



# 2012 Nova Scotia Student Drug Use Survey

Technical Report

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# Executive Summary

The 2012 *Nova Scotia Student Drug Use Survey* asked junior- and senior-high school students (grades 7, 9, 10 and 12) about their experiences with substance use, gambling and associated risk behaviours. The survey revealed no significant differences from 2007 to 2012 in the prevalence of use of alcohol, cannabis, cigarettes, psilocybin or mescaline, LSD, inhalants, MDMA (ecstasy), non-medicinal tranquilizers and stimulants, and cocaine. Furthermore, 43.2% of students in Nova Scotia indicated that they had not used any of the substances in the year prior to the 2012 survey.

Alcohol continued to be the substance most often used by students (49%), followed by cannabis (34.7%) and cigarettes (13.2%). Using alcohol more than once per month was reported by 27% of students, while 14.2% reported cannabis use more often than once per month. The average age of first use of cannabis was 14.3 years of age. This is slightly higher than the age of first use reported in 2007 (13.5 years). Cigarette smoking was noted to have continued its decline in prevalence of use, dropping from 16.2% in 2007, to 13.2% in 2012. Having peaked in 1998 at 36.1%, smoking has continued to drop in prevalence with each iteration of the *Nova Scotia Student Drug Use Survey*. This is compatible with the Canadian experience overall. Data released by the Propel Centre for Population Health Impact, University of Waterloo reported that from 1999 to 2010 the largest decrease in current smoking prevalence was in the age group 15 to 19 years. This observed decline in smoking prevalence is felt to be associated with an array of measures taken to prevent and stop smoking, most importantly steadily increasing tobacco taxes, making all indoor public places smoke free, and increasing restrictions on tobacco advertising including banning point of sale promotions. These measures were part of Nova Scotia's *Comprehensive Tobacco Control Strategy*, which was adopted in 2001. It is important to note that the significant declines in youth smoking are due mainly to broad population-based measures and not measures specific to youth.

The 2012 survey asked respondents a new question about their consumption of energy drinks. More than two thirds of youth (64.3%) used energy drinks such as Red Bull, Monster, Rockstar and Full Throttle. These beverages have become particularly popular among youth due to

their purported stimulant effects and ability to increase alertness and enhance mental and physical energy. Studies have shown that energy drinks increase stimulation, attention and memory; decrease reaction times and mental fatigue; and improve performance on some physical activities. However, they also have been associated with negative health effects, including those typically seen with overuse of caffeine, such as irritability, problems with heart rhythm, nausea and seizures. Youth also tend to use these drinks mixed with alcohol. This combination of alcohol and energy drinks has been seen in conjunction with increased risk-taking, driving under the influence, increased alcohol consumption per sitting, increased susceptibility to injury, and higher rates of alcohol dependence.

When students were asked about non-medical use of pain relief pills such as Percocet, Percodan, Tylenol #3, Demerol, Oxycontin, and codeine, 11.7% reported using pain pills that were not prescribed for them or without a doctor telling the student to take them. Use was similar among both male and female students, but increased with grade, so that 16.4% of grade 12 students reported this drug use behaviour.

Students were asked for the first time about their use of salvia divinorum, a substance which can have “psychedelic” effects. In 2012, 2.3% of students in grades 7, 9, 10 and 12 reported salvia use in the 12 months prior to the survey. Since salvia is a substance which is just beginning to be used by adolescents, it should be closely monitored in future surveys.

In this survey, driving under the influence was assessed using three substances: alcohol, cannabis and pain relief pills. In 2012, in the year prior to the survey, 10% of senior high students with a driver's license drove at least once within an hour of consuming two or more drinks of alcohol. During the same period, 21.4% of senior high students with a driver's license drove within an hour of cannabis use. More than one in four students in grade 12 engaged in this risky behaviour. With respect to driving after using pain medication, 7.2% of senior high students with a driver's license drove within an hour of using prescription pain relief pills.

Following previous iterations of the survey, involvement in gambling activities for money was assessed. Overall, 49.9% of students in grades 7, 8, 10, and 12 in Nova Scotia engaged in gambling for money, which is down from the 60.2% who did so in 2007 and the 63.3% who participated in gambling in 2002. Male students were more likely to report participating in gambling activities than female students.

Unplanned sexual activity while under the influence of alcohol or other drugs can make practicing safe sex more difficult. Among students who had sex in the 12 months prior to the survey, 32.1% of survey respondents reported this risky practice.

Mental health was also assessed. In 2012, 8.7% of students in grades 7, 9, 10 and 12 in Nova Scotia scored as having very elevated depressive symptoms, while 24.4% of students scored as having somewhat elevated depressive symptoms. The corresponding figures in the 2007 survey were 5.8% and 20.5%. Students were also asked in this survey about suicidal tendencies. Suicide is the second leading cause of death among teenagers and young

adults in Canada. In the year prior to the survey, 19.7% of students reported seriously considering attempting suicide, 14.4% reported they made a plan, and 8.4% attempted suicide one or more times.

Finally, measures of help-seeking behaviour, among students who reported using the substances, indicated limited self-reported need for help for their alcohol use (4.2%) and illicit drug use (6.6%), with higher self-reported need for help for smoking (20.7%). Self-reported need for help for depressive symptoms (45%) was substantially higher among students. Students' self-reported help received for alcohol (1.3%), illicit drug use (3.2%), smoking (7.3%), and depressive symptoms (16.4%) were all considerably lower than their respective reported need.

In summary, the *2012 Nova Scotia Student Drug Use Survey* provides a large amount of information about a representative sample of Nova Scotia students in grades 7, 9, 10 and 12. This data about youth alcohol, other substance use, gambling, and mental health can be used to inform and evaluate provincial policy and prevention initiatives.

# Introduction

The *2012 Student Drug Use Survey* in the Atlantic Provinces is the fifth application of a standardized survey conducted in collaboration with Nova Scotia, New Brunswick and Newfoundland and Labrador. For the 2012 iteration of the survey, Prince Edward Island did not take part. A standard protocol was developed in 1994, and the survey was conducted in 1996, 1998, 2002 and 2007. The focus of the *2012 Student Drug Use Survey* is on substance use (including alcohol, tobacco and illegal drugs), gambling and related behaviours, as well as sexual behaviour and mental health. The survey provides information about adolescents enrolled in and attending junior or senior high school (aged 12-19).

The *2012 Nova Scotia Student Drug Use Survey: Technical Report* is restricted to descriptive findings such as the prevalence of substance use, problems and risk behaviours. Included are summary tables that show the prevalence of behaviours among students in each province and trends based on previous iterations of the survey. Prevalence estimates are also provided according to gender, grade and health region.

## Objectives

The primary aim of the *2012 Student Drug Use Survey* in the Atlantic Provinces was to assess the prevalence and trends in substance use, gambling, and related behaviours and risk factors, in the adolescent student population in Nova Scotia, New Brunswick, and Newfoundland and Labrador.

The objectives were:

1. To estimate in the adolescent student population indicators for: prevalence in the use of various substances, gambling, mental health, and related high-risk behaviours and harmful consequences;
2. To identify key individual and social determinants of substance use, gambling, and mental health in the adolescent student population;
3. To report on long-term trends in substance use and gambling among the adolescent student population in each province and in the Atlantic Region;
4. Working with the provinces and school boards, to provide evidence to inform the development of policies and programmes to positively affect adolescent health and well-being.

## About Nova Scotia

In 2011, the province of Nova Scotia had a population of about 921,730 persons, of whom 107,250 were between 10 and 19 years of age.<sup>1</sup> About 92% of the population speaks English at home, either as the sole language or with other languages.

In Nova Scotia, the age restriction for access to alcohol or tobacco, gambling in casinos, lottery tickets, video lottery terminals and sports betting is 19 years of age. The age restriction for alcohol has not changed since 1972 when the *Liquor Control Act* was revised.

The *Tobacco Access Act*, which came into force in April 1994, raised the age restriction for tobacco to 19 years from 16 years. The Gaming Control Act came into force in April 1995. The minimum age to obtain a beginner's driver's license in Nova Scotia is 16 years, and a graduated driver's license program came into effect in October 1994.

In Nova Scotia, the provision of health services is organized into nine District Health Authorities (DHAs). The DHAs are sometimes regrouped into Shared Service Areas (SSA). Comparisons between the 2012 *Student Drug Use Survey* in the Atlantic Provinces and prior surveys can be made based on the approximately equivalent areas as noted below.

District Health Authority in 2012	DHA #	Shared Service Area 2002- 2012	Shared Service Areas 1998 and prior
South Shore	1		
South West	2		
Annapolis Valley	3	DHA 1, 2 & 3	Western
Colchester East Hants	4		
Cumberland	5		
Pictou County	6	DHA 4, 5 & 6	Northern
Guysborough Antigonish Strait	7		
Cape Breton	8	DHA 7 & 8	Eastern
Capital Health	9	DHA 9	Central

# Methods

## Ethics Approval and Consent

Ethics approval for the 2012 survey was granted by the Dalhousie University Health Sciences Research Ethics Board. Issues addressed in the ethics review included informed consent, the risks and benefits of participating, and the confidentiality and anonymity of student participants.

In Nova Scotia, initial consent for the survey to take place was obtained from the Department of Education, in conjunction with the Department of Health and Wellness. Subsequently, the Superintendent of each school board (seven in total) was asked to give their approval to the project and to contact schools in their board with a letter of support. Finally, for those schools randomly selected to participate, individual school principals were contacted to ask whether they were willing to have their school take part in the survey. An ethics review/project proposal was also submitted to the Halifax Regional School Board (HRSB) Planning & Research Department for review, as all research requests for schools in the Halifax Regional School Board require HRSB approval before proceeding. The requirement for parental/guardian consent was determined by individual schools, except for HRSB schools where 'active' parental/guardian consent was mandatory for all schools and grade levels.

Consent from individual students was obtained at the time of the survey, whether or not parental/guardian consent had already been obtained. Since the SDUS was anonymous, consent by individual students was implicit in their completion of the survey. The cover page of the survey provided students with information about the purpose of the survey and its anonymous, confidential and voluntary nature. Students were also reminded that they could skip any questions that they were not comfortable with and could decide not to participate at any time. Once students had completed their surveys, they were asked to place them in an unmarked manila envelope and seal them if they wished, before handing them to research staff.

## Sampling

The *2012 Student Drug Use Survey* was an Atlantic-based survey of students in the public school system in grades 7, 9, 10 and 12. The provinces of Nova Scotia, New Brunswick and Newfoundland and Labrador took part in the survey; Prince Edward Island did not take part in the 2012 iteration. Public school students in both English and French schools were included in the sample; excluded were private schools, schools on reserves, street-youth, school-leavers and students who were absent from school on the designated day of the survey.

The sample design was a two-stage stratified cluster sample of randomly selected classes containing over 20 students in each of the four surveyed grades (7, 9, 10 and 12) within each of the four Shared Service Areas in Nova Scotia (health districts 1,2,3 as SSA 1, health districts 4,5,6 as SSA 2, health districts 7,8 as SSA 3, and health district 9 as SSA 4) of the province of Nova Scotia. The sample allowed for approximately proportional representation of each region within each grade; thereafter, the sample was allocated proportionately according to school size. Data were weighted subsequently in order to correct for the overall disproportionate sampling strategy and for survey non-response. Details of the census and sampling strategy are presented in Appendix 2-1.

## Procedures

In Nova Scotia, surveys were administered by research team members from Dalhousie University. All research team members took part in a one-day training session, led by the Principal Investigators of the study, which focused on improving familiarity with the survey, learning the research protocol, developing techniques for interacting with schools and students, and reviewing various scenarios or potential problems that might emerge during the data collection process.

On the day of data collection, research staff filled out a cover sheet which detailed the school being sampled, the class/grade taking the survey and the name of the class teacher, as well as the name of the researcher administering the survey and the date the survey took place. They also recorded the number of students who were present in the classroom, the number of students registered in the class, and the number of students who agreed to complete the survey. This allowed for post-survey calculation of response rates and absenteeism rates at each school.

Once research staff had completed data collection at a school, completed surveys were brought back to the research office and visually scanned to identify potential problems. These included pencil responses that were too light or surveys that were incorrectly filled out (e.g., where a student had used check marks instead of filled-in circles). In these cases, research staff used pencils to darken the circles or erased the check marks and 'corrected' the responses to ensure that they would be recognized by the scanner being used to code the data. In addition, research staff erased marks on the surveys that did not refer to questions or might interfere with the scanner's function (such as drawings in the bar coded margins or answers which had only partially been erased) and corrected answers to questions where two responses had been given as long as it was obvious which of the two was intended (e.g., by written confirmation, an arrow drawn by the student etc.).

Once the surveys had been 'cleaned', research staff coded each survey with a five digit number corresponding to the province, school and class that had been surveyed. Surveys were bundled by school and class, a copy of the cover sheet was included, and they were shipped to the Propel Centre for Population Health Impact at the University of Waterloo for scanning.

At Propel, student questionnaires were machine scanned using Optical Mark Read (OMR) technology. Processing staff at Propel repeated the previously mentioned quality control measures to ensure the accuracy of the scanned data, separated the perforated questionnaire booklets and oriented them in preparation for the OMR scan. Once the questionnaires had been scanned, data outputs were checked for uncodeable responses (such as two answers

being marked with no indication of which was preferred) and were corrected if possible. Responses which could not be corrected were marked as missing.

## Questionnaire and Screening Tools

The 2012 *Student Drug Use Survey* employed a self-reported questionnaire (see Appendix 1). Students indicated their responses directly on the computer-scannable questionnaire, using an HB pencil. The content of the questionnaire was based on previous versions of the SDUS with the addition of questions pertinent to issues around drugs, alcohol and healthy behaviours in school-aged youth in 2012. The survey was comprised of 106 multiple-choice items and one open-ended question. Information was requested on demographics, social environment, school and community involvement, substance use, problems related to substance use, driving while under the influence of alcohol or drugs, sexual behaviour and other risk behaviours, help seeking, mental health, gambling, school drug education and school policies.

Questions 88 through 93 in the 2012 survey dealt with gambling and problems associated with gambling behaviours. Definitions of problem gambling were based on a five-item version of the South Oaks Gambling Screen, Revised for Adolescents (SOGS-RA).<sup>2</sup> At-risk gambling is defined as a score of 2 or 3 and problem gambling is defined as a score of 4 or more in the SOGS-RA scale. While not formally validated, the five-item version of the scale was employed in the 2007 iteration of the survey, and analyses suggest that the same scores on the five item version could identify at-risk and problem gamblers.<sup>3</sup>

To assess depressive symptoms in Question 101, the 12-item version of the Center for Epidemiological Studies-Depression Scale was used.<sup>4</sup> The CES-D-12-NLSCY asks about depressive symptoms in the seven days prior to the survey. The three categories of elevated depressive symptoms are: Minimal (scores 0 to 11); Somewhat Elevated (scores 12 to 20); and Very Elevated depressive symptoms (scores 21 to 36). Respondents had to have provided answers on 11 out of 12 questions to provide a valid response; remaining surveys were considered indeterminate.

Suicidal thinking/planning and suicide attempts were measured by asking if students had ever had these experiences in the previous year, based on questions developed by the Centers for Disease Control Youth Risk Behavior Surveillance System.<sup>5</sup> Students were asked to respond “yes” or “no” to the following questions: “During the past 12 months, did you ever seriously consider attempting suicide?” and “During the past 12 months, did you make a plan about how you would attempt suicide?” In addition, students were asked how many times they had actually attempted suicide during the past 12 months.

Questions that were included in the 2012 SDUS survey for the first time covered the use of energy drinks, the use of cough medicine for the purposes of getting high, mephedrone use, salvia divinorum use, and driving under the influence of pain medications. These questions followed the formats already used within previous iterations of the survey and were worded as follows:

- In the past 12 months, have you used caffeinated energy drinks, such as Red Bull, Monster, Rockstar and Full Throttle?
- In the past 12 months, have you used cough or cold medicine, such as Robitussin DM, Benylin DM (robos, dex, DXM) in order to get high?
- In the past 12 months, have you used mephedrone (drone, bubbles, m-cat)?
- In the past 12 months, have you used salvia divinorum (sally-D, magic mint, sadi)?
- In the past 12 months, how often have you driven a vehicle within an hour of using a prescription pain relief pill such as Percocet, Percodan, Tylenol #3, Demerol, Oxycontin or codeine?

