PRINCE EDWARD ISLAND

STUDENT DRUG USE

2004-2011
Acknowledgements

Tremendous thanks go to Katarina Kujundzic, our Health Care Futures summer student, who was instrumental in the production of this report. Thanks also to Kathleen Brennan, Sterling Carruthers, Corinne Rowswell, Dr. David Sabapathy and Dr. Lamont Sweet for their thoughtful comments.

This report was built from an analysis of the data collected from the Youth Smoking Survey (YSS). The Youth Smoking Survey is a product of the pan-Canadian capacity building project funded through a contribution agreement between Health Canada and the Propel Centre for Population Health Impact from 2004 to 2007 and a contract between Health Canada and the Propel Centre for Population Health Impact from 2008-2011. The YSS consortium includes Canadian tobacco control researchers from all provinces and provided training opportunities for university students at all levels. The views expressed herein do not necessarily represent the views of Health Canada.

Epidemiology, Chief Public Health Office, Department of Health and Wellness
Connie Cheverie
Sherry Henry
Mary-Ann MacSwain
Dr. Carol McClure
Dr. Carolyn Sanford

September 2013

Printed by Document Publishing Centre, Charlottetown, PEI.

Available on the Prince Edward Island Department of Health and Wellness Website: www.gov.pe.ca/health
Executive Summary

The Prince Edward Island Student Drug Use Report describes the prevalence and trends of tobacco, alcohol, cannabis and other drug use among Prince Edward Island students in grades 6 through 12. Data and figures presented in this report are based on the 2004-05, 2006-07, 2008-09, and 2010-11 Youth Smoking Survey results. It is not meant to be a full discussion on potential reasons for changing rates or methods to reduce student substance use, but rather a starting point for these discussions.

General:

- The average age at which grade 12 students first used drugs (including alcohol, tobacco, cannabis, and other drugs) was 14.4 years old.
- Alcohol, cannabis, tobacco, and other drug use usually increased as grade level increased.
- Typically males reported more substance use compared to females.
- A positive correlation was observed between student drug use and poor emotional well-being. Students that reported using drugs demonstrated lower self-esteem on emotional well-being questions from the survey, compared to students that did not report using drugs.
- Academic achievement and drug use follow the same trend; students that reported using drugs indicated having lower marks in academic achievement questions from the survey, compared to students that did not report using drugs.

Alcohol:

- Alcohol was the most prevalent drug among the population of Island students surveyed (41.8% of students reported having more than a sip of alcohol in the last 12 months).
- Alcohol use has decreased significantly since 2008-09.
- An estimated 28% of grade 12 students reported mixing alcohol with energy drinks in the last 12 months.

Tobacco:

- Tobacco use (“smoker”) slightly decreased since 2008-09 (8% of students are smokers).
- Cigarillo use has significantly decreased since 2008-09.
- Smokeless tobacco use has decreased significantly since 2008-09.
- Students who are smokers were more likely to have used cannabis and alcohol.

Cannabis:

- Cannabis use has remained steady (18.8% of students reported using cannabis in the last 12 months).
- There is a trend towards students using most drugs at younger ages and this includes cannabis.
Other Drugs:

- In total 22.5% of students from grades 7-12 report using one drug (excludes tobacco and alcohol) in the last 12 months. Of those, 43.6% used more than one.
- Approximately 11.1% of students reported using any one drug (excluding cannabis, alcohol, and tobacco) in the last 12 months.
- Amphetamine use has increased significantly since 2008-09.
- Use of solvents is more likely in younger grades (7-9) than older (10-12).

### Student Drug Use Indicator Table - Use in the last 12 months

<table>
<thead>
<tr>
<th>Drug Type &amp; Substances</th>
<th>2010-11 %</th>
<th>2008-09 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>41.8 A</td>
<td>45.7 A</td>
</tr>
<tr>
<td>Tobacco (current smokers)</td>
<td>7.7</td>
<td>8.6</td>
</tr>
<tr>
<td>Cannabis</td>
<td>18.8</td>
<td>17.9</td>
</tr>
<tr>
<td>Drugs (not Cannabis)</td>
<td>11.1</td>
<td>10.7</td>
</tr>
<tr>
<td>Pain Relievers</td>
<td>4.6</td>
<td>4.8</td>
</tr>
<tr>
<td>Dextromethorphan (Cough/cold medicine)</td>
<td>3.3</td>
<td>-</td>
</tr>
<tr>
<td>Stimulants</td>
<td>3.0</td>
<td>4.3</td>
</tr>
<tr>
<td>Sleeping Medication</td>
<td>2.2</td>
<td>-</td>
</tr>
<tr>
<td>Sedatives/Tranquilizers</td>
<td>2.0</td>
<td>1.9</td>
</tr>
<tr>
<td>MDMA</td>
<td>4.3</td>
<td>3.5</td>
</tr>
<tr>
<td>Hallucinogens</td>
<td>3.8</td>
<td>4.3</td>
</tr>
<tr>
<td>Salvia</td>
<td>2.9</td>
<td>2.3</td>
</tr>
<tr>
<td>Amphetamines</td>
<td>2.7 B</td>
<td>1.4 B</td>
</tr>
<tr>
<td>Cocaine</td>
<td>2.6</td>
<td>2.0</td>
</tr>
<tr>
<td>Heroin</td>
<td>1.4</td>
<td>1.1</td>
</tr>
<tr>
<td>Solvents</td>
<td>2.9</td>
<td>2.3</td>
</tr>
</tbody>
</table>

- Not asked in the 2008-09 survey
- A Significant decrease in use 2010-11 compared with 2008-09
- B Significant increase in use 2010-11 compared with 2008-09
Table of Contents

