Nonetheless, with time and the development of a sustained monitoring and surveillance strategy, something that is currently in the process, a more comprehensive and sound examination of the changes in substance use and related behaviours over time will be made possible.

Table 8.1: Rate of past-year drinkers, Canada and regions, aged 15-24, 1989, 1994 and 2004

	NADS 1989 % [CI]	CADS 1994 % [CI]	CAS 2004 % [CI]
Canada	81.4 [78.7-83.8]	77.7 [75.2-80.1]	82.9 [79.8-85.6]
Atlantic	74.7 ¹ [70.3-78.7]	79.4 [74.6-83.4]	81.6 [77.8-85.0]
Quebec	82.9 [77.1-87.5]	80.1 [74.5-84.7]	89.8 ¹ [83.7-93.7]
Ontario	78.1 [72.4-82.9]	76.2 [71.2-80.6]	80.3 [72.6-86.2]
Prairie	87.1 ¹ [82.9-90.3]	76.0* [71.3-80.2]	81.4 [78.5-84.1]
British Columbia	85.6 [78.3-90.8]	78.9 [72.0-84.4]	80.7 [76.7-84.1]

Notes: CI = confidence interval.

* Significantly different from previous survey.

1. Significantly different from national average (for appropriate survey).

Table 8.2: Drinking patterns, Canada, aged 15-24, 1989, 1994 and 2004

Drinking Pattern	Definition	NADS 1989 % [CI]	CADS 1994 % [CI]	CAS 2004 % [CI]
Lifetime abstainers	Never had alcohol beyond sips or tastes	7.6 [6.0-9.5]	12.9* [11.0-15.1]	9.2 [7.1-11.8]
Former drinkers	Drank some time during life but not during 12 months preceding survey	11.1 [9.2-13.3]	9.2 [7.7-11.0]	7.9 [6.2-10.2]
Light Infrequent drinkers	Less often than once a week; usually fewer than 5 drinks	37.9 [34.9-41.1]	36.3 [33.6-39.1]	38.1 [34.5-41.8]
Light Frequent drinkers	Once a week or more; usually fewer than 5 drinks	20.5 [18.0-23.2]	18.8 [16.6-21.1]	15.9 [13.1-19.2]
Heavy Infrequent drinkers	Less often than once a week; 5 drinks or more	8.5 [7.1-10.3]	9.0 [7.6-10.7]	13.1* [11.0-15.7]
Heavy Frequent drinkers	Once a week or more; 5 drinks or more	14.2 [12.0-16.6]	12.2 [10.5-14.2]	14.3 [11.8-17.1]
Not stated		0.3 [0.1-0.9]	1.6 [1.0-2.5]	1.5 [1.0-2.4]

Notes: CI = confidence intervals.

* Significantly different from previous survey.

Differences between this table and other tables due to the fact that "not stated" was used for calculations.

Table 8.3 Percentage of drinkers' reporting various types of harm from one's own alcohol use in their lifetime, Canada, aged 15-24, 1989, 1994 and 2004

Was there ever a time in your life when you felt your alcohol use had a harmful effect on the following?	NADS 1989 % [CI]	CADS 1994 % [CI]	CAS 2004 % [CI]
Friendships or social life	12.6 [10.6-14.9]	11.0 [9.3-12.9]	15.9* [13.1-19.0]
Physical health	13.1 [10.9-15.6]	14.6 [12.7-16.8]	18.4 [15.5-21.7]
Home life or marriage	5.3 [4.0-6.9]	(2)	6.0 [4.5-8.0]
Work, studies or employment opportunities	5.7 [4.3-7.5]	6.5 [5.2-8.2]	8.7 [6.8-11.1]
Financial position	9.7 [7.9-11.8]	13.4 [11.5-15.5]	11.2 [8.9-14.0]

Notes: CI = confidence interval.

* Significantly different from previous survey.

1. In NADS: Past-year drinkers; in CADS and CAS: Past-year and former drinkers.
2. Question asked separately in the CADS: Home life and spouse/partner.

Table 8.4: Percentages of past-year drinkers reporting various types of harm from one's own alcohol use in the past year, Canada, aged 15-24, 1989, 1994 and 2004

Was there ever a time in your life when you felt your alcohol use had a harmful effect on the following? If yes, was this during the past 12 months?	NADS 1989 % [CI]	CADS 1994 % [CI]	CAS 2004 % [CI]
Friendships or social life	8.8 [7.1-11.0]	6.3 [5.0-7.9]	7.6 [5.7-10.2]
Physical health	10.7 [8.7-13.0]	10.8 [9.1-12.8]	12.0 [9.4-15.1]
Home life or marriage	4.5 [3.3-6.1]	(1)	2.9 [2.0-4.3]
Work, studies or employment opportunities	4.8 [3.5-6.5]	4.2 [3.1-5.7]	4.8 [3.3-7.1]
Financial position	8.7 [6.9-10.7]	11.5 [9.7-13.6]	8.7 [6.5-11.5]

Notes: CI = confidence interval.