## Definitions of Substance Use

In the present report, *any smoking* refers to smoking more than one cigarette in the 12 months prior to the survey, and *frequent smoking* refers to smoking more than 10 cigarettes per day. For alcohol, *any use* refers to alcohol use in the 12 months prior to the survey, ranging from less than once per month to daily use of alcohol; *frequent*

*alcohol use* is defined as use more than once per month. For all other substances, *any use* refers to use on one or more occasions during the 12 months prior to the survey, and *frequent use* refers to use more frequently than once per month.

## Statistical Analysis

All analyses took into account the stratified disproportionate cluster sample design and probability weights. Variable non-response was addressed by including a missing category in affected variables. The 2012 Technical Report presents point estimates and tests of statistical significance at 99% ( $p < 0.01$ ). Descriptive statistics presenting prevalence estimates for all measures are provided. For selected behaviours, estimates were provided stratified by gender, grade level, and Shared Service Area. The influence of gender, grade and school location (Shared Service Area) on all behaviours of interest was tested using multivariate logistic and multinomial regression models. No analyses were performed at a geographic unit smaller than the provincial DHA. All analyses were conducted with the Stata 12 computer program.<sup>6</sup>

## How to read the graphs

The 2012 *Technical Report* includes several graphs showing the proportions of adolescent students who used alcohol, tobacco and other drugs, as observed in the 1991, 1996, 1998, 2002, 2007 and 2012 surveys. These results are presented as simple line graphs without box-plots reporting confidence intervals. This was done as data for previous iterations of the survey were not available to us.

## General Information

The survey was administered in 176 randomly selected classes in 75 schools throughout Nova Scotia. Of the 4,475 students enrolled in the classes selected to participate, 15.8% were absent at the time the survey took place and 12.9% did not consent (student or parental) to participate in the survey, leaving us with a sample of 3,189 students. The absentee rates for DHA 9, DHAs 1, 2 & 3 and DHAs 4, 5 & 6 were similar, ranging from 13.3% to 14.4%, but were higher for DHA 7 & 8 at 21.2%. Participation rates

among students present on survey day for the three Shared Service Areas where ‘passive permission’ was used in schools were extremely high, ranging from 96.5% to 98.4% (76.1-85% of students enrolled). However, student participation in schools within the HRSB, where ‘active’ parental/guardian consent was mandatory for all students taking part in the survey, was lower at 59.0% of students present on the day of the survey (50.5% of students enrolled). The response rate for the HRSB is similar to other drug use surveys requiring active parental consent carried out in recent years in Canada. The 2011 Ontario Student Drug Use Survey obtained a response rate of 62%; Health Canada’s 2010 school-based Youth Smoking Survey obtained a response rate of 65% for the province of Nova Scotia, but 33% for the HRSB.<sup>7-9</sup>

Excluded from further analysis were the responses of 41 students who reported using the fictitious drug, which was included in the survey to detect students not responding in a trustworthy fashion. Detailed information about participation is shown in Table 1.

Therefore, the present study on drug and alcohol use and associated risk behaviours among Nova Scotia adolescents is based on the responses of 3,148 students in grades 7, 9, 10 and 12.

## Demographic Characteristics of the 2012 sample

As Table 1 shows, the gender makeup of the sample for the 2012 *Nova Scotia Student Drug Use Survey* was equally split between males and females, with each grade level representing approximately one quarter of the survey respondents. The average age of the 3148 survey respondents was 15.1 years, with the average age ranging from 12.7 years for students in grade 7, to 17.5 years for students in grade 12. Both the gender ratio and the average age of students within each grade were consistent with previous iterations of the survey. The distribution of students by Shared Service Area reflects the proportion of students enrolled in school within each area, with the exception of DHA 9, which has a lower proportion of students than would be expected (see Appendix 2-1).

**Table 1: Demographic characteristics of the 2012 student sample**

		Number of students	%
Total		3148	100.0
Gender	Male	1526	48.5
	Female	1545	49.1
	Not stated	77	2.5
Grade (average age)	7 (12.7 years)	878	27.9
	9 (14.7 years)	678	21.5
	10 (15.7 years)	747	23.7
	12 (17.5 years)	845	26.8
Shared Service Area	DHA 9	776	24.7
	DHA 1, 2 & 3	600	19.1
	DHA 4, 5 & 6	737	23.4
	DHA 7 & 8	1035	32.9

## General Demographic Information about Students in Nova Scotia

Similar to previous *Nova Scotia Student Drug Use Surveys*, 74.7% of students completing the 2012 survey were living in two-parent households, 18% in a single-parent household, and 6.6% were living with neither parent.

Among students in grades 7, 9, 10 and 12, 33.5% of students reported having some form of driver's license, a slight increase from 2007 (27.3%).

Most of the students (73.6%) reported that their mother had achieved a level of education of high school graduate or higher. Almost 36% of students had a mother who attained a university degree.

## Spiritual and Religious Characteristics of Nova Scotia Students

Approximately one-third (36.8%) of students in Nova Scotia reported being fairly or very spiritual, with a similar proportion (36.4%) reporting that religion was important

to them. However, only 18.1% reported attending any type of religious service or event on a regular basis.

**Table 3: Spirituality and religious characteristics of Nova Scotia students in grades 7, 9, 10 & 12, 2012**

		%
Spirituality	Not at all spiritual	22.4
	Not very spiritual	38.1
	Fairly spiritual	30.9
	Very spiritual	5.9
	No response	2.7
Attendance at religious services or events	Never	44.2
	A few times a year	37.0
	At least once a month	8.2
	At least once a week	9.9
	No response	0.7
Importance of religion	Not important at all	28.0
	Not very important	34.6
	Fairly important	26.5
	Very important	9.9
	No response	0.9

**Table 2: General demographic characteristics of Nova Scotia students in grades 7, 9, 10 & 12, 2012**

		%
Lives with...	Both parents	62.8
	One parent only	18.0
	Either & step	11.9
	Neither parent	6.6
	No response	0.8
Driver's license	No license	66.5
	Beginner's	11.5
	Driver's license less than 1 year	7.8
	Driver's license 1 year or longer	14.2
Mother's highest level of education	Did not attend high school	0.9
	Attended high school	5.8
	Graduated from high school	16.6
	Attended college or trade school	1.0
	Graduated from college or trade school	18.0
	Attended university	2.2
	Graduated from university	35.8
Don't know / no mother	19.7	

# Findings

## Trends in Substance Use among Nova Scotia students: 1991-2012

The most commonly used substances by students in 2012, which were also the most commonly used substances in prior years, were alcohol, cannabis and cigarettes (Tables 4 and 5). Almost half of all students consumed alcohol and more than a third used cannabis in the previous year. The proportions of students using alcohol, cannabis and cigarettes were similar to those found in the 2007 survey. However, cigarette use continued to decline from the high of 36.1% reported in 1998 to the current rate of 13.2%.

The 2012 survey included a question about the use of pain pills such as Percocet, Percodan, Tylenol #3, Demerol, Oxycontin, or codeine without a prescription. In 2012, 11.7% of students reported using pain pills that were not prescribed for them. There were no significant changes in the use of any of the remaining substances from the 2007 survey.

In response to increasing sales of energy drinks and concerns about the use of such drinks by school-age children, the 2012 survey asked respondents about their consumption of energy drinks. Almost two thirds of students (64.3%) reported consuming energy drinks in the year prior to the survey (Table 4).

Frequent use of alcohol and cigarettes among students in the 2012 survey was similar to 2007, with 27% of students

consuming alcohol once a month or more in the prior year, and 2.5% smoking 10 or more cigarettes a day (Table 6). Cannabis use more often than once/month spiked in 2007; the rate observed for 2012 was consistent with that found from 1996 to 2002.

**Table 4: Any substance use in 2012 among students in grades 7, 9, 10 & 12, as percentages**

Any use of...	%
Alcohol	49.0
Cannabis	34.7
Cigarettes	13.2
Non-medical pain pills	11.7
Non-medical stimulants	7.0
Psilocybin or Mescaline	5.7
Non-medical tranquilizers	5.0
Cough or cold medicine to get high	5.0
MDMA (Ecstasy)	4.7
Cocaine or crack	4.1
Inhalants	3.3
LSD	2.3
Salvia	2.3
Methamphetamine	2.1
Injection drug use	0.5
Mephedrone	0.3
Caffeinated energy drinks	64.3

**Table 5:** Any substance use, 1991 to 2012, among students in grades 7, 9, 10 & 12, as percentages

Any use of...	1991 %	1996 %	1998 %	2002 %	2007 %	2012 %
Alcohol	50.6	54.1	56.7	53.0	51.7	49.0
Cannabis	17.2	32.1	37.7	37.5	32.4	34.7
Cigarettes	26.0	34.8	36.1	23.6	16.2	13.2
Psilocybin or Mescaline	4.0	8.3	10.7	12.7	7.7	5.7
LSD	7.1	12.4	10.1	5.2	3.7	2.3
Inhalants	9.6	7.2	7.0	4.8	4.4	3.3
Non-medical stimulants*	5.3	8.9	10.5	12.8	6.6	7.0
Non-medical tranquilizers	2.6	4.8	5.9	4.8	3.0	5.0
MDMA (ecstasy)	n/a	n/a	n/a	4.4	6.9	4.7
Cocaine or crack	2.5	3.5	4.7	3.9	4.3	4.1

n/a data not available

\* The 1991, 1996, and 1998 surveys asked about the non-medical use of various stimulants in one question only. The 2002 and 2007 surveys asked about the use of non-medical amphetamines and methylphenidate in separate questions. In order to compare over time, the 2002 and 2007 estimates were calculated as the non-medical use of either amphetamines or methylphenidate (Ritalin). In 2012, students were not asked about the non-medical use of methylphenidates. Hence the 2012 estimate only includes the use of non-medical stimulants in the previous 12 months.

**Table 6:** Frequent use of alcohol, tobacco, and cannabis, 1991 to 2012, among students in grades 7, 9, 10 & 12, as percentages

Any use of...	1991 %	1996 %	1998 %	2002 %	2007 %	2012 %
Alcohol more often than once/ month	25.4	30.3	33.0	30.3	29.8	27.0
Cigarette smoking more often than 10 cigarettes/day	4.9	7.2	7.4	4.3	2.8	2.5
Cannabis more often than once/month	4.3	12.3	13.5	15.5	19.0	14.2

# Alcohol

## Patterns of Use

About 22% of students reported drinking alcohol once a month or less, 16.7% consumed alcohol two or more times a month and 10.3% reported drinking at least once a week. Figure 1 shows that past year alcohol use among students peaked in 1998 and has decreased since then.

As shown in Table 7, alcohol use among male and female students in Nova Scotia is comparable. As in prior surveys, alcohol use increased with higher grade level, with 10.7% of students reporting some use in grade 7, and more than three out of four students using alcohol by grade 12. No differences were observed for alcohol use by students across the province.

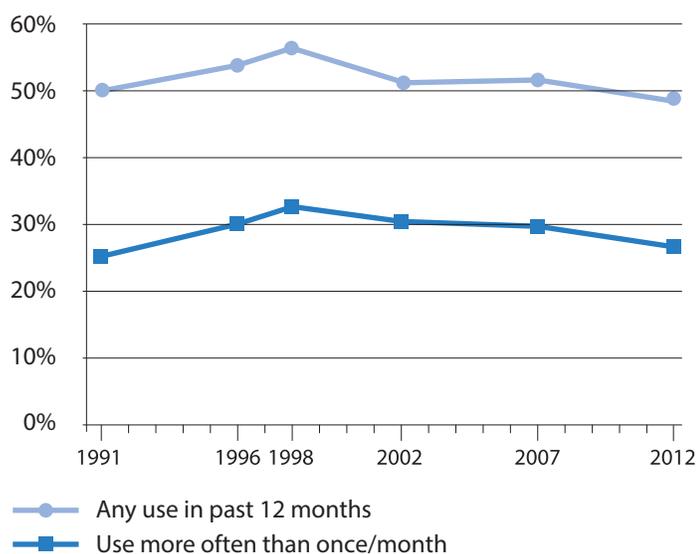
Students were asked how old they were when they first drank alcohol. About 29.4% of students reported never drinking alcohol; among those students who had tried alcohol, the average age of first use was 13.4 years of age. This is slightly older than the age of first use in 2007 (12.9 years). Male students (13.2 years) reported a slightly younger age of onset relative to females (13.6).

Consistent with past surveys, grade point average and friends' use of alcohol were found to be associated with students' alcohol use. Students with a grade point average

of less than 60% were more likely to consume alcohol than those with a higher grade point average (72.1% versus 51.5%, respectively). Among those who reported that all their friends drink alcohol, 91.9% reported some alcohol use in the prior 12 months compared to 14.7% among those who reported that none or only a few of their friends drink alcohol.

Among those who drank alcohol in the previous year (n=1499), friends were by far the most commonly reported method of obtaining alcohol. The last time they drank alcohol, 71% of students reported that they had a friend buy the alcohol for them or were offered alcohol by their friends. Parents were students' next most common source of alcohol, with 11.7% being offered alcohol by their parents.

**Figure 1:** Prevalence of alcohol use among students in grades 7, 9, 10 & 12 in the 12 months prior to the survey



**Table 7:** Any alcohol use in the past 12 months, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

		Any ALCOHOL use (n=3148) %
Overall		49.0
Gender	Male	48.3
	Female	50.1
Grade	7	10.7
	9	44.1**
	10	57.9**
	12	76.6**
Shared Service Area	DHA 9	45.8
	DHA 1, 2 & 3	50.7
	DHA 4, 5 & 6	52.7
	DHA 7 & 8	50.6

\* p<0.01; \*\* p<0.001

Frequent alcohol use (drinking alcohol more than once a month) increased by grade level (Table 8). In grade 7, 3.6% of students consumed alcohol frequently compared to 21.5% in grade 9, 30.4% in grade 10, and 47.9% in grade 12. There were no gender or location differences observed for frequent alcohol use by students.

**Table 8:** Frequent alcohol use in the past 12 months, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

		ALCOHOL Use more than once/ month (n=3148) %
Overall		27.0
Gender	Male	26.6
	Female	27.2
Grade	7	3.6
	9	21.5**
	10	30.4**
	12	47.9**
Shared Service Area	DHA 9	25.0
	DHA 1, 2 & 3	29.3
	DHA 4, 5 & 6	28.9
	DHA 7 & 8	26.8

\* p<0.01; \*\* p<0.001

**Table 9:** Drinking 5 or more drinks at a sitting, in the 30 days prior to the survey, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

		Did not consume any alcohol %	Consumed fewer than 5 drinks at a sitting %	Consumed 5 or more drinks at a sitting %
Overall		58.3	13.5	26.6
Gender	Male	59.1	12.1	27.0
	Female	57.5	15.3	26.1
Grade	7	85.9	8.4	1.7
	9	63.0	14.0**	21.1**
	10	51.2	16.1**	32.5**
	12	38.0	15.0**	46.3**
Shared Service Area	DHA 9	61.0	12.6	24.8
	DHA 1, 2 & 3	55.6	15.8	27.2
	DHA 4, 5 & 6	53.1	14.6	30.1
	DHA 7 & 8	60.4	11.9	26.4

\*\* p<0.001

Table 9 shows the proportion of students who consumed 5 or more drinks (heavy or binge drinking) during a single sitting in the 30 days prior to the survey. In the previous 30 days, 58.3% of students had not consumed any alcohol, and 13.5% did not consume 5 or more drinks at a sitting. However, 26.6% reported at least one episode of heavy drinking in the previous month. The proportions of students who participated in this risky behaviour increased with grade level. No gender or location differences were found. The 2012 estimate is comparable to the 2007 (27.7%) and 2002 estimates (29%) for heavy drinking.

Friends' alcohol use and grade point average were found to be associated with heavy drinking. Heavy drinking increased as the proportion of one's friends who consumed alcohol increases. Among students who reported that all of their friends used alcohol, 65.9% reported heavy drinking. Among students who reported that most of their friends drank, 45.2% reported heavy drinking in the previous 30 days. When about half of their friends drank, 16.8% of students consumed 5 or more drinks at a sitting in the prior month. In contrast, only 2.9% reported heavy drinking if none or only a few of their friends used alcohol. Among students with a lower grade point average, 47.9% reported heavy alcohol use in the past 30 days compared to 28.2% of those with a grade point average of 60 or higher.

In the 30 days prior to the survey, 24.1% of students reported being drunk one or more times (Table 10). This pattern of use is more common with students in the higher grades. Drunkenness was reported by 2.1% of students in grade 7, compared to 21.3% in grade 9, 30.5% in grade 10, and 38.9% in grade 12. No gender or location differences were found for drunkenness.