Executive Summary.............................................................................................................................. i
Overview ................................................................................................................................................ 1
Methodology .......................................................................................................................................... 2
Alcohol Use ........................................................................................................................................... 3
Tobacco Use .......................................................................................................................................... 6
Cannabis Use ...................................................................................................................................... 16
Drug Use (excluding cannabis) ............................................................................................................. 18
  Prescription and Over-the-Counter Drug Use (Non-medicinal)..................................................... 20
    Pain Relievers ............................................................................................................................... 20
    Dextromethorphan ....................................................................................................................... 21
    Stimulants .................................................................................................................................... 22
    Sleeping Medication .................................................................................................................... 23
    Sedatives/Tranquilizers ............................................................................................................... 24
Illicit Drug Use ................................................................................................................................... 25
  MDMA ............................................................................................................................................. 25
  Hallucinogens ................................................................................................................................. 26
  Salvia ............................................................................................................................................. 27
  Amphetamines ............................................................................................................................... 28
  Cocaine .......................................................................................................................................... 29
  Heroin .......................................................................................................................................... 30
Miscellaneous Drug Use ..................................................................................................................... 31
  Solvents ....................................................................................................................................... 31
  “Less Commonly Used” Drugs...................................................................................................... 32
Trends in Drug Use ............................................................................................................................. 33
Discussion ........................................................................................................................................... 35
Consequences of Drug Use ................................................................................................................. 38
Future Reports .................................................................................................................................... 40
Appendix: National Comparison 2010-11 ...................................................................................... 41
References .......................................................................................................................................... 43
Overview

Adolescence is typically identified as a period of self-discovery, curiosity, and experimentation.\(^1\) Many students, in this stage of vulnerability, may turn to alcohol, tobacco, cannabis, and other drugs as a means of their exploration.\(^1\) Other students may begin using substances based on factors such as: socioeconomic status\(^2\), poor parental care\(^3\), poverty, lower education levels, and feelings of cultural/racial segregation.\(^4\) Although, initially, this substance use may seem harmless, it can quickly turn dangerous, and has the potential to spiral out of control. Early experience with alcohol, tobacco, cannabis, and other drugs is of great concern to public health, and continues to be a determinant in the development of substance abuse, addiction, disease, and dependence through adolescence and into adulthood.\(^5\) Student drug use can also trigger a variety of other negative consequences for the user and their family and friends. For example, convincing evidence suggests that substance use and abuse may increase the likelihood for involvement in fights and disagreements (both physical and verbal).\(^6\) Furthermore, student substance use is found to be a major factor in the onset of depressive and suicidal thoughts and actions.\(^6\) Other potential consequences for the future of substance using students may include: a higher likelihood of dropping out of school, a smaller probability of obtaining a higher education, lower career earnings, more marital/relationship issues, and a shorter lifespan than non-drug using students.\(^6\) Student drug use and abuse is also correlated with an increasing number of injuries, diseases, and other drug related issues, which cause a significant economic burden.\(^7\) The costs of treatments, diseases, chronic health problems, injuries, disabilities, crime enforcement, and addiction prevention methods associated with drug abuse all pose as sources of economic burden, as do indirect costs such as days lost at school/work for students and their parents.\(^7\)

This report describes the prevalence and trends of tobacco, alcohol, and other drug use among Prince Edward Island students in grades 6 through 12. Data and figures presented in this report are based on the 2004-05, 2006-07, 2008-09, and 2010-11 Youth Smoking Survey (YSS) results. This report attempts to present a comprehensive analysis of student drug use by:

- Reporting on students surveyed in a safe and non-judgmental atmosphere.
- Reporting on students at various developmental stages and stages of adolescence.
- Correlating drug use with emotional well-being, school marks, peer and family influence, and age of onset.
- Observing patterns comparatively with the past four survey years.

This report is not meant to be a full discussion on potential reasons for changing student substance use rates nor methods to reduce use, but rather a starting point for these discussions.
Overview and Methodology

Methodology

Survey Procedure

The 2004-11 PEI Student Drug Use Report provides an analysis and summary of the 2010-11 YSS data, in correspondence with the 2004-05, 2006-07, and 2008-09 surveys. The YSS, sponsored by Health Canada (http://www.yss.uwaterloo.ca), is a classroom-based survey that examines the tobacco, alcohol, cannabis, and other substance use behaviors of students. The survey outlines possible implications substance use may have on students’ health, well-being, and school performance. In 2010-11 YSS collaborated with the SHAPES-PEI project (healthy eating, physical activity, and mental fitness survey). Approximately one-third of participating grade 6-12 students in each classroom received a YSS, while the remaining two-thirds received a SHAPES-PEI survey. In PEI, a total of 54 of 61 target schools were surveyed. Overall, 2830 students from grade 6-12 completed the YSS in 2010-11. For each year, 3826 grade 6-12 students were surveyed in 2008-09, 4862 grade 5-12 students in 2006-07, and 2485 grade 5-9 students in 2004-05. All analysis of the data took into account probability weights, to adjust for the disproportionate cluster sample design. Manipulation and analysis of the data was performed using the statistical program STATA 12.

Presentation of the Results

All questions, and some definitions, outlined in this report are summarized from the YSS 2010-11 Data Codebook and 2010-11 YSS Results Profile, with the exception of a few definitions that were adapted from the World Health Organization Drug Lexicon and Mycek et al. Substances throughout the report were grouped in the following categories: alcohol use, tobacco use, cannabis use, prescription drug/over-the-counter drug (OTC) use, illicit drug use, and miscellaneous drug use. Any data in the figures or tables that represents 5 students or less was suppressed to maintain confidentiality. For some questions, earlier years were omitted due to dissimilar questions. Students in Grade 6 were not asked questions about alcohol, cannabis or other drug use. Students were asked about their substance use “ever” and “in the last 12 months” from date of survey, so results are presented using those words. In the graphs, the years are shown as the first year of the school year (eg: 2004-05 is shown as 2004).
Alcohol Use

<table>
<thead>
<tr>
<th></th>
<th>Drinking in 2010-11</th>
<th>Drinking in the Past</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Sample</strong></td>
<td>Overall, 41.8% of students from grade 7-12 reported having consumed alcohol (more than just a sip) in the last 12 months.</td>
<td>The overall rate of drinking has significantly decreased in this population. In 2008-09, 45.7% of students reported having consumed alcohol (more than just a sip) in the last 12 months.</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td>Drinking rates in 2010-11 are similar between males (41.8%) and females (41.7%).</td>
<td>In 2008-09, slightly more males (47.2%) reported drinking than females (44.3%).</td>
</tr>
<tr>
<td><strong>Grade/Age</strong></td>
<td>Drinking rates increase with increasing grade level:</td>
<td>In 2008-09, 8.7% of grade 7 students reported drinking in the last 12 months, and 80.4% of grade 12 students reported drinking in the last 12 months.</td>
</tr>
<tr>
<td></td>
<td>Grade 7: 6.0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grade 8: 17.3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grade 9: 30.8%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grade 10: 51.1%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grade 11: 62.7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grade 12: 72.0%</td>
<td></td>
</tr>
</tbody>
</table>