* Significantly different from previous survey.

1. Question asked separately in the CADS: Home life and spouse/partner.

Table 8.5 Percentage reporting various harms from other people's drinking in the past year, Canada, aged 15-24 and 18-24¹, 1989, 1994 and 2004

Have you ever been or have you ever had the following due to someone else's drinking?	NADS 1989 % [CI]	CADS 1994 % [CI]	CAS 2004 % [CI]
Insulted or humiliated	37.8 [34.8-40.9]	35.2 [32.6-38.0]	36.1 [31.9-40.5]
Arguments/quarrels	32.4 [29.5-35.4]	28.2 [25.7-30.8]	31.9 [27.9-36.2]
Family problems or marriage difficulties	11.6 [9.7-13.7]	7.8* [6.5-9.4]	13.9* [11.2-17.2]
Passenger with a drunk driver	23.1 [20.5-25.9]	19.7 [17.6-22.0]	32.5* [26.6-39.1]
Pushed or shoved	(2)	30.5 [28.0-33.2]	32.7 [28.6-37.0]
Hit/assaulted	17.5 [15.4-20.0]	11.0 [9.3-13.0]	10.1 [7.9-12.9]

Notes: CI = confidence interval.

* Significantly different from CAS.

1. In NADS and CADS, question asked of those 15 years or older; in CAS question asked of those 17 years or older.
2. Not asked in NADS (pushed/shoved and hit/assaulted were combined).

Table 8.6: Changes in time in the frequency of cannabis use, Canada, aged 15-24, 2004

	NADS 1989 % [CI]	CADS 1994 % [CI]	CAS 2004 % [CI]
Less than once a month			
15-24	48.0 [40.1-56.0]	55.0 [48.8-61.0]	43.0 [37.1-49.2]
15-19	56.3 [43.8-68.0]	44.5 [36.3-53.0]	44.1 [35.6-53.0]
20-24	42.9 [33.1-53.3]	67.3* [58.3-75.1]	42.1* [34.0-50.6]
1-3 times a month			
15-24	28.5 [21.6-36.5]	17.1 [12.8-22.5]	13.3 [9.9-17.5]
15-19	25.1 [15.9-37.4]	20.9 [14.9-28.5]	9.5* [6.3-14.0]
20-24	30.5 [21.4-41.3]	12.7* [7.4-21.0]	16.7 [11.4-24.0]
One or more times a week			
15-24	23.6 [17.3-31.2]	27.9 [22.8-33.6]	43.7* [37.7-49.9]
15-19	18.6 [10.6-30.5]	34.6 [27.0-43.0]	46.4 [37.8-55.3]
20-24	26.6 [18.3-36.9]	20.0 [14.3-27.4]	41.2* [33.2-49.7]

Notes: * Significant difference between estimate and respective one from previous survey.

The questions used to examine frequency of cannabis use across the different surveys were worded slightly different and also yielded different response choices for the respondents. NADS asked current cannabis/hashish users "How often have you used marijuana or hash in the past 12 months?" with the response categories of "less than once a month", "1-3 times a month", "once a week" and "more than once a week"; however, the CADS asked current users "How often did you use marijuana or hash in the past 12 months" with the response categories of "tried it once", "less than once a month", "1-3 times a month", "once a week" and "more than once a week". The CAS, however, asked current users "How often did you use marijuana cannabis or hashish in the **past 3 months?**" with the response categories of "never", "less than monthly", "monthly", "weekly" and "daily or almost daily".

Table 8.7: Percentages reporting lifetime and past-year use of any illicit drugs¹, Canada, aged 15-24, 1989, 1994 and 2004

	CADS 1994 % [CI]	CAS 2004 % [CI]
Lifetime		
Overall	39.7* [36.9-42.5]	62.0 [58.2-65.6]
Male	44.8* [40.7-49.0]	65.2 [59.9-70.1]
Female	34.4* [30.8-38.2]	58.6 [53.3-63.8]
Past Year		
Overall	22.7* [20.4-25.2]	37.9 [34.3-41.6]
Male	27.0* [23.5-30.8]	42.3 [37.2-47.7]
Female	18.2* [15.4-21.5]	33.2 [28.4-38.4]

Notes: * Significantly different from CAS.