Students were asked how old they were when they first got drunk from alcohol (intoxicated or impaired, drinking too much alcohol). About 52.7% of students reported never being drunk; among those students who had been drunk, the average age of first drunkenness was 14.4 years of age.

Reported drunkenness was associated with friends' use of alcohol and grade point average. Students who reported that most or all of their friends drink alcohol had a higher prevalence of drunkenness than students who reported that none or only a few of their friends drink (63.0% and 2%, respectively). Students with a higher grade point average were less likely to report drunkenness than students with lower averages, 25.6% versus 45.3% respectively.

In summary, higher-grade levels, friends' use of alcohol and grade point average were positively associated with any alcohol use, heavy drinking and drunkenness.

**Table 10:** Drunkenness in the 30 days prior to the survey, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Serviced Area, 2012

		Did not consume alcohol %	Consumed alcohol but did not get drunk %	Got drunk on at least one occasion %
Overall		57.2	17.1	24.1
Gender	Male	58.4	16.8	23.0
	Female	55.9	17.5	25.5
Grade	7	85.5	8.5	2.1
	9	61.5	15.4**	21.3**
	10	49.6	19.6**	30.5**
	12	37.1	23.3**	38.9**
Shared Service Area	DHA 9	58.6	17.9	22.1
	DHA 1, 2 & 3	54.9	19.8	23.8
	DHA 4, 5 & 6	53.0	16.7	27.8
	DHA 7 & 8	60.6	12.3	25.6

\*\* p<0.001

## Drinking Venues

In 2012, 11.3% of students consumed alcohol in a licensed venue in the year prior to the survey. The likelihood of drinking in a licensed venue increased with grade level (Table 11). Students in grade 12 (24.7%) were the most likely to report drinking in a licensed venue compared to 9.3% of students in grade 10, 6.7% in grade 9, and 2.5% in grade 7.

In Nova Scotia, the legal drinking age is 19 years of age. In the year prior to the survey, 7.8% of students aged 14 years or younger, 16.4% of 15 to 16 year olds, and 44.7% of 17 and 18 year old students reported drinking in a licensed venue.

**Table 11:** Drinking in a licensed venue, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

		Drinking in a licensed venue (n=3148) %
Overall		11.3
Gender	Male	10.7
	Female	11.6
Grade	7	2.5
	9	6.7*
	10	9.3**
	12	24.7**
Shared Service Area	DHA 9	10.5
	DHA 1, 2 & 3	12.0
	DHA 4, 5 & 6	11.9
	DHA 7 & 8	11.9

\* p<0.01; \*\* p<0.001

# Cigarettes

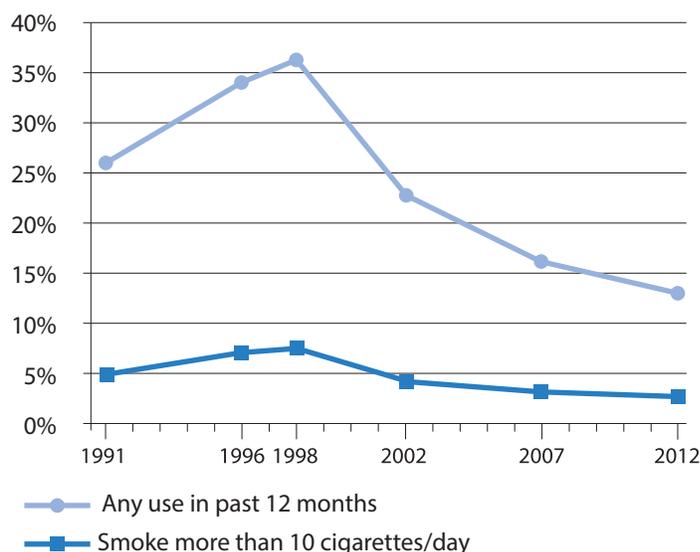
## Patterns of Cigarette Smoking

The age for taking up smoking increased for the first time in recent years. In 2012, the average age for first smoking a whole cigarette was 13.7 years, with male students reporting a slightly younger age of onset relative to female students (13.5 years vs. 14 years). Prior to the 2012 survey the average first smoking age had remained fairly consistent. The average age was 12.7 years in 1998, 12.6 years in 2002, and 12.9 years in 2007.

As shown in Figure 2, cigarette smoking peaked among students in Nova Scotia in 1998 and has steadily decreased since. The decrease since 1998 occurred for any cigarette smoking and for smoking more than 10 cigarettes a day.

In the past year, 13.2% of students in grades 7, 9, 10 and 12 reported any cigarette smoking with 2.5% smoking more than 10 cigarettes a day. Male and female students reported similar smoking rates and there were no statistically significant differences in the proportions of

**Figure 2:** Prevalence of cigarette smoking among students in grades 7, 9, 10 & 12 in the 12 months prior to the survey



students who smoked around the province. However, smoking rates increased significantly by grade level, ranging from 2.9% of students in grade 7, to 20% of students in grade 12.

Having friends who smoke was strongly associated with smoking behaviour. If all their friends smoked, 62.9% of students reported smoking in the prior year. If most of their friends smoked, 58.9% reported smoking. If about half their friends smoked, 30.6% of students reported smoking at least one cigarette in the prior year, compared to 5.2% of students if none or only a few of their friends smoked. Grade point average was also associated with smoking among students. Students with a grade point average of less than 60% were much more likely to smoke (43.5%) than those with higher marks (12.1%).

**Table 12:** Any cigarette smoking in the previous 12 months, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

		Any CIGARETTE smoking (n=3148) %
Overall		13.2
Gender	Male	13.6
	Female	13.0
Grade	7	2.9
	9	12.2**
	10	16.1**
	12	20.0**
Shared Service Area	DHA 9	11.0
	DHA 1, 2 & 3	17.0
	DHA 4, 5 & 6	12.4
	DHA 7 & 8	14.6

\* p<0.01; \*\* p<0.001

## Quitting

About half of all students (50.8%) who smoked in the preceding year tried to quit at least once in the six months before the survey. Females were more likely than males to attempt quitting (Table 13). No differences in quitting smoking were observed for grade or location.

**Table 13:** Tried to quit smoking in the 6 months prior to the survey, among students in grades 7, 9, 10 & 12, as percentages of students who reported smoking in the past 12 months according to gender, grade and Shared Service Area, 2012

		Tried to quit smoking (n=432) %
Overall		50.8
Gender	Male	41.0
	Female	60.1*
Grade	7	30.2
	9	42.5
	10	52.5
	12	56.3
Shared Service Area	DHA 9	58.9
	DHA 1, 2 & 3	44.7
	DHA 4, 5 & 6	47.7
	DHA 7 & 8	47.6

\* p<0.01; \*\* p<0.001

# Cannabis

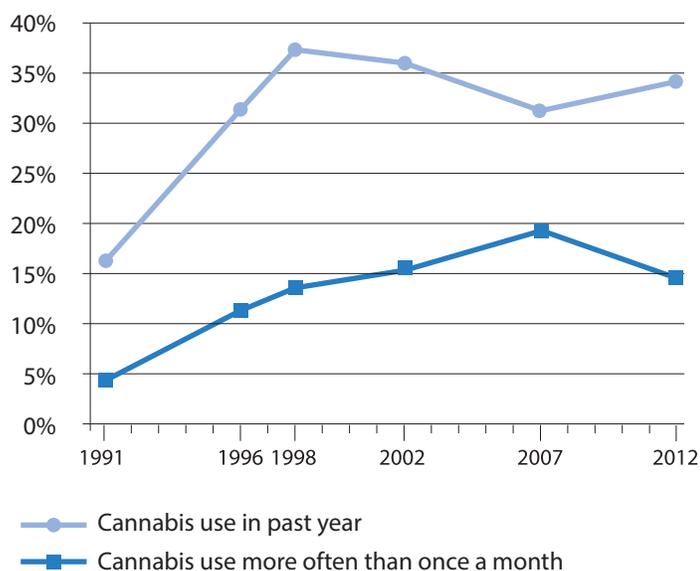
## Patterns of Use

Since 1996, cannabis use by students has remained fairly consistent ranging from rates of 32.1% to 37.7% (Figure 3).

In 2012, 34.7% of students used cannabis in the year prior to the survey. Males and females were equally likely to use cannabis. As shown in Table 14, cannabis use increased significantly with grade level. The proportions of students around the province who used cannabis were about the same in each of the Shared Service Areas. Similar findings were observed for the 14.2% of students who had used cannabis more than once a month. No gender or location differences were found for frequent cannabis use.

The average age of first cannabis use among Nova Scotia students was 14.3 years, with a slightly earlier age of onset for males (14.1 years) than females (14.6 years). This is significantly higher than the average age of first cannabis use reported in 2007 (13.5 years).

**Figure 3:** Patterns of cannabis use among students in grades 7, 9, 10 & 12 in the 12 months prior to the survey



Friends' use of cannabis was strongly associated with one's own cannabis use. Among students who reported that all their friends used cannabis, 94.6% reported some use in the past year. Among students who reported that most of their friends use cannabis, 77.9% used cannabis and if about half of their friends used cannabis, 61% of students reported use in the prior year. However, this rate dropped to 13.7% of students when none or only a few of their friends used cannabis. Grade point average was also found to be associated with cannabis use. Among students with a lower grade point average, 63.6% used cannabis compared to 35.9% if their grade point average was 60% or higher.

**Table 14:** Any cannabis use among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

		Any use of CANNABIS (n=3148) %	CANNABIS use more often than once/month (n=3148) %
Overall		34.7	14.2
Gender	Male	33.9	16.2
	Female	35.9	12.4
Grade	7	7.0	1.1
	9	32.7**	13.8**
	10	39.9**	15.3**
	12	54.7**	24.3**
Shared Service Area	DHA 9	34.4	15.2
	DHA 1, 2 & 3	34.9	13.0
	DHA 4, 5 & 6	33.4	12.8
	DHA 7 & 8	36.5	14.3

\*p<0.01; \*\* p<0.001

In 2012, 20.7% of students in grades 7, 9, 10 and 12 reported using cannabis in the 30 days prior to the survey, with 6.4% using cannabis almost every day (Table 15). A larger proportion of male students reported almost daily use compared to female students. Higher-grade level students were more likely to use cannabis in the prior 30 days, and to use more frequently than students in grade 7.

**Table 15:** Cannabis use in the 30 days prior to the survey, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

		No use %	Less often than every week %	Almost every week %	Almost every day %
Overall (n=3148)		79.2	9.8	4.5	6.4
Gender	Male	78.4	8.9	4.5	8.3
	Female	79.7	10.9	4.7	4.7*
Grade	7	96.6	2.1	-	-
	9	79.9	9.0**	5.4**	5.8**
	10	76.2	11.7**	5.1**	7.0**
	12	67.0	15.3**	6.6**	11.1**
Shared Service Area	DHA 9	78.9	9.1	5.0	7.0
	DHA 1, 2 & 3	79.7	11.0	4.1	5.2
	DHA 4, 5 & 6	81.4	9.0	3.6	6.0
	DHA 7 & 8	77.3	11.0	4.8	6.9

\*p<0.01; \*\* p<0.001

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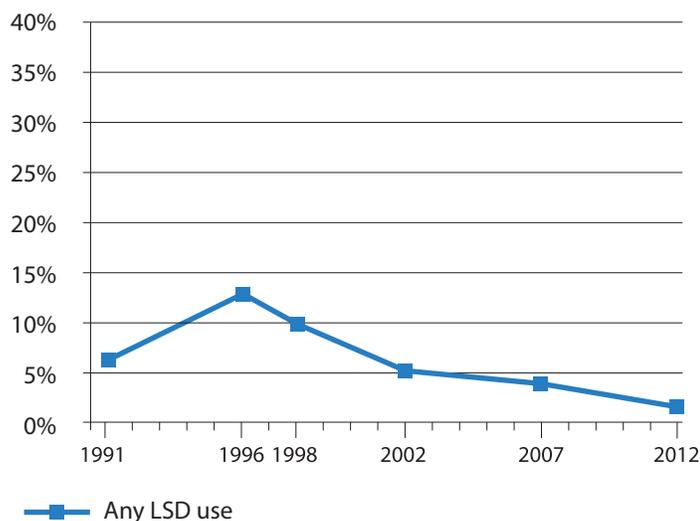
# Illicit Drugs Other Than Cannabis

## LSD

Lysergic acid diethylamide (LSD) is a controlled substance in Canada. As shown in Figure 4, LSD use among Nova Scotia students has been steadily decreasing since 1996. In 2012, only 2.3% of students in grades 7, 9, 10 and 12 reported using LSD in the 12 months prior to the survey.

More male than female students used LSD in the past year (Table 16). A larger proportion of students in grade 12 (4.4%) used LSD than students in other grades. No differences in LSD use among students were found for the four Shared Service Areas. These findings should be interpreted with caution due to small numbers.

**Figure 4:** Prevalence of any LSD use among students in grades 7, 9, 10 & 12 in the 12 months prior to the survey



**Table 16:** LSD use in the previous 12 months, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

		Any use of LSD (n=3148) %
Overall		2.3
Gender	Male	3.5
	Female	1.2*
Grade	7	-
	9	2.4
	10	1.2
	12	4.4*
Shared Service Area	DHA 9	2.2
	DHA 1, 2 & 3	1.8
	DHA 4, 5 & 6	3.7
	DHA 7 & 8	1.8

\* p<0.01; \*\* p<0.001

- suppressed due to small N

## Amphetamines and Methamphetamines

In the 2012 survey, students were asked about their use of three types of amphetamine drugs: MDMA, Methamphetamine and Mephedrone. In the 12 months prior to the survey, 5.3% of students reported using one or more of these three amphetamines (Table 17). Although no gender or school location differences were observed for amphetamine use by students across the province, amphetamine use did increase by grade.

MDMA (3,4-methylenedioxy-N-methamphetamine) is a synthetic, psychoactive drug with both stimulant (amphetamine-like) and hallucinogenic (LSD-like) properties. MDMA has become widely known as “ecstasy” (or “E”) and is a controlled substance in Canada. In 2012, 4.7% of students reported using MDMA in the 12 months prior to the survey. The proportions of students using MDMA increased by grade, with a prevalence ranging from less than 1% in grade 7, to 7.6% in grade 12. No gender or location differences were found for MDMA

use in the province. MDMA use by students in 2012 is lower than the 2007 rate of 6.9%, and comparable to the 2002 rate of 4.4%.

Methamphetamine is commonly known as crystal meth, speed, crank, chalk, or ice. In 2012, 2.1% of students in grades 7, 9, 10 and 12 used methamphetamines in the 12 months prior to the survey. Students in grade 10 were more likely to use methamphetamines than students in the other grades. No gender or location differences were observed for methamphetamine use. These findings should be interpreted with caution due to small numbers.

Mephedrone is a synthetic stimulant commonly known as Drone, Meow Meow, M-Cat, Bounce, White Magic or 4-MMC. Mephedrone use by students in Nova Scotia is minimal. In 2012, 0.3% of students reported any use of mephedrone in the 12 months previous to the survey. This finding should be interpreted with caution due to very small numbers.

**Table 17: Amphetamine use in the previous 12 months, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012**

		Any use of MDMA	Any use of Methamphetamines	Any use of Mephedrone	Any use of MDMA Methamphetamines or Mephedrone
		%	%	%	%
Overall (n=3148)		4.7	2.1	0.3	5.3
Gender	Male	3.5	2.1	-	4.2
	Female	5.7	2.0	-	6.3
Grade	7	-	-	-	1.5
	9	3.9*	1.6	-	4.3*
	10	5.8**	3.7*	-	6.6**
	12	7.6**	2.0	-	8.2**
Shared Service Area	DHA 9	4.9	1.8	-	5.1
	DHA 1, 2 & 3	4.5	1.6	-	5.0
	DHA 4, 5 & 6	4.2	4.3	-	6.2
	DHA 7 & 8	4.9	1.3	-	5.6

\*p<0.01; \*\* p<0.001

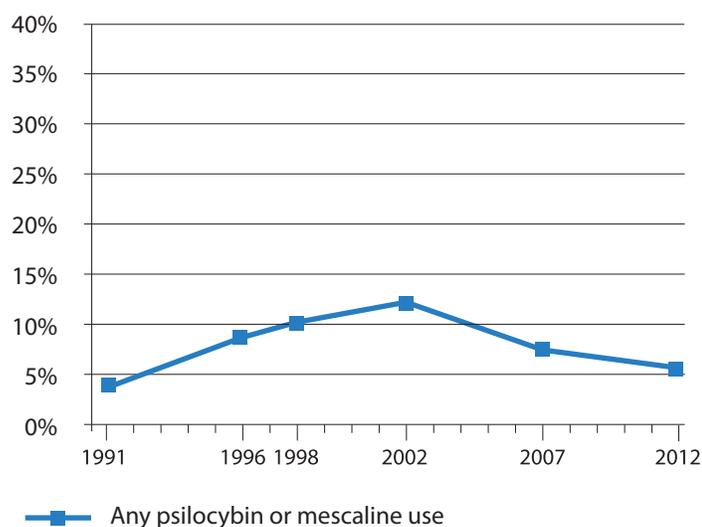
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## Psilocybin and Mescaline

Psilocybin and mescaline are both naturally occurring hallucinogenic drugs. Psilocybin is produced from varying species of mushrooms while mescaline is derived from the peyote cactus. Both drugs produce effects similar to LSD, including euphoria and hallucinations, and changes in perception. Psilocybin and mescaline are controlled substances in Canada. Psilocybin and mescaline use by students in Nova Scotia peaked in 2002 and has been declining since (Figure 5).