In 2010-11, the average age at which grade 12 students first consumed alcohol (more than just a sip) was 13.9 years old. This is similar to previous years (13.4 in 2006-07 and 13.8 in 2008-09, respectively). In 2010-11, the average age at which grade 12 students first consumed 5 drinks or more of alcohol on one occasion (binge drinking) was 14.8 years old. Although not significant, there is a slightly decreasing trend in the age at which students begin binge drinking. In 2006-07 the age was 15.1, and in 2008-09 the age was 15.0 years old.

**Question:** In the last 12 months, have you had a drink of alcohol that was more than just a sip?

**Definition:** “Drinking” is defined by having a drink of alcohol that was more than just a sip.
In 2010-11, as Island students got older, the tendency for them to mix alcohol with energy drinks increased. Over 5% of grade 7 students reported mixing alcohol with an energy drink in the last 12 months, while 28% of grade 12 students reported doing so.

Question: In the last 12 months, how often have you had a drink of alcohol that was more than just a sip?

Question: In the last 12 months, have you had alcohol mixed or pre-mixed with an energy drink such as Red Bull, Rock Star, Monster, or another brand?
In 2010-11, a significant positive correlation was observed between drinking (in the last 12 months) and having poor self esteem. Students with lower self esteem (i.e. those who responded “false” or “mostly false” to “I like the way I am”, “When I do something, I do it well”, and “I like the way I look”) were more likely to be drinkers than those with higher self esteem (i.e. those who responded “true” or “mostly true” to the above questions).

### Alcohol and Emotional Well-Being

<table>
<thead>
<tr>
<th>Emotional Well-Being*</th>
<th>Drinkers (last 12 months)</th>
<th>Non-Drinkers</th>
</tr>
</thead>
<tbody>
<tr>
<td>In general, I like the way I am.</td>
<td>77.3%</td>
<td>85.6%</td>
</tr>
<tr>
<td>When I do something, I do it well.</td>
<td>73.6%</td>
<td>80.7%</td>
</tr>
<tr>
<td>I like the way I look.</td>
<td>68.3%</td>
<td>78.4%</td>
</tr>
</tbody>
</table>

*If students answered “True” or “Mostly True”, they were considered to have high self-esteem.

In 2010-11, a significant positive correlation was observed between being a drinker and demonstrating poor academic achievement. Students with lower grades (i.e. those who reported that their marks were “Mostly B’s and C’s” and “Mostly below C’s”) were more likely to be drinkers than those with higher grades (i.e. those who reported that their marks were “Mostly A’s and B’s”).

### Alcohol and School Marks

<table>
<thead>
<tr>
<th>Marks in School</th>
<th>Drinkers (last 12 months)</th>
<th>Non-Drinkers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly A’s and B’s (70% and higher)</td>
<td>71.0%</td>
<td>88.8%</td>
</tr>
<tr>
<td>Mostly B’s and C’s (50%-69%)</td>
<td>26.0%</td>
<td>10.5%</td>
</tr>
<tr>
<td>Lower than C’s (lower than 50%)</td>
<td>3.0%</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

---

**Question:** Choose the answer that describes how you feel about the statements (True, Mostly True, Neutral, False, Mostly False): (a) “In general, I like the way I am” (b) “When I do something, I do it well” (c) “I like the way I look”

**Question:** Which of the following best describes your marks during the past year? (a) Mostly A’s and B’s > 70% (b) Mostly B’s and C’s/ 50% - 69% (c) Mostly below C’s < 50%
Tobacco Use

<table>
<thead>
<tr>
<th></th>
<th>Smoking in 2010-11</th>
<th>Smoking in the Past</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Sample</strong></td>
<td>Overall, 7.7% of students from grade 6-12 reported being smokers.</td>
<td>The overall smoking rate in this population has decreased slightly since 2006-07 (8.3%) and 2008-09 (8.6%).</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td>Smoking rates in 2010-11 are significantly higher in males (9.2%) than in females (6.2%)</td>
<td>Females start smoking earlier than males; however males have a higher rate of smokers by grade 12.</td>
</tr>
<tr>
<td><strong>Grade/Age</strong></td>
<td>The proportion of smokers increases with increasing grade level:</td>
<td>“Trying smoking” rates decreased consistently in all grade levels in 2010-11 compared to 2008-09.</td>
</tr>
<tr>
<td></td>
<td>Grade 6: 0.7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grade 7: 1.2%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grade 8: 2.0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grade 9: 6.9%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grade 10: 11.4%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grade 11: 12.6%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grade 12: 16.3%</td>
<td></td>
</tr>
</tbody>
</table>

The average age at which grade 12 students smoked their first whole cigarette was 14.5 years old. This number has not changed since the 2006-07 and 2008-09 surveys. Only 29% of students from grade 6-12 who have bought cigarettes at a store were asked for ID when buying cigarettes in the last 30 days. Females are significantly less likely to be asked for identification than their male counterparts and this is consistent across all grades/ages. A total of 65.6% of students from grade 6-12 who smoke have tried to quit at least once.

Student Smoking, PEI, 2004-2010

**Question:** Are you a smoker?

**Definition:** A current smoker is defined as someone who has smoked 100 cigarettes or more in their lifetime, and has smoked a minimum of one whole cigarette in the past 30 days.

Grade 6 data was suppressed for all four years due to small numbers.
In 2010-11, overall, 25.0% of students reported trying smoking (as little as a puff). This number has decreased significantly since 2008-09 (when it was 29.8%), and 2006-07 (when it was 30.7%). In 2010-11, the average age at which grade 12 students first tried cigarettes (even just a puff) was 14.4 years old, this is similar to previous years (2006-07 was 14.1, and 2008-09 was 14.5).