CI = confidence interval.

Data for this category were not available from the NADS (1989).

1. Any illicit drugs include cannabis, cocaine/crack, LSD in CADS; and hallucinogens in CAS; speed; and heroin.

Table 8.8: Percentages reporting lifetime use of illicit drugs, Canada, aged 15-24, 1989, 1994 and 2004

	NADS 1989 % [CI]	CADS 1994 % [CI]	CAS 2004 % [CI]
Cannabis	33.6 [30.7-36.6]	39.2 [36.5-42.1]	61.4* [57.7-65.0]
Males	36.8 [32.4-41.3]	44.6 [40.5-48.8]	64.7* [59.3-69.7]
Females	30.3 [26.6-34.3]	33.6 [30.0-37.4]	58.0* [52.7-63.2]
Cocaine/Crack	4.9 [3.8-6.3]	3.7 [2.9-4.8]	12.5* [10.3-15.1]
Males	5.7 [4.1-7.8]	3.7 [2.6-5.2]	14.4* [11.1-18.4]
Females	4.0 [2.7-6.1]	3.8 [2.6-5.5]	10.6* [7.9-14.2]
LSD or hallucinogens¹	(2)	10.8 [9.1-12.7]	16.4* [13.9-19.3]
Males	(2)	13.9 [11.3-17.1]	20.4 [16.5-24.8]
Females	(2)	7.5 [5.7-9.8]	12.2 [9.2-16.0]
Speed	(2)	2.6 [1.8-3.7]	9.8* [7.9-12.2]
Males	(2)	s	11.3* [8.5-14.9]
Females	(2)	s	8.3* [5.8-11.6]
Heroin	(2)	s	s
Males	(2)	s	s
Females	(2)	s	s
LSD/speed/heroin	4.6 [3.6-6.0]	11.6* [9.8-13.5]	19.3* [16.6-22.3]
Males	5.5 [4.0-7.5]	14.8* [12.1-18.1]	23.1* [19.0-27.7]
Females	3.7 [2.4-5.8]	8.1* [6.2-10.5]	15.4* [12.0-19.4]

Notes: S = estimate suppressed due to high sampling variability.

* Significantly different from previous survey.

CI = confidence interval.

1. In CADS and NADS, the question asked about use of LSD, but in the CAS the question asked about use of hallucinogens, PCP or LSD.

2. The NADS presented data for LSD/speed/heroin in an aggregate category.

Table 8.9: Percentage of lifetime users' reporting various types of harm from one's own drug use in their lifetime, Canada, aged 15-24, 1994 and 2004

	CADS 1994 % [CI]	CAS 2004 % [CI]
Friendships or social life	12.4 [9.3-16.2]	16.2 [12.8-20.4]
Physical health	20.8 [16.8-25.4]	22.2 [18.3-26.6]
Home life or marriage	(2)	12.4 [9.5-16.1]
Work, studies or employment opportunities	14.8 [11.3-19.1]	14.7 [11.3-18.8]
Financial position	14.6 [11.3-18.6]	13.3 [10.3-17.0]

Notes: CI = confidence interval.

1. Lifetime use: use in lifetime of at least one of the following drugs: cannabis (excluding one-time only), cocaine/crack, LSD or hallucinogens, speed, heroin, steroids or solvents. Numbers differ between this table and Table 5.9 because a different definition of users was used here to accommodate the CADS data.
2. Home life or marriage questions asked separately in CADS.

Table 8.10 Percentages of respondents reporting having driven after consuming two or more drinks in the previous hour; within 2 hours of having used cannabis or hash, Canada, aged 15-24, 1989, 1994 and 2004

	NADS 1989 % [CI]	CADS 1994 % [CI]	CAS 2004 % [CI]
During the past 12 months have you driven a motor vehicle after having 2 or more drinks in the previous hour? ¹	27.2 [23.8-30.8]	25.4 [22.2-28.9]	20.9 [14.8-28.7]
During the past 12 months have you driven a motor vehicle within 2 hours of consuming cannabis or hashish? ²	25.8 [19.8-32.9]	31.9 [24.5-40.4]	39.8 [27.5-53.5]

Notes: CI = confidence interval.

1. Asked of those youth who had both driven in the past 12 months and used alcohol in the past 12 months.
2. Asked of those youth who had driven in the past 12 months and used cannabis in the past 12 months.

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