In 2012, 5.7% of students used one of these drugs in the year prior to the survey (Table 18). Larger proportions of students in grades 9, 10 and 12 used these drugs compared to students in grade 7. No statistically significant differences were found for gender or Shared Service Area.

**Figure 5:** Prevalence of any use of psilocybin or mescaline among students in grades 7, 9, 10 & 12 in the 12 months prior to the survey



**Table 18:** Psilocybin or mescaline use in the previous 12 months, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

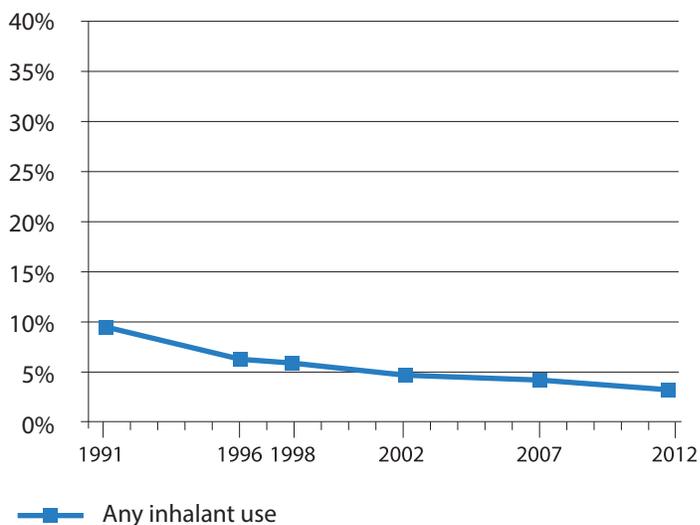
		Any use of Psilocybin or Mescaline (n=3148) %
Overall		5.7
Gender	Male	6.6
	Female	4.8
Grade	7	1.4
	9	5.2*
	10	5.2**
	12	10.1**
Shared Service Area	DHA 9	6.5
	DHA 1, 2 & 3	5.1
	DHA 4, 5 & 6	6.2
	DHA 7 & 8	4.1

\* p<0.01; \*\* p<0.001

## Inhalants

Inhalants are volatile chemicals such as solvents, gasoline or glue. As shown in Figure 6, inhalant use by students in Nova Scotia has decreased steadily since 1991. In 2012, 3.3% of students used inhalants in the year prior to the survey. No gender, grade or location differences were found for inhalant use.

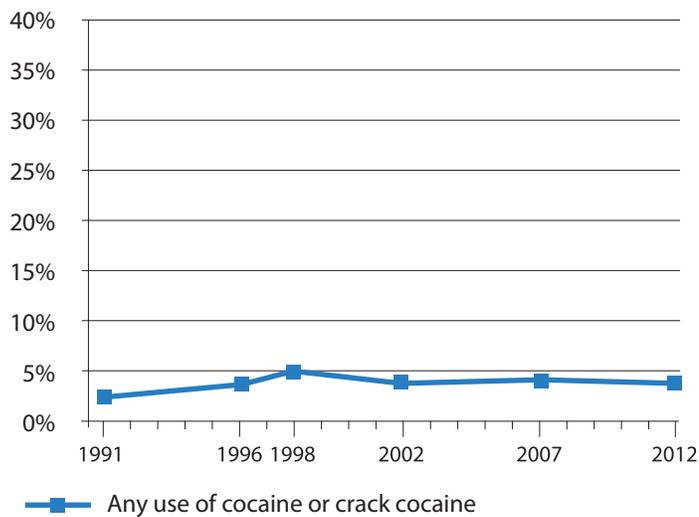
**Figure 6:** Prevalence of any inhalant use among students in grades 7, 9, 10 & 12 in the 12 months prior to the survey



## Cocaine or Crack Cocaine

The use of cocaine or crack cocaine by students in Nova Scotia has remained stable since 1991 (Figure 7). In 2012, 4.1% of students in grades 7, 9, 10 and 12 used either of these substances in the year prior to the survey. The proportion of students in grade 12 (5.8%) who used cocaine or crack cocaine was significantly higher than the proportion of students who used either of these substances in grade 7 (1.8%). No gender or location differences were found.

**Figure 7:** Prevalence of any use of cocaine or crack cocaine among students in grades 7, 9, 10 & 12 in the 12 months prior to the survey



## Salvia Divinorum

As a new addition to the survey, students were asked about their use of salvia divinorum, also known as sally-D, magic mint or sadi. In 2012, 2.3% of students in grade 7, 9, 10 and 12 reported salvia use in the 12 months prior to the survey. Detailed findings are presented in Appendix 2-6. These findings should be interpreted with caution due to small numbers.

## Injection drug use

Students were asked about whether they had used pain killers, speed or cocaine by injection or needles in the 12 months prior to the survey, 0.5% of students reported using one or more of these drugs by injection. In 2002, less than 1% of students in grades 7, 9, 10 and 12 reported having injected substances for non-medical purposes. The student rate for injection drug use was not reported in 2007. These findings should be interpreted with caution due to small numbers.

## Other Substances

### Stimulants

Non-medical stimulants refer to drugs such as diet pills and pills used to stay awake that are used without a prescription. Common names for these substances are uppers, bennies, dexies and pep pills.

In 2012, 7% of students in grades 7, 9, 10 and 12 used non-medical stimulants in the year prior to the survey (Table 19). More than twice the proportion of female students reported using stimulants compared to male students. The proportions of students who used stimulants increased as grade increased, ranging from 1.6% of grade 7 students to 11.1% of grade 12 students. No differences were observed for Shared Service Areas.

**Table 19: Non-medical stimulant use in the previous 12 months, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012**

		Any use of Stimulants (n=3148) %
Overall		7.0
Gender	Male	4.6
	Female	9.5*
Grade	7	1.6
	9	6.4**
	10	8.1**
	12	11.1**
Shared Service Area	DHA 9	7.9
	DHA 1, 2 & 3	5.4
	DHA 4, 5 & 6	7.2
	DHA 7 & 8	6.8

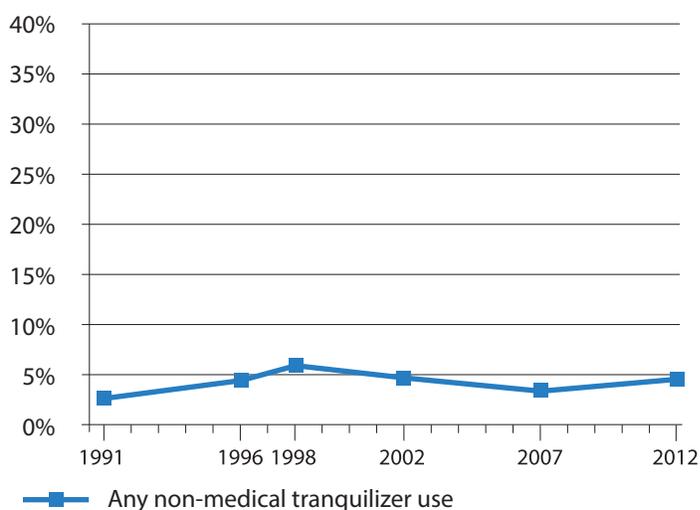
\* p<0.01; \*\* p<0.001

### Tranquilizers

Tranquilizers refer to drugs such as Valium, Ativan, Xanax, also known as “tranqs” or “downers”, used by a student without a prescription or a doctor telling a student to take them. Past year non-medical use of tranquilizers has fluctuated slightly over the years ranging from a low of 2.6% of students in 1991, to a high of 5.9% in 1998 (Figure 8).

In 2012, 5% of students used tranquilizers that were not prescribed for them in the 12 months prior to the survey. The proportion of male and female students who used non-medical tranquilizers was about the same. Students in grade 10 had the highest proportion of non-medical tranquilizer usage (8.6%), followed by students in grade 12 at 7.1%. Non-medical use of tranquilizers did vary by Shared Service Area. The proportion of students using non-medical tranquilizers was higher in DHA 9 (7.4%) compared to DHAs 1, 2 & 3 (3.3%), DHAs 4 & 5 (3.8%) and DHAs 7 & 8 (2.7%).

**Figure 8: Prevalence of non-medical tranquilizer use among students in grades 7, 9, 10 & 12 in the 12 months prior to the survey**



## Pain Relief Medication (Opiates)

Students were asked about non-medical use of pain relief pills such as: Percocet, Percodan, Tylenol #3, Demerol, Oxycontin, and codeine. In 2012, 11.7% of students used pain pills that were not prescribed for them or without a doctor telling the student to take them. The proportions of males and females using non-prescribed pain pills were similar; however, the proportion of students using non-medical pain pills increased with grade level. In grade 7, 4% of students used non-medical pain pills compared to 11.3% in grade 9, 13.9% in grade 10 and 16.4% in grade 12. No location differences were found for non-medical use of pain pills.

**Table 20:** Non-medical pain medication use in the previous 12 months, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

		Any use of Pain Medications (n=3148) %
Overall		11.7
Gender	Male	11.6
	Female	11.9
Grade	7	4.0
	9	11.3*
	10	13.9**
	12	16.4**
Shared Service Area	DHA 9	13.6
	DHA 1, 2 & 3	9.5
	DHA 4, 5 & 6	11.0
	DHA 7 & 8	10.8

\* p<0.01; \*\* p<0.001

## Cough or Cold Medicine

In this survey, students were asked whether they used cough or cold medicines, such as Robitussin DM or Benylin DM, in order to get high. In 2012, 5% of students used a cough or cold medicine to get high. No gender, grade or location differences were found.

## Caffeinated Energy Drinks

New to the 2012 survey was a question about the use of caffeinated energy drinks, such as Red Bull, Monster, Rockstar or Full Throttle. More than six in ten students (64.3%) used an energy drink at least once in the 12 months prior to the survey. The proportions of male and female students using energy drinks were similar. The proportion of students in grades 9 (67.4%), 10 (69.5%) and 12 (71.4%) who used energy drinks were much higher than the proportion in grade 7 (46.6%). No differences in energy drink use were observed between Shared Service Areas.

**Table 21:** Consumption of caffeinated energy drinks in the previous 12 months, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

		Any use of Energy Drinks (n=3148) %
Overall		64.3
Gender	Male	66.9
	Female	62.1
Grade	7	46.6
	9	67.4**
	10	69.5**
	12	71.4**
Shared Service Area	DHA 9	64.1
	DHA 1, 2 & 3	62.7
	DHA 4, 5 & 6	64.7
	DHA 7 & 8	66.4

\* p<0.01; \*\* p<0.001

## Multiple Substance Use

In 2012, 41.2% of students in grade 7, 9, 10 and 12 reported using, on at least one occasion in the 12 months prior to the survey, one or more of the following 13 substances: cannabis, inhalants, LSD, psilocybin or mescaline, cocaine or crack cocaine, MDMA, methamphetamine, salvia divinorum, mephedrone, cough or cold medicine to get high, or non-medical use of stimulants, tranquilizers or pain relief pills (Table 22). No gender or location differences were found for any illicit drug use. Students in the higher grades were more likely to use illicit drugs than students in grade 7. Moreover, almost one in four (23.2%), students used at least one of the other 12 illicit drugs, excluding cannabis, in 2012.

In 2007, 36% of students reported using at least one of 11 illicit substances<sup>1</sup> in the previous year and in 2002, 41.2% reported use of at least one of 12 illicit substances.<sup>2</sup>

Various patterns of substance use by students in Nova Scotia are displayed in Table 23. In 2012, 43.2% of students in grade 7, 9, 10 and 12 reported no substance use whatsoever. Although not statistically significant, the proportion of students reporting no substance use has

been increasing since 1998. The proportion of students using drugs other than alcohol, tobacco or cannabis increased significantly, from 1.2% in 2007 to 2.9% in 2012.

**Table 22:** Past year use of any illicit substance including cannabis, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

		Any illicit substance use (n=3148) %
Overall		41.2
Gender	Male	40.5
	Female	42.4
Grade	7	14.3
	9	39.8**
	10	47.2**
	12	59.3**
Shared Service Area	DHA 9	41.3
	DHA 1, 2 & 3	42.4
	DHA 4, 5 & 6	40.6
	DHA 7 & 8	40.6

\* p<0.01; \*\* p<0.001

**Table 23:** Multiple substance use, 1991 to 2012, among students in grades 7, 9, 10 & 12, as percentages

Substance	1991 %	1996 %	1998 %	2002 %	2007 %	2012 %
No substance use whatsoever	38.6	36.8	35.0	40.3	41.6	43.2
No Alcohol, no Tobacco, no Cannabis, but some other substance use	5.3	2.9	1.5	1.7	1.2	2.9
Alcohol, No Tobacco, No Cannabis	24.9	16.8	15.1	15.7	19.1	17.3
Alcohol & Tobacco & Cannabis	12.4	21.9	24.9	17.3	12.5	10.5
Alcohol & Tobacco, No Cannabis	10.1	7.7	6.6	3.2	2.0	1.5
Alcohol & Cannabis, No Tobacco	4.5	7.9	10.1	15.3	17.1	19.7
Tobacco, No Alcohol, No Cannabis	3.3	3.7	3.3	1.3	0.6	<1.0
Tobacco & Cannabis, No Alcohol	<1.0	1.5	1.4	1.2	0.7	<1.0
Cannabis, No Alcohol, No Tobacco	<1.0	<1.0	1.3	2.6	2.0	3.7

<sup>1</sup> In 2007, one of 11 illicit substances refers to: cannabis, inhalants, LSD, psilocybin or mescaline, cocaine or crack cocaine, MDMA, methamphetamine, and non-medical use of amphetamine, methylphenidate, tranquilizers or steroids.

<sup>2</sup> In 2002, one of 12 illicit substances refers to: cannabis, inhalants, LSD, psilocybin or mescaline, cocaine or crack cocaine, MPH, MDMA, amphetamines, tranquilizers, anabolic steroids, PCP and heroin.

# Problems and Risky Use

## Driving under the influence

In Nova Scotia, a person must be at least 16 years of age to apply for a learner’s permit. Among students 16 years of age and older, 74.1% reported having a driver’s license with an equal proportion of males and females having a license (71.6% and 76.3%, respectively).

- Alcohol

In 2012, 4% of students in grade 7, 9, 10 and 12 reported having driven a vehicle within an hour of consuming two or more drinks of alcohol. The drinking and driving rate among all students was 5.3% in 2007 and 6.6% in 2002.

Among students in grades 10 and 12 with a driver’s license, 10% drove within an hour of consuming two or

**Table 24:** Driving after drinking among students in grades 10 & 12 with a driver’s license, as percentages according to gender, grade and Shared Service Area, 2012

		Among senior high students with a driver’s license (n=963) %
Overall		10.0
Gender	Male	12.6
	Female	7.9
Grade	10	4.9
	12	12.4
Shared Service Area	DHA 9	9.8
	DHA 1, 2 & 3	10.2
	DHA 4, 5 & 6	8.7
	DHA 7 & 8	11.5

\* p<0.01; \*\* p<0.001

more drinks in 2012 compared to 13.6% who reported doing so in 2007 and 14.8% in 2002. No gender or location differences were observed.

In 2012, 5.4% of students in grades 7, 9, 10 and 12 were in a motor vehicle accident with them as a driver and less than 1% of students reporting drinking and driving prior to their accident.