**Question:** Have you ever tried cigarette smoking, even just a puff?

**Definition:** The term “ever tried cigarettes” describes someone who has ever smoked a cigarette, as little as a puff.
A positive correlation was observed between smoking behavior and number of friends that smoke. Of Island students in 2010-11, 9.0% of smokers reported having no friends that smoke, while 75.4% of non-smokers reported having no friends that smoke. In contrast, 57.3% of smokers reported having 5 or more friends that smoke, while only 4.0% of non-smokers reported having 5 or more friends that smoke. The same trend is observed when comparing smokers to non-smokers with family members that smoke. In 2010-11, 67.5% of students who smoke had at least one parent/guardian who smoked compared to 41.4% of students who do not smoke. Additionally, 51.7% of students who smoke had at least one sibling who smoked compared to 16.2% of students who do not smoke.

Question: How many of your closest friends smoke?

Definition: Closest friends are defined as friends who you like to spend the most time with.
In 2010-11, Island students reported that the most common source of getting cigarettes is “getting them from a friend or someone else”, followed by “asking someone to buy them for me”. Forty-four percent of students acquire their cigarettes from a friend or acquaintance. In 2008-09, 27.4% of students reported that the most common source of getting cigarettes was also “getting them from a friend or someone else”, followed by “I buy them myself” (23.4%)

"Where Do You Usually Get Your Cigarettes?”, PEI, 2010

Of Island students in grade 6-9, 70% reported that they thought it would be easy to get cigarettes if they wanted to smoke. This number has somewhat increased since 2006-07 (60% thought it would be easy) and has significantly increased since 2004-05 (44% thought it would be easy). In 2010-11, 89% of students in grades 10-12 felt it would be easy to get cigarettes.
Over 50% of grade 12 students who tried smoking cigarettes reported that the first time they tried smoking was when they were drinking alcohol.

**Frequency of Drinking at Time of Trying Smoking, PEI, 2010**

**Question:** When you first tried smoking cigarettes, were you drinking alcohol at the same time?
In 2010-11, a significant positive correlation was observed between being a smoker and having poor self esteem. Students with lower self esteem (i.e. those who responded “false” or “mostly false” to “I like the way I am”, “When I do something, I do it well”, and “I like the way I look”) were less likely to be smokers than those with higher self esteem (i.e. those who responded “true” or “mostly true” to the above questions).

### Smoking and Emotional Well-Being

<table>
<thead>
<tr>
<th>Emotional Well-Being*</th>
<th>Smokers</th>
<th>Non-Smokers</th>
</tr>
</thead>
<tbody>
<tr>
<td>In general, I like the way I am.</td>
<td>68.4%</td>
<td>84.3%</td>
</tr>
<tr>
<td>When I do something, I do it well.</td>
<td>60.2%</td>
<td>80.3%</td>
</tr>
<tr>
<td>I like the way I look.</td>
<td>60.7%</td>
<td>76.5%</td>
</tr>
</tbody>
</table>

*Proportion answering “True” or “Mostly True”

In 2010-11, a significant positive correlation was observed between being a smoker and demonstrating poor academic achievement. Students with lower grades (i.e. those who reported that their marks were “Mostly B’s and C’s” and “Mostly below C’s”) were more likely to be smokers than those with higher grades (i.e. those who reported that their marks were “Mostly A’s and B’s”).

### Smoking and Academic Achievement

<table>
<thead>
<tr>
<th>School Marks</th>
<th>Smokers</th>
<th>Non-Smokers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly A’s and B’s (70% and higher)</td>
<td>50.0%</td>
<td>84.6%</td>
</tr>
<tr>
<td>Mostly B’s and C’s (50%-69%)</td>
<td>40.7%</td>
<td>14.5%</td>
</tr>
<tr>
<td>Lower than C’s (lower than 50%)</td>
<td>9.3%</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

**Question:** Which of the following best describes your marks during the past year?

(a) Mostly A’s and B’s/ ≥ 70%
(b) Mostly B’s and C’s/ 50% - 69%
(c) Mostly below C’s < 50%
In 2010-11, 3.3% of students from grade 6-12 reported using cigarillos in the last 30 days. This number has decreased significantly since 2008-09, when it was 5.8%. Significantly more males (4.9%) reported using cigarillos in the last 30 days than females (1.7%) in 2010-11.

**Cigarillo Use in the Last 30 Days, PEI, 2008-2010**

* Grade 7 and 8 data for 2010-11 was suppressed due to small numbers.

In 2010-11, 10.7% of students from grade 6-12 reported ever using cigarillos. This number has significantly decreased since 2008-09, when it was 15.8%. Significantly more males (12.8%) reported using cigarillos ever than females (8.4%) in 2010-11.

**Cigarillo Use Ever, PEI, 2008-2010**

* Grade 7 data for 2010-11 was suppressed due to small numbers.

**Question:** In the last 30 days, did you use cigarillos or little cigars (plain or flavoured)?

**Question:** Have you ever tried smoking cigarillos or little cigars (plain or flavoured)?
In 2010-11, 8.6% of students from grade 6-12 reported ever using roll-your-own cigarettes. This number has decreased only slightly since 2008-09, when it was 9.4%. Males (8.7%) and females (8.5%) demonstrated similar rates of using roll-your-own cigarettes.

**Question:** Have you ever tried smoking roll-your-own cigarettes?

* Grade 6 data for both years and grade 7 data for 2010-11 was suppressed due to small numbers.
In 2010-11, 7.5% of students from grade 6-12 reported ever using cigars. This number has decreased slightly since 2008-09, when it was 9.7%. More males (10.6%) reported using cigars than females (4.2%).

Cigar Use, Ever, PEI, 2008-2010

* Grade 6 and 7 data for 2010-11 data was suppressed due to small numbers.

**Question:** Have you ever tried smoking cigars (not including cigarillos or little cigars, plain or flavoured)?
In 2010-11, 4.2% of students from grade 6-12 reported ever using smokeless tobacco (chewing tobacco). This number has decreased significantly since 2008-09, when it was 5.8%. Significantly more males (7.1%) reported using smokeless tobacco than females (1.1%).

**Question:** Have you ever tried using smokeless tobacco (chewing tobacco, pinch, snuff, or snus)?

Grade 7 data for both years was suppressed due to small sample size.
Cannabis Use

In 2010-11, the average age at which grade 12 students first used/attempted cannabis was 14.7 years old. Students have started using/trying cannabis at slightly younger ages when compared to previous survey years; in 2008-09, the average age at which grade 12 students first used/attempted cannabis was 15.1 years old, and 15.0 in 2006-07. Of those using cannabis in the last 12 months, 42.3% are frequent users (more than 40 times).

**Question:** In the last 12 months, did you use marijuana or cannabis?

**Definition:** Cannabis (marijuana, weed, pot, hash, a joint...) is a drug that is made up of the plant Cannabis sativa, which contains the psychoactive “THC”. Cannabis often induces a state of euphoria, relaxation, drowsiness, and social isolation.

---

### Frequency of Cannabis Use in the Last 12 Months, PEI, 2010

![Graph showing frequency of cannabis use by grade in the last 12 months.](image)
In 2010-11, a significant positive correlation was observed between being a cannabis user and having poor self esteem. Students with lower self esteem (i.e. those who responded “false” or “mostly false” to “I like the way I am”, “When I do something, I do it well”, and “I like the way I look”) were less likely to be cannabis users than those with higher self esteem (i.e. those who responded “true” or “mostly true” to the above questions).

### Cannabis Use and Emotional Well-Being

<table>
<thead>
<tr>
<th>Emotional Well-Being</th>
<th>Cannabis User</th>
<th>Non-Cannabis User</th>
</tr>
</thead>
<tbody>
<tr>
<td>In general, I like the way I am.</td>
<td>72.8%</td>
<td>83.8%</td>
</tr>
<tr>
<td>When I do something, I do it well.</td>
<td>64.1%</td>
<td>81.0%</td>
</tr>
<tr>
<td>I like the way I look.</td>
<td>64.1%</td>
<td>76.3%</td>
</tr>
</tbody>
</table>

### Cannabis Use and Academic Achievement

<table>
<thead>
<tr>
<th>School Marks</th>
<th>Cannabis User</th>
<th>Non-Cannabis User</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly A’s and B’s (70% and higher)</td>
<td>58.3%</td>
<td>86.5%</td>
</tr>
<tr>
<td>Mostly B’s and C’s (50%-69%)</td>
<td>36.9%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Lower than C’s (lower than 50%)</td>
<td>4.8%</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

**Question**: 12 Choose the answer that describes how you feel about the statements (True, Mostly True, Neutral, False, Mostly False):

(a) “In general, I like the way I am”
(b) “When I do something, I do it well”
(c) “I like the way I look”

**Question**: 12 Which of the following best describes your marks during the past year?

(a) Mostly A’s and B’s > 70%
(b) Mostly B’s and C’s/ 50% - 69%
(c) Mostly below C’s < 50%
Drug Use (excluding cannabis)

Overall, in 2010-11, 11.1% of students reported using any drug other than alcohol, tobacco, or cannabis (see list below) in the last 12 months. This has not changed since 2008-09, when it was 10.7%.

The following section outlines Island student drug use (excluding cannabis), categorized as follows:

(a) Prescription and over-the-counter (OTC) drug use (Non-medicinal) \(^{14,15}\)
   1. Pain Relievers
   2. Dextromethorphan (Cough/cold medicine)
   3. Stimulants
   4. Sleeping Medicine
   5. Sedatives and Tranquilizers

(b) Illicit Drug Use \(^{14,15}\)
   1. MDMA
   2. Hallucinogens
   3. Salvia
   4. Amphetamines
   5. Cocaine
   6. Heroin

(c) Miscellaneous Drug Use \(^{14,15}\)
   1. Solvents
   2. Less Commonly Used Drugs (including DACS, Ketamines, GHB, and Jimson weed)

(d) Trends in Drug Use \(^{14,15}\)
## Drug Use (excluding cannabis) and Average Age of First Use

<table>
<thead>
<tr>
<th>Rank</th>
<th>Percent of use in last 12 months</th>
<th>Drug</th>
<th>Type</th>
<th>Average age of first use*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.6%</td>
<td>Pain relievers</td>
<td>Prescription/OTC</td>
<td>15.3</td>
</tr>
<tr>
<td>2</td>
<td>4.3%</td>
<td>MDMA</td>
<td>Illicit</td>
<td>15.3</td>
</tr>
<tr>
<td>3</td>
<td>3.8%</td>
<td>Hallucinogens</td>
<td>Illicit</td>
<td>15.2</td>
</tr>
<tr>
<td>4</td>
<td>3.3%</td>
<td>Dextromethorphan (Cough/cold medicine)</td>
<td>Prescription/OTC</td>
<td>13.4</td>
</tr>
<tr>
<td>5</td>
<td>3.0%</td>
<td>Stimulants</td>
<td>Prescription/OTC</td>
<td>14.6</td>
</tr>
<tr>
<td>6</td>
<td>2.9%</td>
<td>Solvents</td>
<td>Miscellaneous</td>
<td>13.1</td>
</tr>
<tr>
<td>7</td>
<td>2.9%</td>
<td>Salvia</td>
<td>Illicit</td>
<td>14.9</td>
</tr>
<tr>
<td>8</td>
<td>2.7%</td>
<td>Amphetamines</td>
<td>Illicit</td>
<td>15.1</td>
</tr>
<tr>
<td>9</td>
<td>2.6%</td>
<td>Cocaine</td>
<td>Illicit</td>
<td>14.8</td>
</tr>
<tr>
<td>10</td>
<td>2.2%</td>
<td>Sleeping Medicine</td>
<td>Prescription/OTC</td>
<td>14.0</td>
</tr>
<tr>
<td>11</td>
<td>2.0%</td>
<td>Sedatives/tranquilizers</td>
<td>Prescription/OTC</td>
<td>14.0</td>
</tr>
<tr>
<td>12</td>
<td>1.4%</td>
<td>Heroin</td>
<td>Illicit</td>
<td>13.6</td>
</tr>
</tbody>
</table>

*Grade 12 students’ response.
Prescription and Over-the-Counter Drug Use (Non-medicinal)

Pain Relievers
In 2010-11, 6.6% of students from grade 7-12 reported ever using pain relievers to get high. Males (6.8%) and females (6.5%) used pain relievers to get high at a similar rate. In 2010-11, the average age at which grade 12 students first used/shot pain relievers to get high was 15.3 years old. Students have started using/trying pain relievers to get high slightly earlier when compared to previous survey years; in 2008-09 the average age at which grade 12 students first used/shot pain relievers to get high was 15.6 years old.