Table 25 shows the proportions of students who reported being a passenger in a motor vehicle with an impaired driver. In 2012, 16.8% of students were a passenger in a vehicle with a driver who was impaired, compared to 19.2% in 2007, and 22.8% in 2002. No differences were observed for gender, grade level or school location.

**Table 25:** Being a passenger with an impaired driver among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

		Being a passenger with an impaired driver (n=3148) %
Overall		16.8
Gender	Male	16.2
	Female	17.1
Grade	7	14.5
	9	15.8
	10	18.0
Shared Service Area	12	18.3
	DHA 9	15.2
	DHA 1, 2 & 3	15.1
	DHA 4, 5 & 6	20.9
	DHA 7 & 8	18.3

\* p<0.01; \*\* p<0.001

- Cannabis

In the year prior to the survey, 8.4% of students in grade 7, 9, 10 and 12 drove at least once within an hour after using cannabis.

Among senior students with a driver’s license, 21.4% drove within an hour of cannabis use, comparable to the 23.1% who reported doing so in 2007 and 25.7% in 2002 (Table 26). Male and female students were equally likely to drive after using cannabis. In grade 12, more than one in four students in the province engaged in this risky behaviour. No location differences were observed for driving under the influence of cannabis.

**Table 26:** Driving within one hour of cannabis use, among students in grades 10 & 12 with a driver’s license, as percentages according to gender, grade and Shared Service Area, 2012

		Among senior high students with a driver’s license (n=963) %
Overall		21.4
Gender	Male	22.9
	Female	20.4
Grade	10	10.1
	12	26.9**
Shared Service Area	DHA 9	19.8
	DHA 1, 2 & 3	21.1
	DHA 4, 5 & 6	21.2
	DHA 7 & 8	26.2

\* p<0.01; \*\* p<0.001

Table 27 shows the proportions of students who reported being a passenger in a motor vehicle driven by someone who had been using cannabis. In 2012, 32.7% of students reported being a passenger in a vehicle driven by someone who had been using cannabis, compared to 26.2% in 2007. Students in the higher grades were more likely to report being a passenger in a vehicle driven by someone who had been using cannabis. Almost 60% of students in grade 12 reported this risky behaviour. No differences were observed for gender or school location.

**Table 27:** Being a passenger in a motor vehicle driven by someone who had been using cannabis among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

		Being a passenger in a motor vehicle driven by someone who had been using cannabis (n=3148) %
Overall		32.7
Gender	Male	29.4
	Female	36.5
Grade	7	6.1
	9	23.9**
	10	37.7**
Shared Service Area	12	57.9**
	DHA 9	33.3
	DHA 1, 2 & 3	36.9
	DHA 4, 5 & 6	31.7
	DHA 7 & 8	28.9

\* p<0.01; \*\* p<0.001

- Pain Medications

In the year prior to the survey, 2.9% of students in grade 7, 9, 10 and 12 drove at least once within an hour of using a prescription pain relief pill.

Among students with a driver’s license, 7.2% drove within an hour of taking a prescription pain relief pill (Table 28). Male and female students were equally likely to drive after taking a pain pill. No grade or location differences were observed for driving after taking a pain relief pill.

**Table 28:** Driving within an hour after taking pain medication among students in grades 10 & 12 with a driver’s license, as percentages according to gender, grade and Shared Service Area, 2012

		Among senior high students with a driver’s license (n=963) %
Overall		7.2
Gender	Male	6.3
	Female	8.0
Grade	10	2.9
	12	9.2
Shared Service Area	DHA 9	9.1
	DHA 1, 2 & 3	5.2
	DHA 4, 5 & 6	6.2
	DHA 7 & 8	5.8

\* p<0.01; \*\* p<0.001

### Self-reported harms

Students were asked whether they had experienced any of the 10 alcohol-related problems or risks listed in Table 29 in the prior year. Among students who used alcohol in the previous 12 months, the three most common alcohol-related problems were unplanned sex under the influence of alcohol or drugs, injuring oneself, and damaging things when drinking.

**Table 29:** Alcohol-related problems or risks, as percentages, 2012

Alcohol-related problem	Among all students (n=3148) %	Among students who used alcohol in the previous 12 months (n=1499) %
Damaged things when drinking	11.0	22.2
Drinking caused one to injure oneself	12.5	25.1
Unplanned sex under the influence of alcohol/drugs	13.3	26.2
Drinking caused tensions or disagreement with family or friends	5.6	11.0
Cost of alcohol prevented buying other things	8.0	16.3
Consumed alcohol before or instead of breakfast	4.5	9.0
Driving under the influence of alcohol	4.0	7.9
Trouble with the police as a result of drinking	2.8	5.7
School work or exams affected by drinking	1.8	3.5
Motor vehicle accident as a driver after drinking in the previous 2 hrs.	0.4	0.6

Table 30 reports on differences in having experienced one more alcohol-related problems or risks in the past year. The proportion of students reporting one or more alcohol-related problems or risks in 2012 is about the same as that reported by students in 2002, 28.3% versus 30.5% respectively. No gender or location differences were observed for one or more alcohol-related problems. However, students in higher grades were more likely to report alcohol-related problems than those in lower grades. Among students who consumed alcohol, 55.9% indicated that they experienced alcohol-related problems in the prior year.

In addition, 9.7% of students reported 3 or more alcohol-related problems or risks (11% reported 3 or more in 2002).

**Table 30:** One or more alcohol-related problems or risks, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

		Among all students (n=3148) %	Among students who consumed alcohol in the past 12 months (n=1499) %
Overall		28.5	55.9
Gender	Male	25.4	50.6
	Female	31.6	60.5
Grade	7	5.0	30.9
	9	22.6**	48.0
	10	33.0**	56.7*
	12	49.0**	62.3**
Shared Service Area	DHA 9	28.2	59.5
	DHA 1, 2 & 3	26.6	50.1
	DHA 4, 5 & 6	31.6	57.5
	DHA 7 & 8	28.3	54.1

\*p<0.01; \*\* p<0.001

Students were also asked about eight drug-related problems or risks. Among students who used drugs in the previous 12 months, the three most commonly reported problems were unplanned sex under the influence of alcohol or drugs, driving under the influence of cannabis, and the cost of drugs prevented students from buying other things.

**Table 31:** Drug-related problems or risks, as percentages, 2012

Drug-related problem	Among all students (n=3148) %	Among students who used drugs in the previous 12 months (n=1252) %
Driving under the influence of cannabis	8.4	20.4
Unplanned sex under the influence of alcohol/drugs	13.3	27.8
Drug use caused tensions or disagreement with family or friends	6.3	15.1
Cost of drugs prevented buying other things	6.6	15.9
School work or exams affected by drug use	4.6	11.1
Damaged things when using drugs	3.8	9.2
Drug use caused one to injure oneself	3.8	9.1
Trouble with the police as a result of drug use	2.0	4.8

In 2012, 23.5% of students reported one or more drug-related problems. This proportion is almost identical to that reported in the 2002 survey. Among students who used drugs, 52.2% reported one or more drug-related problems or risks in the year prior to the survey. The proportion of students who reported one or more drug-related problems increased as students advanced from grade 7 to 12. No gender or location differences were observed for drug-related problems or risks.

**Table 32:** One or more drug-related problems or risks, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

		Among all students (n=3148) %	Among students who used drugs in the past 12 months (n=1252) %
Overall		23.5	52.2
Gender	Male	20.8	48.4
	Female	26.3	55.8
Grade	7	3.9	23.4
	9	17.0**	40.3*
	10	24.5**	47.6**
	12	44.6**	68.6**
Shared Service Area	DHA 9	25.3	56.0
	DHA 1, 2 & 3	22.3	50.2
	DHA 4, 5 & 6	22.0	49.9
	DHA 7 & 8	22.3	48.1

\*p<0.01; \*\* p<0.001

## Alcohol, Drugs & Sexual Behaviour

In the 2012 survey, students were asked if they had engaged in vaginal, anal or oral sex in the 12 months prior to the survey. About 40.7% of grade 7, 9, 10 and 12 students reported having either vaginal, anal or oral sex in the previous year (Table 33). The proportions of students having sex increased with each progressive grade level, from 6.1% of students in grade 7, to 68.6% of grade 12 students. No gender or location differences were found.

Students were asked about the number of sexual partners they had in the previous year. Among students who reported having sex in the previous 12 months, 56.8% reported having sex with one, 23.9% with two, and 19.3% with 3 or more partners.

**Table 33:** Vaginal, anal or oral sex in the past 12 months, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

		Had sex (n=3148) %
Overall		40.7
Gender	Male	38.5
	Female	43.2
Grade	7	6.1
	9	33.2**
	10	48.6**
	12	68.6**
Shared Service Area	DHA 9	38.4
	DHA 1, 2 & 3	43.8
	DHA 4, 5 & 6	39.6
	DHA 7 & 8	43.5

\* p<0.01; \*\* p<0.001

Among students who had sex in the previous year, 32.1% had unplanned sex while under the influence of a substance (Table 34). Females were more likely than males to report this risky sexual behaviour. Compared to students in the lower grades, students in grade 12 were more likely to engage in unplanned sex under the influence. However, students in DHAs 1, 2 & 3 were less likely to have unplanned sex under the influence of alcohol or drugs than students in the other DHAs.

**Table 34:** Unplanned sex under the influence of alcohol or drugs, among students who had sex in the past 12 months, as percentages, 2012

		Any unplanned sex under the influence (n=1223) %
Overall		32.1
Gender	Male	26.8
	Female	36.4*
Grade	7	14.1
	9	22.2
	10	25.9
	12	41.9*
Shared Service Area	DHA 9	37.7
	DHA 1, 2 & 3	25.5*
	DHA 4, 5 & 6	31.3
	DHA 7 & 8	29.3

\* p<0.01; \*\* p<0.001

Slightly more than half of students (53.6%) used a condom or other latex barrier the last time they had sex. No gender, grade or location differences were found for condom use.

**Table 35:** Condom use at time of last intercourse, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

		Use condom at last sexual intercourse (n=1223) %
Overall		53.6
Gender	Male	57.8
	Female	50.0
Grade	7	59.3
	9	48.0
	10	54.9
	12	54.7
Shared Service Area	DHA 9	51.7
	DHA 1, 2 & 3	54.8
	DHA 4, 5 & 6	55.5
	DHA 7 & 8	54.4

\* p<0.01; \*\* p<0.001

# Gambling

## Participation in Gambling Activities

In 2012, students were asked about their participation in a number of gambling activities. About 52.7% of students engaged in at least one of the various gambling activities listed in Table 36 in the past 12 months. Excluding students who gambled with play money or for points, 49.9% of all students in grades 7, 9, 10 and 12 participated in some form of gambling for money in the year prior to the survey. This rate is lower than the 60.2% of students

in 2007, and the 63.3%, in 2002, who participated in gambling for money. Females were less likely than their male counterparts to partake in gambling activities. Playing scratch tabs (29.6%) was the most popular form of gambling among students, followed by playing cards (20.9%) or bingo (19.4%) for money, and betting on sporting events (19.0%). Females were less likely than males to play cards for money, bet on sports activities, play video gambling machines, and gamble on the Internet. Grade differences were found for some of the gambling activities. Students around the province were equally likely to gamble.

**Table 36:** Participation in various gambling activities, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

(n=3148)		Played cards for money %	Played bingo For money %	Bet on sports activities %	Played Sports Select %	Played other lottery %	Played video gambling machines %	Played scratch tabs %	Played break-opens %	Internet gambling for money %	Internet gambling with play money or points %	Any of these activities %
Overall		20.9	19.4	19.0	6.4	7.3	6.8	29.6	16.7	2.5	15.5	52.7
Gender	Male	30.1	17.7	28.6	9.7	8.8	9.3	28.8	15.7	4.5	20.0	58.2
	Female	12.0**	21.1	9.9**	2.8**	5.7	4.4**	30.4	17.7	0.6**	11.3**	47.7**
Grade	7	16.4	21.2	19.9	3.7	4.8	7.3	25.3	12.3	2.2	14.1	47.0
	9	24.6*	20.1	20.0	5.8	7.8	7.3	29.4	16.4	3.4	16.2	54.6
	10	19.9	21.5	17.5	7.5*	6.7	6.3	31.5	16.4	2.2	17.3	54.2
	12	22.4*	15.3	18.8	8.0*	9.6*	6.4	31.5	21.0*	2.3	14.4	54.3
Shared Service Area	DHA 9	21.2	20.5	19.7	6.3	7.1	6.1	29.2	16.3	1.5	16.5	54.9
	DHA 1, 2 & 3	20.3	18.1	17.4	5.6	6.6	7.8	28.7	18.0	3.5	15.1	51.0
	DHA 4, 5 & 6	23.2	22.6	20.4	7.0	9.5	6.5	33.7	19.1	2.8	14.4	54.1
	DHA 7 & 8	18.9	15.4	18.0	6.9	6.6	7.4	27.6	14.0	3.2	15.0	48.4

\*p<0.01; \*\* p<0.001

In 2012, 2.4% of students met the criteria for at-risk or problem gambling (Table 37). No gender, grade or location differences were observed for at-risk or problem gambling. Over the past 10 years, the reported rate of at risk or problem gambling among students has declined from 5.1% in 2002, to 4.4% in 2007, and to 2.4% in 2012.

As shown in Table 38, the popularity of most forms of gambling has declined over the years.

**Table 37:** Problem gambling, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

(n=3148)		At risk or problem gambling %
Overall		2.4
Gender	Male	3.7
	Female	1.3
Grade	7	1.4
	9	2.6
	10	2.4
	12	3.0
Shared Service Area	DHA 9	2.7
	DHA 1, 2 & 3	2.3
	DHA 4, 5 & 6	2.2
	DHA 7 & 8	2.0

\*p<0.01; \*\* p<0.001

**Table 38:** Participation in various gambling activities, 1991 to 2012, among students in grades 7, 9, 10 & 12, as percentages

Any participation in...	1996 %	1998 %	2002 %	2007 %	2012 %
Played scratch tabs	n/a	60.7	42.6	38.4	29.6
Cards for money	40.1	38.3	32.2	34.2	20.9
Bet on sports activities	29.1	28.8	28.4	24.3	19.0
Played break opens	n/a	n/a	25.8	23.2	16.7
Bingo for money	29.7	28.3	22.6	18.7	19.4
Lottery other than Sports Select	43.3	36.7	16.2	10.7	7.3
Sports Select lottery	19.5	15.4	9.6	6.4	6.4
Video lottery terminals	20.4	12.4	7.4	5.7	6.8
Internet gambling for money	n/a	n/a	n/a	4.8	2.5

n/a data not available

# Mental Health

## Depressive Symptoms

In 2012, 8.7% of students met the criteria for very elevated depressive symptoms on the 12-item Center for Epidemiologic Studies Depression Scale (CES-D) screening tool (Table 39). A further 24.4% reported somewhat elevated depressive symptoms, while scoring for 5.3% of students was indeterminate. Females were more likely than males to be rated as having very or somewhat elevated depressive symptoms. Students in grades 10 and 12 were more likely to report somewhat elevated depressive symptoms, while students in grade 9 were more likely to report very elevated depressive symptoms, relative to grade 7 students. In 2007, 5.8% of students met the criteria for very elevated depressive symptoms and 20.5% reported somewhat elevated symptoms.

**Table 39:** Elevated depressive symptoms based on screening tool, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

(n=3148)		Somewhat elevated depressive symptoms %	Very elevated depressive symptoms %
Overall		24.4	8.7
Gender	Male	18.6	3.8
	Female	30.3**	13.5**
Grade	7	17.4	5.4
	9	20.0	10.9**
	10	29.9**	9.0
	12	28.8**	9.0
Shared Service Area	DHA 9	25.9	7.0
	DHA 1, 2 & 3	23.7	8.8
	DHA 4, 5 & 6	25.2	11.4
	DHA 7 & 8	20.9	9.8

\*p<0.01; \*\* p<0.001

## Suicide

Questions about considering, planning and attempting suicide were included in the 2012 survey. Almost one in five students in grades 7, 9, 10 and 12 seriously considered attempting suicide in the year prior to the survey (Table 40). About 14.4% made a plan about how they would commit suicide and 8.4% attempted suicide one or more times. Female students were far more likely than male students to have considered, planned, or attempted suicide. Students in the middle grades (grades 9 & 10) were more likely to consider or plan suicide relative to students in the other grades. No differences in suicidal ideation and suicide attempts by Shared Service Area were found.