Definition: Pain relievers such as Demerol, Percocet, Percodan, Oxycontin, or any other pain killer containing codeine are prescription drugs used to provide relief from pain (analgesic). Other effects of these pain-killers may include mood changes and drowsiness.

In 2010-11, 4.6% of students from grade 7-12 reported using pain relievers to get high in the last 12 months. This did not differ from 2008-09 when it was 4.8%.

Question: Have you ever used pain relievers to get high?

Question: Have you used pain relievers to get high in the last 12 months?
Dextromethorphan

In 2010-11, 3.3% of students from grade 7-12 reported using dextromethorphan in the last 12 months to get high. Females (3.5%) and males (3.2%) used dextromethorphan to get high at a similar rate. In 2010-11, the average age at which grade 12 students first used/tried dextromethorphan to get high was 13.4 years old.

**Question**: Have you used Dextromethorphan (cold or cough medicine) to get high in the last 12 months?

**Definition**: Dextromethorphan products (cold or cough medicine) such as Robitussin DM, Benylin DM (robos, dex, DXM...) are over-the-counter (and sometimes prescription) drugs used to provide relief from cold and cough symptoms. Abuse of these drugs may induce a state of euphoria, hallucinations, and changes in perception.
Stimulants
In 2010-11, 4.8% of students from grade 7-12 reported ever using stimulants to get high. Only slightly more males (5.0%) reported using stimulants to get high than females (4.5%). In 2010-11, the average age at which grade 12 students’ first used/ tried stimulants to get high was 14.6 years old. Students have started using/trying stimulants to get high at significantly younger ages when compared to previous survey years; in 2008-09 the average age at which grade 12 students’ first used/ tried stimulants was 15.5.

In 2010-11 overall, 3.0% of students from grade 7-12 reported using stimulants to get high in the last year. This number has decreased somewhat since 2008-09, when it was 4.3%.

**Question:** Have you ever used/ tried stimulants to get high?

**Definition:** Stimulants, in this case, are separated into two categories: stay awake pills/ diet pills (uppers, bennies…) and medication used to treat ADHD, such as Ritalin, Concerta, Adderall, Dextedrine (prescription or over-the-counter). Both are stimulants of the central nervous system, and induce concentration and alertness.

* Grade 7 data for 2006-07 was suppressed due to small numbers.

* Grade 8 data for 2010-11 was suppressed due to small numbers.
**Sleeping Medication**

In 2010-11, 2.2% of students from grade 7-12 reported using sleeping medication in the last 12 months to get high. No difference was observed between male and female sleeping medication use to get high. In 2010-11, the average age at which grade 12 students first used/tryed sleeping medication to get high was 14.0 years old.

**Sleeping Medication Use in the Last 12 Months, PEI, 2010**

![Chart showing sleeping medication use by grade.](chart)

- *Grade 7 data was suppressed due to small numbers.*

**Question:** Have you used sleeping medication to get high in the last 12 months?

**Definition:** Sleeping medication from a drugstore, such as Nytol, Unisom, etc. are over-the-counter (and sometimes prescription) drugs that are used to treat sleep disorders. Using these medications to get high induces a calm, drowsy, relaxed state of euphoria.
**Sedatives/Tranquilizers**

In 2010-11, 2.0% of students from grade 7-12 reported using sedatives/tranquilizers to get high in the last 12 months. This is has not changed since 2008-09 when it was 1.9%. Slightly more males (2.5%) reported using sedatives/tranquilizers to get high in the last 12 months than females (1.6%). In 2010-11, the average age at which grade 12 students first tried sedatives/tranquilizers to get high was 14.0 years old. Students have started using/trying sedatives and tranquilizers to get high at somewhat younger ages when compared to previous survey years; in 2008-09 the average age at which grade 12 students first used/tried sedatives or tranquilizers was 14.8.

*Grade 7 data for both years and grade 8 data for 2010-11 was suppressed due to small numbers.*
Illicit Drug Use

MDMA

In 2010-11, 6.5% of students from grade 7-12 reported ever using MDMA. This is significantly higher than in 2008-09 in which 4.8% reported ever using MDMA. Significantly more males (7.5%) reported using MDMA than females (5.3%). In 2010-11, the average age at which grade 12 students first tried MDMA was 15.3 years old. Students have started using/trying MDMA at slightly younger ages when compared to previous survey years; in both 2006-07 and 2008-09, the average age at which grade 12 students first used/ried MDMA was 15.7 years old.

In 2010-11, 4.3% of students from grade 7-12 reported using MDMA in the last year. This number has somewhat increased since 2008-09, when it was 3.5%.

**Question:** Have you ever used or tried MDMA?

**Definition:** MDMA (ecstasy, E, X, XTC, mandy, molly...) is a psychoactive drug with hallucinogenic and stimulant properties. This “rave drug” typically induces a state of euphoria, intimacy, and a decreased sense of anxiety.

**Question:** Have you used or tried MDMA in the last 12 months?
Hallucinogens

In 2010-11, 5.9% of students from grade 7-12 reported ever using hallucinogens. Significantly more males (8.3%) reported using hallucinogens than females (3.4%). In 2010-11, the average age at which grade 12 students first used/ tried hallucinogens was 15.2 years old. Students have started using/trying hallucinogens at slightly younger ages when compared to previous survey years; in both 2006-07 and 2008-09, the average age at which grade 12 students first used/ tried hallucinogens was 15.6.

In 2010-11, 3.8% of students from grade 7-12 reported using hallucinogens in the last year. This number has decreased slightly since 2008-09, when it was 4.3%.