**Table 40:** Suicidal ideation and attempted suicide, among students in grades 7, 9, 10 & 12, as percentages according to gender, grade and Shared Service Area, 2012

(n=3148)		Seriously considered attempting suicide %	Made a plan of how to attempt suicide %	Attempted suicide one or more times %
Overall		19.7	14.4	8.4
Gender	Male	14.5	10.2	5.5
	Female	25.1**	18.4**	11.3**
Grade	7	13.4	7.4	6.2
	9	21.8*	16.9**	10.1
	10	24.4**	18.8**	9.9
	12	18.7	13.7*	7.4
Shared Service Area	DHA 9	19.8	12.8	8.6
	DHA 1, 2 & 3	18.8	13.9	8.1
	DHA 4, 5 & 6	22.6	17.1	9.8
	DHA 7 & 8	18.0	16.0	7.1

\*p<0.01; \*\* p<0.001

## Help-Seeking Behaviour

The survey included questions on needing and obtaining help for alcohol, smoking, other substance use, and depression.

- Substance Use

In 2012, 2.1% of all students in grades 7, 9, 10 and 12 indicated they needed help for their alcohol use and 0.7% used services or received help to deal with their alcohol use. In 2007, the exact same proportion (2.1%) reported needing help for alcohol use and 0.9% got help. Among students in 2012 who used alcohol in the previous year (n=1499), 4.2% reported they needed help and 1.3% got help for their alcohol use.

The proportion of all students who reported they needed help with their cigarette smoking was 2.8% in 2012, with 1.1% receiving help. These rates are comparable to 2007. In that year, 4.0% of students indicated they needed help and 1.5% received help for smoking. Among students who

reported smoking in 2012 (n=432), 20.7% indicated they needed help for their smoking and 7.3% received help.

In 2012, 2.8% of all students in grades 7, 9, 10 and 12 indicated they needed help for illicit drug use and 1.3% got help. Similarly in 2007, 3.3% of students needed help and 1.3% got help for illicit drug use. Among students in 2012 who used illicit drugs in the 12 months before the survey, 6.6% reported they needed help and 3.2% received help.

- Mental Health

In terms of mental health help-seeking behaviour, 21.2% of all students in grades 7, 9, 10 and 12 reported that they needed help for their symptoms of depression, with 7.7% receiving help. This is an increase from 2007 when 17% of students reported needing help and 5.2% received help. Among students in 2012 who reported somewhat or elevated symptoms of depression, 45% reported needing help and 16.4% received help.

## School Policy and Drug Education

Students were asked questions on whether their school had rules regarding tobacco use on school property. Most students reported that their school has a rule against using tobacco on school property (Table 41). They were also asked whether they had been offered classes in the current school year that covered decision-making skills, peer pressure, and assertiveness or refusal skills (Table 41). Approximately 68.1% of students reported having been offered classes on these topics.

**Table 41:** School drug education and rules among students in grades 7, 9, 10 & 12, 2012

(n=3148)		Grade 7 %	Grade 9 %	Grade 10 %	Grade 12 %
Drug education	none	20.5	14.6	42.0	46.8
	1 or 2 classes	38.8	47.5	51.5	46.2
	3 or more classes	40.7	37.9	6.5	7.0
No smoking on school property rule		71.2	78.9	66.5	80.8

## Substance Use by Adolescent Students in the Atlantic Provinces

The 2012 *Student Drug Use Survey* was conducted in Nova Scotia, New Brunswick, and Newfoundland and Labrador. Data collection did not take place in Prince Edward Island in 2012. Table 42 outlines the substance use prevalence rates among students for these three provinces. With a few exceptions, substance use among students in Nova Scotia, New Brunswick, and Newfoundland and Labrador was comparable. More students used cannabis, non-medical tranquilizers, and caffeinated energy drinks in Nova Scotia than students in New Brunswick.

**Table 42:** Any past 12 months substance use, among students Nova Scotia, New Brunswick and Newfoundland and Labrador, as percentages, 2012

Any use of ...	Nova Scotia		New Brunswick		Newfoundland and Labrador	
	%	99% CI	%	99% CI	%	99% CI
Alcohol	49.0	44.6 - 53.4	47.5	43.0 - 52.0	48.0	45.3 - 50.8
Cannabis	34.7	31.0 - 38.7	27.4	24.0 - 31.1	30.0	24.8 - 33.6
Cigarettes	13.2	11.2 - 15.6	13.3	11.0 - 15.9	13.9	12.4 - 15.7
Psilocybin or Mescaline	5.7	3.8 - 8.4	4.4	3.3 - 5.9	4.8	3.8 - 6.0
LSD	2.3	1.3 - 3.9	2.5	1.6 - 3.7	2.9	1.8 - 4.8
Inhalants	3.3	2.3 - 4.9	1.8	1.2 - 2.8	2.3	1.5 - 3.3
Non-medical tranquilizers	5.0	3.6 - 6.9	2.5	1.8 - 3.4	3.6	2.3 - 5.6
Non-medical stimulants	7.0	5.6 - 8.8	4.5	3.5 - 5.8	6.4	4.3 - 9.5
Non-medical pain medication	11.7	9.5 - 14.5	10.3	8.9 - 11.8	9.7	7.8 - 12.1
Cocaine or crack	4.1	3.1 - 5.5	3.3	2.4 - 4.6	5.8	4.0 - 8.3
MDMA	4.7	3.4 - 6.4	4.1	3.0 - 5.4	5.7	3.8 - 8.5
Caffeinated energy drinks	64.3	61.5 - 67.1	56.6	53.1 - 60.1	61.6	57.3 - 65.8

## Discussion

The 2012 *Nova Scotia Student Drug Use Survey* (NSSDUS) asked junior- and senior-high school students (grades 7, 9, 10 and 12) about their experiences with substance use, gambling and associated risk behaviours. This section examines trends related to selected findings and discusses the significance of questions which are new to the survey this year. In discussing the results, we will refer to both the 2002 *NSSDUS Technical Report* and the 2007 *NSSDUS Technical and Highlights Report*, each of which contains varying information.<sup>3,10,11</sup> We will also where appropriate, examine how these findings compare with other studies of a similar nature.

The 2012 survey revealed no significant differences from 2007 to 2012 in the prevalence of use of alcohol, cannabis, psilocybin or mescaline, LSD, inhalants, MDMA (ecstasy), non-medicinal tranquilizers and cocaine, though there were slight downward trends for almost all. Almost half of all students gambled for money in the year prior to the 2012 survey, even though this rate is significantly lower than that observed in 2007.

Alcohol continued to be the substance most often reported to have been used by students in the year previous to the survey (49%), followed by cannabis (34.7%), cigarettes (13.2%), non-medical pain pill use (11.7%), stimulant use (7%), and psilocybin or mescaline (5.7%). While patterns of any use of alcohol and cannabis have been essentially stable since 1996, use of psilocybin or mescaline was seen to peak at 12.2% in 2002 and thereafter declined to 7.7% in 2007, with this further decline to 5.7% in 2012. Using alcohol more than once per month was reported by 27% of students, while 14.2% reported marijuana use more often than once per month. The average age of first use of cannabis was 14.3 years of age. This is slightly higher than the age of first use reported in 2007 (13.5 years). With respect to the two drugs most commonly used by students in Nova Scotia, some perspective can be gained from the *Cross Canada Report of Student Alcohol and Drug Use* published by the Canadian Centre on Substance Abuse in which data from student drug use surveys from all provinces except Saskatchewan were examined to provide a national picture.<sup>12</sup> Fifty-two per cent of Nova Scotia students had consumed alcohol in the previous year (lowest Alberta at 49%; highest Ontario at 62%). With

respect to cannabis use in the past year, however, 32.4% of Nova Scotia students reported having done so, this being the highest rate in the country, while Alberta was lowest at 17%. This report did not include data on tobacco use.

Cigarette smoking was noted for its continued decline in prevalence, dropping from 23.2% in the 2002 survey, to 16.2% in the 2007 survey, to 13.2% in 2012. Cigarette smoking peaked in 1998 at 36.1% with smoking rates continuing to drop with each iteration of the NSSDUS. This is compatible with the Canadian experience overall – data from the Youth Smoking Survey indicates that 14.7% of Nova Scotia adolescents in grades 10-12 reported being a current smoker, and that from 1999 to 2010 the largest decrease in current smoking prevalence was in the age group 15 to 19 years.<sup>13</sup> This observed decline in smoking prevalence may be associated with an array of measures taken to prevent and stop smoking, including restricting access to tobacco products by minors, increased awareness of the dangers of smoking through the media and on cigarette packets themselves, smoking bans, and not accepting funds from tobacco companies for sponsorship of events targeted at youth. In Nova Scotia, many of the above activities are based upon the *Tobacco Control Strategy* adopted by the province in 2001, and may have contributed to this trend to less cigarette smoking by adolescents.<sup>14</sup> The strategy called for action in the areas of taxation, policy and legislation, media and public awareness, treatment and cessation, community-based programs and evaluation, monitoring and surveillance. These comprehensive activities are seen as having been effectively implemented.

In 2012, about half of all students who smoked in the prior year tried to quit in the six months before the survey. This rate is comparable to the 56% who tried to quit in 2002, when there were more smokers among youth. The *Comprehensive Tobacco Control Strategy* was renewed in Nova Scotia in 2011, calling for a decrease in tobacco use in those aged 15 to 19 years in Nova Scotia to 10% by 2015-16.<sup>15</sup> In order to accomplish this, the call for renewal identified that there was a need for health care professionals to use best practices for smoking cessation, for identification of barriers that individuals experience in accessing cessation resources, for retail outlets to make

cessation resources such as nicotine replacement more available, for supporting District Health Authorities in communicating with health professionals on what tobacco treatment options are available, and for a public awareness campaign focussed on youth and their families.

The 2012 survey asked respondents a new question about their consumption of energy drinks. As far as we know, this is the first population-based data which examines prevalence of use of these products among youth. The finding that 64.3% of youth used energy drinks such as Red Bull, Monster, Rockstar and Full Throttle is of note. These beverages have become particularly popular among youth due to their purported stimulant effects and ability to increase alertness and enhance mental and physical energy.<sup>16</sup> Studies have shown that the energy drinks increase stimulation, attention and memory, decrease reaction times and mental fatigue, and improve performance on some physical activities. However they also have been associated with negative health effects, including those typically seen with overuse of caffeine, such as irritability, problems with heart rhythm, nausea and seizures.<sup>17</sup> These harmful effects can be due to the toxicity of the ingredients found in the drinks or due to their use with other substances such as alcohol.<sup>18</sup> Canadian youth in grades 7 to 12 often use these drinks mixed with alcohol, with about 20% having done so in the previous year.<sup>19</sup> Mixing alcohol with energy drinks has been seen in conjunction with increased risk-taking, driving under the influence, increased alcohol consumption per sitting, increased susceptibility to injury and higher rates of alcohol dependence.<sup>20</sup> This behaviour was not examined in the 2012 *Nova Scotia Student Drug Use Survey*, and perhaps should be included in future years.

When students were asked about non-medical use of pain relief pills such as Percocet, Percodan, Tylenol #3, Demerol, Oxycontin, and codeine, 11.7% reported using pain pills that were not prescribed for them or without a doctor telling the student to take them. Use was similar among both male and female students, but increased with grade, so that 16.4% of grade 12 students reported this drug use behaviour. This is lower than the 12 month prevalence of 20.6% seen in Ontario students in 2007, however, that survey involved all students in grades 7

to 12.<sup>20</sup> This type of drug use has been a major concern throughout the province recently, so that this information should prove helpful for planning and policy decisions to assist in its prevention.<sup>21</sup>

Also new to the survey, students were asked about their use of salvia divinorum, a substance which can have “psychedelic” effects. In 2012, 2.3% of students in grade 7, 9, 10 and 12 reported salvia use in the 12 months prior to the survey. Though this level of use is low and compares with data reported from the 2008-2009 Canadian Youth Smoking Survey, which found that 3.8% of students aged 12 to 17 had used salvia in the past year,<sup>22</sup> that report also pointed out the potential for long term psychiatric morbidity.<sup>23</sup> Salvia is a substance which is just beginning to be used by adolescents, so should be followed closely in future surveys.

Driving under the influence of substances is always a concern. In 2012, in the year prior to the survey, 10% of senior students (in grades 10 and 12) with a driver’s license drove at least once within an hour after consuming two or more drinks, compared with 13.6% in the 2007 survey,<sup>3</sup> and 14.8% in the 2002 survey.<sup>10</sup> About 17% of students reported being a passenger of a driver who had been drinking in 2012, also down from previous years, with approximately 20% doing so in 2007 and 2002.<sup>3,10</sup> While drinking and driving rates appear to be trending downward, driving under the influence of cannabis has remained elevated among young drivers. In 2012, 21.4% of senior students with a driver’s license reported driving within one hour of using cannabis, a rate similar to 2007 (23.1%).<sup>3</sup> Being a passenger with a driver under the influence of cannabis was 32.7%, up from the 26.2% who did so in 2007.<sup>3</sup> In addition, 7.2% of senior high students with a driver’s license reported driving within one hour of taking a non-prescription pain medication.

Unplanned sexual activity while under the influence of alcohol or other drugs is also a major concern since use of substances makes practicing safe sex, in particular condom use, more difficult.<sup>24</sup> This risky practice was reported by 32.1% of those who had had intercourse in the previous year, a number comparable to the 34.8% who reported having done so in the 2002 NSSDUS.<sup>10</sup>

Gambling continues to be common among adolescents. About 53% of students in grade 7, 9, 10 and 12 engaged in at least one gambling activity in the year before the survey. However, more severe issues related to gambling are no more common now than in the past. In 2012, 2.4% of students met the criteria for at-risk or problem gambling. The at-risk or problem gambling rate among students was 4.4% in 2007,<sup>3</sup> and 5.1% in 2002,<sup>10</sup> comparable to the 2012 rate.

Mental health indicators point to an area requiring considerable attention. The NSSDUS assessed for symptoms of depression and risk of suicide in students. In 2012, 8.7% of students in grades 7, 9, 10 and 12 in Nova Scotia scored as having very elevated depressive symptoms, slightly higher than the 6.0% reported in the 2007 NSSDUS Highlights Report.<sup>11</sup> Twenty-four per cent of students scored as having somewhat elevated depressive symptoms in 2012, compared to 20.5% in 2007.<sup>3</sup> Depression is common in adolescents, with about 25% of individuals having experienced a major depressive episode by the end of adolescence.<sup>25</sup> Depression and substance use and/or gambling problems are also frequently comorbid with each other.<sup>26,27</sup> Poor mental health may also interact with substance use to lead to some of the risky behaviours which adolescents become involved in while using drugs and/or alcohol.<sup>28</sup>

Suicidality was reported on for the first time in the 2012 survey. Almost one in five students reported seriously considering attempting suicide in the year prior to the survey, with 14.4% reported having made a plan about how they would commit suicide, and 8.4% having

attempted suicide one or more times. Female students had higher reported rates than male students. Youth suicide is the second leading cause of death in Canada and substance use disorders are a significant risk factor.<sup>29</sup>

The consent procedure for students attending schools within the HRSB changed from passive to active parental/guardian consent for this survey. The participation rate for students within HRSB went from 98.9% of students present on the day of the survey in 2007, to 59% in 2012. As a result of the decline in sample size for students in HRSB, consent procedures should be re-examined for future surveys.

In summary, the *2012 Nova Scotia Student Drug Use Survey* provides a large amount of information about a representative sample of Nova Scotia students in grades 7, 9, 10 and 12 which could prove very helpful in the development of programs and services across the spectrum of risk and harm. The prevalence of cigarette smoking decreased, reflecting a trend seen since 1998. There also was a decrease in driving after drinking and riding with a drinking driver, although rates of driving after using cannabis remain relatively unchanged. Other patterns of drug use remain essentially unchanged, including use of alcohol and cannabis. Also of concern are the rates of poor mental health observed among Nova Scotia students, particularly among female students. The results indicate that more is yet to be done in the areas of gambling, substance use and mental health. In order to improve youth health in these areas, both policy and program options should be considered.