Question: Have you ever used or tried hallucinogens?

Definition: Hallucinogens (LSD, PCP, acid, magic mushrooms, mescaline...) are a group of psychoactive drugs that induce changes in perception, thought, and emotion. Other effects include euphoria, illusions, and heightened awareness of self.

* Grade 7 data for 2006-07, 2008-09, and 2010-11 was suppressed due to small numbers.

Grade 7 data for both years was suppressed due to small numbers.
Salvia

In 2010-11, 2.9% of students from grade 7-12 reported using salvia in the last 12 months to get high. This has not changed since 2008-08, when it was 2.3%. Significantly more males (4.2%) reported using salvia to get high in the last 12 months than females (1.5%). In 2010-11, the average age at which grade 12 students first used/tried salvia to get high was 14.9 years old. Students have started using/trying salvia to get high at somewhat younger ages when compared to previous survey years; in 2008-09 the average age at which grade 12 students first used/tried salvia to get high was 15.6.

**Salvia Use in the Last 12 Months, PEI, 2008-2010**

- **Question:** Have you used salvia to get high in the last 12 months?

- **Definition:** Salvia (Divine Sage, Magic Mint, Sally D...) is a drug that is made up of the plant *Salvia divinorum*, which contains psychoactive properties. This drug typically induces heightened self awareness, visual distortions, and hallucinations.

* Grade 7 data for both years and grade 8 data for 2010-11 was suppressed due to small numbers.
**Amphetamines**

In 2010-11, 4.0% of students from grade 7-12 reported ever using amphetamines. Significantly more males (5.3%) reported using amphetamines than females (2.7%). In 2010-11, the average age at which grade 12 students first used/tried amphetamines was 15.1 years old. Students have started using/trying amphetamines at slightly younger ages when compared to previous survey years; in 2008-09, the average age at which grade 12 students first used/tried amphetamines was 15.4 years old, and 15.5 in 2006-07.

* Grade 7 data for all 4 years and grade 9 data for 2004-05 was suppressed due to small numbers.

In 2010-11, 2.7% of students from grade 7-12 reported using amphetamines in the last year. This number has significantly increased since 2008-09, when it was 1.4%.

* Grade 7 data for both years, grade 8 data for 2010-11, and grade 9 data for 2008-09 was data suppressed due to small numbers.

**Question:** Have you ever used or tried amphetamines?

**Definition:** Amphetamines (speed, crystal meth, ice, meth...) comprise a group of stimulant drugs. These drugs typically induce heightened focus and alertness, and decrease appetite and feelings of fatigue.
Cocaine

In 2010-11, overall, 4.1% of students from grade 7-12 reported ever using cocaine. Slightly more males (5.2%) reported using cocaine than females (3.0%). In 2010-11, the average age at which grade 12 students first used/ried cocaine was 14.8 years old. Students have started using/trying cocaine at younger ages when compared to previous survey years, significantly younger than 2006-07 (15.7 years) and slightly younger than 2008-09 (15.0 years).

Cocaine Use, Ever, PEI, 2004-2010

In 2010-11, overall, 2.6% of students from grade 7-12 reported using cocaine in the last year. The rate in 2008-09 was slightly lower at 2.0%.

Cocaine Use in the Last 12 Months, PEI, 2008-2010

*Grade 7 data for 2004-05, 2008-09, and 2010-11 and grade 9 data for 2004-05 was suppressed due to small numbers.

Question: Have you ever used or tried cocaine?

Definition: Cocaine (crack, blow, snow...) is a drug derived from the leaves of a coca plant. This local anesthetic/stimulant drug induces a sense of euphoria and wakefulness. Cocaine is most commonly consumed via nasal insufflations, but can also be taken orally or smoked.

Question: Have you used or tried cocaine in the last 12 months?

Grade 7 data for both years was suppressed due to small numbers.
Heroin

In 2010-11, overall, 2.4% of students from grade 7-12 reported ever using heroin. Significantly more males (3.7%) reported using heroin than females (1.1%). In 2010-11, the average age at which grade 12 students first used/trying heroin was 13.6 years old. Students have started using/trying heroin at older ages when compared to previous survey years; in 2006-07 the average age at which grade 12 students first used/trying heroin was slightly lower at 12.5, and in 2008-09 it was 12.8 years old.

**Question:** Have you ever used or tried heroin?

**Definition:** Heroin (smack, junk, crank...) is a type of opioid drug that induces mood changes, drowsiness and relief of pain. This drug is most commonly administered as an injectable, however it can also be taken orally or smoked.

In 2010-11, overall, 1.4% of students from grade 7-12 reported using heroin in the last year. The rate in 2008-09 was slightly lower at 1.1%.

**Question:** Have you used or tried heroin in the last 12 months?

* Grade 7 data for 2004-05, 2006-07, and 2010-11 and grade 9 data for 2004-05 was suppressed due to small numbers.

* Grade 7 data for both years and grade 11 data for 2010-11 was suppressed due to small numbers.
Miscellaneous Drug Use

Solvents

In 2010-11, overall, 5.2% of students from grade 7-12 reported ever using solvents to get high. Significantly more males (6.3%) reported using solvents to get high than females (4.0%). In 2010-11, the average age at which grade 12 students first used/failed solvents to get high was 13.1 years old. Students have started using/trying solvents to get high at somewhat younger ages when compared to previous survey years; in 2008-09 the average age at which grade 12 students first used/failed solvents to get high was 14.2.

In 2010-11, overall, 2.9% of students from grade 7-12 reported using solvents (glue, gasoline, etc.) in the last 12 months to get high. This has not changed since 2008-09, when it was 2.3%.

**Question:** Have you used solvents to get high in the last 12 months?

**Definition:** Solvents such as glue, gasoline, cleaning products, etc. are chemical substances that are typically sniffed or inhaled to achieve a high. Effects of solvent use include euphoria, dizziness, visual distortions, and hallucinations.
“Less Commonly Used” Drugs

These drugs were asked about in the YSS, but were used less commonly used by students. They have been grouped together for completeness of the survey and to maintain confidentiality of the students. In 2010-11, overall, 2.4% of students reported using one or more of these “other drugs”.