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# Appendices

## **Appendix 1:** 2012 Student Drug Use Questionnaire





## START HERE

### 1. What are the first 3 digits of the postal code where you live?

Example: If your postal code is A1B 2C3, you would fill in:

A	1	B
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--	--	--

I do not know

### 2. Are you male or female?

- Male
- Female

### 3. What language do you usually speak at home?

- English
- French
- English and French
- English and another language
- French and another language
- Another language

### 4. What grade are you in?

- Grade 7
- Grade 8
- Grade 9
- Grade 10 / level I
- Grade 11 / level II
- Grade 12 / level III

### 5. How old are you?

- 11 years or younger
- 12 years
- 13 years
- 14 years
- 15 years
- 16 years
- 17 years
- 18 years
- 19 years or older

### 6. So far in this school year, what is your average on all your courses at school?

- 80% or higher
- 70% - 79%
- 60% - 69%
- 50% - 59%
- Below 50%
- I do not know

## Office Use Only

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
D	1	2	3	4	5	6	7	8	9																
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

**7. Who are you living with now?**

- Mother and father
- Mother
- Father
- Mother and step-father
- Father and step-mother
- I live alone or with friends (independent living)
- Other (please state) \_\_\_\_\_

**8. What is the highest level of education that your mother has attained?**

- Graduated university
- Attended but did not graduate university
- Graduated college or trade school
- Attended but did not graduate college or trade school
- Graduated high school
- Attended but did not graduate high school
- Did not attend high school
- Don't know
- No mother

**9. Imagine this ladder to the right shows how Canadian society is set up. At the top of the ladder are people who are the “best off” – they have the most money, the most education and the jobs that bring the most respect. At the bottom are the people who are “worst off” – they have the least money, little education, no job or jobs that no one wants.**

Best off	10
9	9
8	8
7	7
6	6
5	5
4	4
3	3
2	2
Worst off	1

**Now think about your family. Please fill in the bubble next to the box that best shows where you think your family would be on this ladder.**

**10. How spiritual of a person do you consider yourself to be?**

- Not at all spiritual
- Not very spiritual
- Fairly spiritual
- Very spiritual

**11. How often do you attend religious services or events?**

- Never
- A few times a year
- At least once a month
- At least once a week

**12. How important would you say religion is to you? Is it:**

- Not important at all
- Not very important
- Fairly important
- Very important



[serial]

The next question asks about your parents or guardians. By parents or guardians we mean whomever you consider your parents. They could be biological parents, adoptive parents, step-parents, same sex parents, or foster parents.

13. Please indicate how much you agree or disagree with the following statements:

	Strongly Agree	Agree	I do not know	Disagree	Strongly Disagree
a) My parent(s) or guardian(s) usually know where I am when I am not at home	<input type="radio"/>				
b) My parent(s) or guardian(s) usually know who I am with when I am not at home	<input type="radio"/>				
c) It is important that I do not let down or disappoint my parent(s) or guardian(s)	<input type="radio"/>				

14. Please indicate how much you agree or disagree with the following statements:

	Strongly Agree	Agree	I do not know	Disagree	Strongly Disagree
a) People say "Hello" and often stop to talk to one another on the street	<input type="radio"/>				
b) It is safe for younger children to play outside during the day	<input type="radio"/>				
c) You can trust people around here	<input type="radio"/>				
d) I could ask for help or a favour from my neighbours	<input type="radio"/>				

15. Please choose which of the following two statements you agree with. (Please choose one only)

- Most of the people I go to school with can be trusted  
**OR**  
 You can't be too careful of the people I go to school with

16. Please choose which of the following two statements you agree with. (Please choose one only)

- Most of the time, the people I go to school with try to be helpful  
**OR**  
 Most of the time, the people I go to school with look out for themselves

17. Please indicate how much you agree or disagree with the following statements:

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
a) I feel safe in my school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) I feel close to people at my school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) I feel happy at my school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. How long have you had a license to drive a car or a motorcycle?

- I do not have a license to drive  
 I have a beginner's license or a temporary license  
 I have had a license less than one year  
 I have had a license one to two years  
 More than two years

19. In the past 12 months, have you been in a motor vehicle accident with YOU as the driver?

- Yes  
 No

**20. How many of your friends use TOBACCO?**

- None
- A few
- About half
- More than half
- All

**21. How many of your friends use ALCOHOL?**

- None
- A few
- About half
- More than half
- All

**22. How many of your friends use CANNABIS (marijuana, grass, weed, pot, hash, hash oil)?**

- None
- A few
- About half
- More than half
- All

**23. How old were you when you smoked your first whole cigarette?**

- I have never smoked a whole cigarette
- 10 years or younger
- 11 years
- 12 years
- 13 years
- 14 years
- 15 years
- 16 years
- 17 years
- 18 years
- 19 years or older

**24. In the past 12 months, how many cigarettes did you usually smoke per day?**

- I have never smoked
- I did not smoke cigarettes in the past 12 months
- I tried one cigarette in the past 12 months
- I had less than one cigarette a day
- I had 1 or 2 cigarettes a day
- 3 to 5 cigarettes a day
- 6 to 10 cigarettes a day
- 11 to 15 cigarettes a day
- 16 to 20 cigarettes a day
- More than 20 cigarettes a day

**25. Have you smoked 100 or more cigarettes in your life?**

- Yes
- No
- I don't know



[serial]

26. Have you tried to quit smoking in the past 6 months?

- Yes
- No
- I have never smoked or I have smoked only a few times

27. How old were you when you first drank alcohol?

- I have never drunk alcohol
- 10 years or younger
- 11 years
- 12 years
- 13 years
- 14 years
- 15 years
- 16 years
- 17 years
- 18 years
- 19 years or older

28. In the past 12 months, how often did you drink alcohol - beer, wine, coolers or hard liquor (rum, whisky, vodka, gin, etc.)?

- Not at all
- Just a sip
- Once a month or less often
- Two or three times a month
- Once a week
- Twice a week
- Three times a week
- Four or five times a week
- Almost every day - six or more times a week

29. The **LAST TIME** you drank alcohol, how did you get it?

- I bought it myself
- I had a friend buy it for me
- My friend or friends offered it to me
- My parents offered it to me
- Other adults offered it to me
- I got it from my home without my parent's permission
- I do not drink alcohol

30. In the past 12 months, has drinking affected your school work or exams so that you did not do as well as you could?

- Yes
- No
- I do not drink alcohol

31. In the past 12 months, has your drinking caused tension or disagreement with family or friends?

- Yes
- No
- I do not drink alcohol



39. In the past 12 months, how often have YOU driven a motor vehicle within an hour of drinking two or more drinks of alcohol?

- Never
- Once
- Twice
- Three or more times
- I do not drink alcohol / I do not drive

40. In the past 12 months, have you been in a motor vehicle accident with YOU as the driver, after drinking in the two previous hours?

- Never
- Once
- Twice
- Three or more times
- I do not drink alcohol / I do not drive

41. In the past 12 months, how often were you a PASSENGER in a vehicle with a driver who had too much to drink?

- Never
- Once
- Twice
- Three or more times

42. In the past 12 months, how often did you use CANNABIS (marijuana, grass, weed, pot, hash, hash oil)?

- I do not know what cannabis is
- I have never used cannabis
- I did not use cannabis in the past 12 months
- One time
- Two times
- Three or four times
- Five to eight times
- Nine to 12 times (about once a month)
- Thirteen to 26 times (about twice a month)
- Twenty-seven or more times (more than twice a month)

43. How old were you when you first tried CANNABIS?

- I have never tried cannabis
- 10 years or younger
- 11 years
- 12 years
- 13 years
- 14 years
- 15 years
- 16 years
- 17 years
- 18 years
- 19 years or older



48. In the **past 12 months**, have you used **COCAINE** (snow or coke) or **CRACK COCAINE** (rock)?

- I do not know what cocaine is
- Not at all
- One time
- Two times
- Three or four times
- Five to eight times
- Nine to 12 times (about once a month)
- Thirteen to 26 times (about twice a month)
- Twenty-seven or more times (more than twice a month)

49. In the **past 12 months**, have you used **ECSTASY** or **MDMA**?

- I do not know what Ecstasy and MDMA are
- Not at all
- One time
- Two times
- Three or four times
- Five to eight times
- Nine to 12 times (about once a month)
- Thirteen to 26 times (about twice a month)
- Twenty-seven or more times (more than twice a month)

50. In the **past 12 months**, have you used **METHAMPHETAMINE** (crystal meth, speed, crank, chalk, ice)?

- I do not know what methamphetamine is
- Not at all
- One time
- Two times
- Three or four times
- Five to eight times
- Nine to 12 times (about once a month)
- Thirteen to 26 times (about twice a month)
- Twenty-seven or more times (more than twice a month)

51. In the **past 12 months**, have you used **SALVIA DIVINORUM** (sally-D, magic mint, sadi)?

- I do not know what salvia divinorum is
- Not at all
- One time
- Two times
- Three or four times
- Five to eight times
- Nine to 12 times (about once a month)
- Thirteen to 26 times (about twice a month)
- Twenty-seven or more times (more than twice a month)

52. In the **past 12 months**, have you used **COUGH OR COLD MEDICINE**, such as **Robitussin DM**, **Benlyn DM** (robos, dex, DXM) in order to get high?

- I do not know what cough or cold medicine is
- Not at all
- One time
- Two times
- Three or four times
- Five to eight times
- Nine to 12 times (about once a month)
- Thirteen to 26 times (about twice a month)
- Twenty-seven or more times (more than twice a month)

**53. In the past 12 months, have you used MEPHEDRONE (drone, bubbles, m-cat)?**

- I do not know what mephedrone is
- Not at all
- One time
- Two times
- Three or four times
- Five to eight times
- Nine to 12 times (about once a month)
- Thirteen to 26 times (about twice a month)
- Twenty-seven or more times (more than twice a month)

**54. In the past 12 months, have you used CAFFEINATED ENERGY DRINKS, such as Red Bull, Monster, Rockstar and Full Throttle?**

- I do not know what caffeinated energy drinks are
- Not at all
- One time
- Two times
- Three or four times
- Five to eight times
- Nine to 12 times (about once a month)
- Thirteen to 26 times (about twice a month)
- Twenty-seven or more times (more than twice a month)

**55. In the past 12 months, how often did you use STIMULANTS such as diet pills and stay awake pills (also known as “uppers”, “bennies”, “dexies”, “pep pills” etc.) without a prescription?**

- I do not know what stimulants are
- Not at all
- One time
- Two times
- Three or four times
- Five to eight times
- Nine to 12 times (about once a month)
- Thirteen to 26 times (about twice a month)
- Twenty-seven or more times (more than twice a month)
- Used without a prescription, but not in the past 12 months

**56. Sedatives or tranquillizers are sometimes prescribed by doctors to help people sleep, calm them down or relax their muscles. In the past 12 months, how often did you use SEDATIVES or TRANQUILLIZERS (such as Valium, Ativan, Xanax) with a prescription or because a doctor told you to?**

- I do not know what sedatives or tranquillizers are
- Not at all
- One time
- Two times
- Three or four times
- Five to eight times
- Nine to 12 times (about once a month)
- Thirteen to 26 times (about twice a month)
- Twenty-seven or more times (more than twice a month)
- Used with a prescription, but not in the past 12 months

57. In the past 12 months, how often did you use **SEDATIVES** or **TRANQUILLIZERS** (such as Valium, Ativan, Xanax, also known as “tranqs”, “downers” etc.) without a prescription or without a doctor telling you to take them?

- I do not know what sedatives or tranquillizers are
- Not at all
- One time
- Two times
- Three or four times
- Five to eight times
- Nine to 12 times (about once a month)
- Thirteen to 26 times (about twice a month)
- Twenty-seven or more times (more than twice a month)
- Used without a prescription, but not in the past 12 months

58. In the past 12 months, how often did you use **PAIN RELIEF PILLS** (such as Percocet, Percodan, Tylenol #3, Demerol, Oxycontin, codeine) with a prescription or because a doctor told you to take them? (We do not mean regular Tylenol or Aspirin that anyone can buy in a drugstore).

- I do not know what pain relief pills are
- Not at all
- One time
- Two times
- Three or four times
- Five to eight times
- Nine to 12 times (about once a month)
- Thirteen to 26 times (about twice a month)
- Twenty-seven or more times (more than twice a month)
- Used with a prescription, but not in the past 12 months

59. In the past 12 months, how often did you use **PAIN RELIEF PILLS** (such as Percocet, Percodan, Tylenol #3, Demerol, Oxycontin, codeine) without a prescription or without a doctor telling you to take them? (We do not mean regular Tylenol or Aspirin that anyone can buy in a drugstore).

- I do not know what pain relief pills are
- Not at all
- One time
- Two times
- Three or four times
- Five to eight times
- Nine to 12 times (about once a month)
- Thirteen to 26 times (about twice a month)
- Twenty-seven or more times (more than twice a month)
- Used without a prescription, but not in the past 12 months

60. In the past 12 months, how often have you driven a vehicle within an hour of using a **PRESCRIPTION PAIN RELIEF PILL** such as Percocet, Percodan, Tylenol #3, Demerol, Oxycontin, or codeine? (We do not mean regular Tylenol or Aspirin that anyone can buy in a drugstore).

- Never
- Once
- Twice
- Three or more times
- I do not use drugs / I do not drive



[serial]

61. In the past 12 months, have you used pain killers, speed or cocaine, by injection or needles?

- I used one or more of these drugs by injection
- I used one or more of these drugs, but not by injection
- I did not use these drugs at all

62. In the past 12 months, has your drug use (other than alcohol) affected your school work or exams so that you did not do as well as you could?

- Yes
- No
- I do not use drugs

63. In the past 12 months, has your drug use (other than alcohol) caused tension or disagreement with family or friends?

- Yes
- No
- I do not use drugs

64. In the past 12 months, have you been in trouble with the police as a result of your drug use (other than alcohol)?

- Yes
- No
- I do not use drugs

65. In the past 12 months, has the cost of drugs (other than alcohol) caused you to give up buying other things?

- Yes
- No
- I do not use drugs

66. In the past 12 months, have you damaged things after having used drugs (other than alcohol)?

- Yes
- No
- I do not use drugs

67. In the past 12 months, has your drug use (other than alcohol) caused you to injure yourself?

- Yes
- No
- I do not use drugs

68. In the past 12 months, how many times have YOU driven a motor vehicle within an hour of using cannabis?

- Never
- Once
- Twice
- Three or more times
- I do not use cannabis / I do not drive

69. In the past 12 months, how often were you a **PASSENGER** in a car or other vehicle driven by someone who had been using cannabis?

- Never
- Once
- Twice
- Three or more times

The next 7 questions ask about the **PAST 30 DAYS**.

70. In the past 30 days, how many times has drinking alcohol made you drunk (that is, you had so much to drink that you threw up or you lost control of your actions)?

- I did not drink alcohol at all in the past 30 days
- I have not been drunk in the past 30 days
- Once, I was drunk in the past 30 days
- Twice
- Three times
- Four times
- Five or more times

For question # 71, **ONE DRINK** means 1 bottle/can of beer (about 341 ml = 12 ounces) OR 1 glass of wine (about 118 ml = 4 ounces) OR 1 shot glass of liquor (about 30 ml = 1 ounce).

71. In the past 30 days, how many times have you had five or more drinks of alcohol on the same occasion?

- I did not drink alcohol at all in the past 30 days
- I have not had five or more drinks of alcohol on the same occasion in the past 30 days
- Once, I had five or more drinks of alcohol on the same occasion in the past 30 days
- Twice
- Three times
- Four times
- Five or more times

72. In the past 30 days, how often did you use **CANNABIS** (marijuana, grass, weed, pot, hash, hash oil)?

- Not at all during the month
- Less than every week
- Every week or almost every week
- Every day or almost every day

73. In the past 30 days, how often did you use **CANNABIS** during school hours on school days?

- Not at all during the month
- Less than every week
- Every week or almost every week
- Every day or almost every day

74. In the past 30 days, how often did you take **AMPHETAMINE** (Dexedrine®, Adderall XR®) as prescribed for you by your doctor?

- I am not on prescribed amphetamine
- In the past 30 days, I took prescribed amphetamine once a day
- Twice a day
- Three times a day
- Four times a day



[serial]

**75. In the past 30 days, how often did you take RITALIN® or CONCERTA® (methylphenidate) as prescribed for you by your doctor?**

- I am not on prescribed Ritalin® or Concerta®
- In the past 30 days, I took prescribed Ritalin® or Concerta® once a day
- Twice a day
- Three times a day
- Four times a day

**76. In the past 30 days, how often did you take TRANQUILIZERS (Valium®, Ativan®, Xanax®, Tranqs, 5s, 10s) as prescribed for you by your doctor?**

- I am not on prescribed tranquilizers
- In the past 30 days, I took prescribed tranquilizers once a day
- Twice a day
- Three times a day
- Four times a day

**The next section asks about some of your decisions concerning sexual behaviour. You may skip any question which makes you uncomfortable.**

**Please read the following definition of vaginal sex and then answer questions #77 and #78:**

**“Vaginal sex occurs when a male’s penis enters a female’s vagina. When this happens, both people are having vaginal sex.”**

**77. In the past 12 months, have you had vaginal sex?**

- Yes
- No
- I have never had vaginal sex

**78. How old were you when you had vaginal sex for the FIRST TIME?**

- I have never had vaginal sex
- 10 years or younger
- 11 years
- 12 years
- 13 years
- 14 years
- 15 years
- 16 years
- 17 years
- 18 years
- 19 years or older

**Please read the following definition of anal sex, and then answer question #79:**

**“Anal sex occurs when a male’s penis enters another person’s anus or rectum. When this happens, both people are having anal sex.”**

**79. In the past 12 months, have you had anal sex?**

- Yes
- No
- I have never had anal sex

Please read the following definition of oral sex, and then answer question #80:

“Oral sex occurs when a male’s penis enters someone’s mouth, or when someone’s mouth is in contact with a female’s vulva or vagina. When either of these happens, both people are having oral sex.”

80. In the past 12 months, have you had oral sex?

- Yes
- No
- I have never had oral sex

For the next 6 questions, “sex” means vaginal, anal, or oral sex.

81. In the past 12 months, with how many different male partners did you have sex?

- I have never had sex
- I did not have sex in the past 12 months
- I did not have any male partners in the past 12 months
- I had 1 male partner in the past 12 months
- 2 male partners
- 3 or more male partners

82. In the past 12 months, with how many different female partners did you have sex?

- I have never had sex
- I did not have sex in the past 12 months
- I did not have any female partners in the past 12 months
- I had 1 female partner in the past 12 months
- 2 female partners
- 3 or more female partners

83. The **LAST TIME** you had sex, did you drink alcohol or use drugs before you had sex?

- I have never had sex
- No, I did not drink alcohol or use drugs before I had sex
- Yes, I drank alcohol or used drugs before I had sex

84. The **LAST TIME** you had sex, did you or your partner use a condom or other latex barrier (e.g. dental dam)?

- I have never had sex
- No, we did not use a condom or other latex barrier
- Yes, we used a condom or other latex barrier

85. In the past 12 months, did you have unplanned sex?

- I have never had sex
- I did not have sex in the past 12 months
- I had sex in the past 12 months but only when I planned to
- Yes, I had unplanned sex in the past 12 months

86. In the past 12 months, did you have unplanned sex under the influence of alcohol or drugs?

- Yes
- No



[serial]

**87. People have different feelings about themselves when it comes to questions of being attracted to other people. Which of the following best describes your feelings?**

- 100% heterosexual (attracted to persons of the opposite sex)
- Mostly heterosexual
- Bisexual (attracted to both males and females)
- Mostly homosexual
- 100% homosexual ("gay/lesbian"; attracted to persons of the same sex)
- Not sure

**The next section asks about gambling.**

**88. In the past 12 months, how often have you done the following:**

	Never	Less than monthly	Monthly	Weekly	Daily
Played cards for money	<input type="radio"/>				
Played bingo for money	<input type="radio"/>				
Bet on sports activities	<input type="radio"/>				
Played Sports Select lottery	<input type="radio"/>				
Played a lottery other than Sports Select	<input type="radio"/>				
Played any video gambling machines	<input type="radio"/>				
Played scratch tabs	<input type="radio"/>				
Played break-opens	<input type="radio"/>				
Played on Internet gambling websites for money	<input type="radio"/>				
Played on Internet gambling websites with play money or points	<input type="radio"/>				

**89. In the past 12 months, has your betting money caused any problems for you such as arguments with family and friends, or problems at school or work?**

- Yes
- No
- I do not gamble

**90. In the past 12 months, have you gambled more than you had planned to?**

- Yes
- No
- I do not gamble

**91. In the past 12 months, has anyone criticized your betting or told you that you had a gambling problem, regardless of whether you thought it was true or not?**

- Yes
- No
- I do not gamble

**92. In the past 12 months, have you skipped or been absent from school or work due to betting activities?**

- Yes
- No
- I do not gamble

93. In the past 12 months, have you borrowed money or stolen something in order to bet or to cover gambling debts?

- Yes
- No
- I do not gamble

The next questions ask about sad feelings and attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide; that is, taking some action to end their own life. Please choose the response which is right for you.

94. During the past 12 months, did you ever seriously consider attempting suicide?

- Yes
- No

95. During the past 12 months, did you make a plan about how you would attempt suicide?

- Yes
- No

96. During the past 12 months, how many times did you actually attempt suicide?

- Never
- One time
- Two or three times
- Four or five times
- Six or more times

The next section asks about help-seeking.

97. In the past 12 months, did you feel you needed help for your...

- |                       |                           |                          |  |
|-----------------------|---------------------------|--------------------------|--|
| a) Alcohol use?       | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> I do not drink alcohol   |
| b) Cigarette smoking? | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> I do not smoke           |
| c) Other drug use?    | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> I do not use other drugs |
| d) Gambling?          | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> I do not gamble          |

98. In the past 12 months, did you use any services or receive help to deal with your...

- |                       |                           |                          |  |
|-----------------------|---------------------------|--------------------------|--|
| a) Alcohol use?       | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> I do not drink alcohol   |
| b) Cigarette smoking? | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> I do not smoke           |
| c) Other drug use?    | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> I do not use other drugs |
| d) Gambling?          | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> I do not gamble          |

99. In general, would you say your health is:

- Excellent
- Very good
- Good
- Fair
- Poor



[serial]

The next section asks about your feelings.

100. Please indicate how much you agree or disagree with the following statements:

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
a) I like new and exciting experiences, even if I have to break the rules.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) I prefer friends who are exciting and unpredictable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) I like to explore strange places.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) I like to do frightening things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

101. Please mark the response that best describes how you felt in the PAST 7 DAYS.

	Never or rarely	Sometimes	Often	Always
a) I did not feel like eating; my appetite was poor.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) I felt like I could not shake off the blues even with help from my family or friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) I had trouble keeping my mind on what I was doing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) I felt depressed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) I felt like I was too tired to do things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) I felt hopeful about the future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g) My sleep was restless.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h) I was happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i) I felt lonely.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j) I enjoyed life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k) I had crying spells.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l) I felt people disliked me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

102. Please mark the response that best describes how you felt in the PAST 30 DAYS.

	Not true	Sometimes true	Often true
a) I got really frightened for no reason at all.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) I was afraid to be alone in the house.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) People told me that I worry too much.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) I was scared to go to school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) I was shy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

103. In the past 12 months, did you feel you needed help because you felt...

- |               |                           |                          |  |
|---------------|---------------------------|--------------------------|--|
| a) Depressed? | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> I did not feel depressed |
| b) Stressed?  | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> I did not feel stressed  |
| c) Anxious?   | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> I did not feel anxious   |

104. In the past 12 months, did you use any services or receive help because you felt...

- |               |                           |                          |  |
|---------------|---------------------------|--------------------------|--|
| a) Depressed? | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> I did not feel depressed |
| b) Stressed?  | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> I did not feel stressed  |
| c) Anxious?   | <input type="radio"/> Yes | <input type="radio"/> No | <input type="radio"/> I did not feel anxious   |



## Appendix 2: Supplementary Tables of Findings

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**Appendix 2-1: Census, sample and participation, 2012**

Shared service area	Grade 7	Grade 9	Grade 10	Grade 12	Totals
<b>DHA 9</b>					
Total number of students based on census	4,050.0	4,082.0	4,667.0	4,698.0	17,497.0
Number of students enrolled in selected classes	580.0	423.0	281.0	266.0	1,550.0
Percentage of students absent/not available on survey day	11.0	14.7	14.6	21.1	14.4
Number of students present on survey day	516.0	361.0	240.0	210.0	1,327.0
Number of students participating	304.0	205.0	156.0	118.0	783.0
Response rate as % of students present on survey day	58.9	56.8	65.0	56.2	59.0
Participation rate as % of students enrolled in class	52.4	48.5	55.5	44.4	50.5
<b>DHA 1, 2 &amp; 3</b>					
Total number of students based on census	2,041.0	2,203.0	2,376.0	2,542.0	9,162.0
Number of students enrolled in selected classes	317.0	265.0	278.0	387.0	1,247.0
Percentage of students absent/not available on survey day	10.1	11.7	14.0	19.9	14.4
Number of students present on survey day	285.0	234.0	239.0	310	1,068.0
Number of students participating	276.0	232.0	236.0	307.0	1,051.0
Response rate as % of students present on survey day	96.8	99.1	98.7	99.0	98.4
Participation rate as % of students enrolled in class	87.1	87.5	84.9	79.3	84.3
<b>DHA 4, 5 &amp; 6</b>					
Total number of students based on census	1,632.0	1,809.0	1,900.0	1,965.0	7,306.0
Number of students enrolled in selected classes	175.0	173.0	274.0	257.0	879.0
Percentage of students absent/not available on survey day	6.9	13.9	19.0	11.3	13.3
Number of students present on survey day	163.0	149.0	222.0	228.0	762.0
Number of students participating	157.0	147.0	222.0	221.0	747.0
Response rate as % of students present on survey day	96.3	98.7	100.0	96.9	98.0
Participation rate as % of students enrolled in class	89.7	85.0	81.0	86.0	85.0
<b>DHA 7 &amp; 8</b>					
Total number of students based on census	1,722.0	1,860.0	1,958.0	2,069.0	7,609.0
Number of students enrolled in selected classes	184.0	128.0	226.0	261.0	799.0
Percentage of students absent/not available on survey day	16.8	22.7	17.7	26.4	21.2
Number of students present on survey day	153.0	99.0	186.0	192.0	630.0
Number of students participating	151.0	99.0	181.0	177.0	608.0
Response rate as % of students present on survey day	98.7	100.0	97.3	92.2	96.5
Participation rate as % of students enrolled in class	82.1	77.3	80.1	67.8	76.1
<b>Overall</b>					
Total number of students based on census	9,445.0	9,954.0	10,901.0	11,274.0	41,574.0
Number of students enrolled in selected classes	1,256.0	989.0	1,059.0	1,171.0	4,475.0
Percentage of students absent/not available on survey day	11.2	15.8	16.3	19.7	15.8
Number of students present on survey day	1,117.0	843.0	887.0	940.0	3,787.0
Number of students participating	888.0	683.0	795.0	823.0	3,189.0
Response rate as % of students present on survey day	87.7	88.7	90.3	86.1	88.1
Participation rate as % of students enrolled in class	70.7	69.1	75.1	70.3	71.3

**Appendix 2-2:** Any substance use, 1991 to 2012, among students in grades 7, 9, 10 & 12, as percentages

Any use of ...	1996		1998		2002		2007		2012	
	%	99% CI								
Alcohol	54.1	51.5 - 56.7	56.7	54.0 - 59.4	53.0	50.5 - 55.5	51.7	49.6 - 53.8	49.0	44.6 - 53.4
Cannabis	32.1	29.5 - 34.7	37.7	35.1 - 40.3	37.5	35.1 - 39.9	32.4	29.9 - 34.9	34.7	31.0 - 38.7
Cigarettes	34.8	32.0 - 37.6	36.1	33.3 - 38.9	23.6	21.2 - 26.0	16.2	14.1 - 18.3	13.2	11.2 - 15.6
Psilocybin or Mescaline	8.3	7.0 - 9.6	10.7	9.1 - 12.3	12.7	11.0 - 14.4	7.7	6.3 - 9.1	5.7	3.8 - 8.4
LSD	12.4	10.7 - 14.1	10.1	8.5 - 11.7	5.2	4.2 - 6.2	3.7	2.8 - 4.6	2.3	1.3 - 3.9
Inhalants	7.2	6.0 - 8.4	7.0	5.8 - 8.2	4.8	3.8 - 5.8	4.4	3.4 - 5.4	3.3	2.3 - 4.9
Non-medical tranquilizers	4.8	3.6 - 6.0	5.9	4.9 - 6.9	4.8	3.9 - 5.7	3.0	2.2 - 3.8	5.0	3.6 - 6.9
Non-medical amphetamines	n/a		n/a		9.5	8.1 - 10.9	3.6	2.7 - 4.5	7.0	5.6 - 8.8
Cocaine	3.5	2.6 - 4.4	4.7	3.7 - 5.7	3.9	3.0 - 4.8	4.3	3.2 - 5.4	4.1	3.1 - 5.5
MDMA	n/a		n/a		4.5	3.5 - 5.5	6.9	5.5 - 8.3	4.7	3.4 - 6.4

n/a data not available

**Appendix 2-3:** Any use of alcohol, tobacco and cannabis among students in grades 7, 9, 10 & 12, as percentages according to friends' use and school performance, 2012

		Alcohol %	Tobacco %	Cannabis %
Overall (n=3148)		49.0	13.2	34.7
Friends' use	none or a few	14.7	5.2	13.7
	almost half	49.0**	30.6**	61.0**
	most	77.2**	58.9**	77.9**
	all	91.9**	62.9**	94.6**
Grade point average	≥ 60%	51.5	12.1	35.9
	< 60%	72.1**	43.5**	63.6**
	do not know	25.5**	9.9	18.0**

\* p<0.01; \*\* p<0.001

**Appendix 2-4:** Number of alcohol-related problems resulting from respondents' own alcohol use, as percentages, 2012

	Among all students (n=3148) %	Among students who used alcohol (n=1499) %
No problem	71.5	44.1
1 problem	11.4	21.4
2 problems	7.4	14.9
3 problems	5.6	11.3
4 or more problems	4.1	8.4

**Appendix 2-5:** Number of drug-related problems (not alcohol or tobacco) resulting from respondents' own drug use, as percentages, 2012

	Among all students (n=3148) %	Among students who used drugs (n=1252) %
No problem	76.5	47.8
1 problem	11.2	22.5
2 problems	5.9	14.1
3 problems	3.1	7.6
4 or more problems	3.3	8.0

**Appendix 2-6:** Substance use among students in grades 7, 9, 10 & 12 as percentages, according to demographic characteristics, 2012

Any use of...	Alcohol	Cigarettes	Cannabis	LSD	MDMA	Psilocybin/ Mescaline		Stimulants	Tranq- uilizers	Pain relief pills	Inhalants	Cocaine or crack	Cough or cold meds	Energy drinks	Salvia divinorum	Metham- phetamine
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
<b>Overall</b> (n=3148)	49.0	13.3	34.7	2.3	4.7	5.7	7.0	5.0	11.7	3.3	4.1	5.0	64.3	2.3	2.1	
<b>Gender</b>																
Male	48.3	13.6	33.9	3.5	3.5	6.6	4.6	4.6	11.6	3.6	4.6	4.5	66.9	3.3	2.1	
Female	50.1	13.0	35.9	1.2*	5.7	4.8	9.5**	5.6	11.9	3.1	3.6	5.9	62.1	1.4*	2.0	
<b>Grade</b>																
7	10.7	2.9	7.0	-	-	1.4	1.6	1.1	4.0	4.6	1.8	3.6	46.6	-	-	
9	44.1**	12.2**	32.7**	2.4	3.9*	5.2*	6.4**	2.4	11.3*	3.1	4.0	4.8	67.4**	2.6*	1.6	
10	57.9**	16.1**	39.9**	1.2	5.8**	5.2**	8.1**	8.6**	13.9**	3.0	4.5	5.2	69.5**	2.3*	3.7*	
12	76.6**	20.0**	54.7**	4.4*	7.6**	10.1**	11.1**	7.1**	16.4**	2.8	5.8*	6.1	71.4**	3.6**	2.0	
<b>Shared Service Area</b>																
DHA 9	45.8	11.0	34.4	2.2	4.9	6.5	7.9	7.4	13.6	3.4	3.6	6.1	64.1	1.7	1.8	
DHA 1, 2 & 3	50.7	17.0	34.9	1.8	4.5	5.1	5.4	3.3*	9.5	3.1	4.2	4.8	62.7	2.3	1.6	
DHA 4, 5 & 6	52.7	12.4	33.4	3.7	4.2	6.2	7.2	3.8	11.0	4.3	4.1	3.8	64.7	2.7	4.3	
DHA 7&8	50.6	14.6	36.5	1.8	4.9	4.1	6.8	2.7*	10.8	2.4	5.3	3.5	66.4	3.4	1.3	

\* p&lt;0.01; \*\* p&lt;0.001

- suppressed due to small N