Definitions:

DACS: (links...) a narcotic cold medicine that contains codeine and pseudoephedrine. DACS typically induce drowsiness and mood changes.

Ketamines: (Special K, kit-kat...) an anesthetic drug that induces sedation, calmness, and amnesia.

GHB: (G, liquid X, goop...) a nervous system depressant that induces intoxication, relaxation, and hallucinations.

Jimson weed: (locoweed, stinkweed, mad apple), from the plant *Datura stramonium*, induces euphoria, visions, and alteration of perception.
Trends in Drug Use

In 2010-11, 21.6% of students reported using at least one of the following 17 drugs in the last 12 months: cannabis, amphetamines, MDMA, hallucinogens, heroin, cocaine, sedatives/tranquilizers (for non-medicinal purposes), stimulants (for non-medicinal purposes), pain relievers (for non-medicinal purposes), solvents, salvia, sleeping medication (for non-medicinal purposes), and cough/cold medicine (for non-medicinal purposes). The remaining 78.4% of students reported no use of the drugs listed above in the last 12 months. Of the students that reported using at least one drug in the last 12 months, 59.5% used only 1, 12.2% used 2, 9.3% used 3, and 3.9% used 4 drugs.

Cannabis use, alcohol use and both cannabis and alcohol use are more common among smokers than non-smokers. This trend is consistent over time.

Cannabis and Alcohol Use by Smoking, PEI 2010-11

<table>
<thead>
<tr>
<th></th>
<th>Cannabis (%)</th>
<th>Alcohol (%)</th>
<th>Cannabis &amp; Alcohol (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoker</td>
<td>79.4</td>
<td>89.1</td>
<td>73.0</td>
</tr>
<tr>
<td>Non-Smoker</td>
<td>13.1</td>
<td>37.3</td>
<td>11.7</td>
</tr>
</tbody>
</table>
Drug Use and Emotional Well-Being

Students that reported using any drug in the last 12 months were asked questions about their emotional well-being and marks in school. In 2010-11, a significant positive correlation was observed between being a drug user and having poor self esteem. Students with lower self esteem (i.e. those who responded “false” or “mostly false” to “I like the way I am”, “When I do something, I do it well”, and “I like the way I look”) were less likely to be drug users than those with higher self esteem (i.e. those who responded “true” or “mostly true” to the above questions).

<table>
<thead>
<tr>
<th>Emotional Well-Being</th>
<th>Drug Users</th>
<th>Non-Drug Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>In general, I like the way I am.</td>
<td>68.9%</td>
<td>84.6%</td>
</tr>
<tr>
<td>When I do something, I do it well.</td>
<td>63.0%</td>
<td>80.5%</td>
</tr>
<tr>
<td>I like the way I look.</td>
<td>61.1%</td>
<td>76.9%</td>
</tr>
</tbody>
</table>

In 2010-11, a significant positive correlation was observed between being a drug user and demonstrating poor academic achievement. Students with lower grades (i.e. those who reported that their marks were “Mostly B’s and C’s” and “Mostly below C’s”) were more likely to be drug users than those with higher grades (i.e. those who reported that their marks were “Mostly A’s and B’s”).

<table>
<thead>
<tr>
<th>School Marks</th>
<th>Drug Users</th>
<th>Non-Drug Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly A’s and B’s (70% and higher)</td>
<td>61.4%</td>
<td>84.1%</td>
</tr>
<tr>
<td>Mostly B’s and C’s (50%-69%)</td>
<td>32.5%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Mostly below C’s (&lt;50%)</td>
<td>6.1%</td>
<td>1.0%</td>
</tr>
</tbody>
</table>
Discussion

The Youth Smoking Survey is administered in the classroom. Students are self-reporting on behaviors by answering specific questions. These answers are used for the analysis. Self-reported answers are known for under- and over-reporting depending on the circumstance. Therefore that needs to be kept in mind when interpreting the report.

Alcohol:
In 2010-11, it was found that the prevalence of alcohol use in Island students (42%) has decreased since the previous survey year (2008-09 was 46%). This trend was observed consistently at every grade level, with the exception of grade 8 (which increased by 3.2%). No discrepancy in alcohol use was observed between sexes. In 2010-11, the average age at which grade 12 students first consumed alcohol (more than just a sip) was 13.9 years old. Similarly, the average age at which grade 12 students first participated in binge drinking was 14.8 years old. These ages have not changed significantly when compared to previous survey years.

The mixture of energy drinks and alcohol results in dangerous beverages that induce high levels of intoxication. In 2010-11, a total of 17.1% of students reported having alcohol mixed or pre-mixed with energy drinks in the last year. The likelihood for students to mix alcohol with energy drinks increased with increasing age; about 28% of grade 12 students reported mixing alcohol with energy drinks in the last 12 months, compared to over 5% of grade 7 students.

It was found that there is a positive correlation between drinking in the last 12 months and having poor self esteem. A 10% difference was observed between the way drinkers and non-drinkers responded to the statement “I like the way I look”. Only about 70% of drinkers reported that they “like the way they look”, compared to almost 80% of non-drinkers. Other emotional well-being questions, such as “In general, I like the way I am” and “When I do something, I do it well” demonstrated similar trends. Similarly, a positive correlation was observed between reporting drinking in the last 12 months and poor academic achievement. Almost 20% more non-drinkers reported achieving A’s and B’s than drinkers. In contrast, drinkers were three times more likely to receive marks lower than C’s compared to non-drinkers.

Tobacco:
In 2010-11, 8% of students reported being smokers. Even more students tried smoking, as a quarter of students (25%) reported ever trying a cigarette, even just a puff. In 2010/2011, “trying smoking” rates decreased consistently in all grade levels compared to 2008-09. Smoking rates demonstrated the same trend, with the exception of grade 10 students that experienced a slight increase. The average age at which grade 12 students first tried cigarettes in 2010-11 was 14.4 years old, while the average age at which grade 12 students first smoked their whole cigarette was 14.5 years old. These ages have not changed significantly when compared to previous survey years.

It was found that the most common method of acquiring cigarettes for students was “getting them from a friend or someone else” (30%), followed by “asking someone to buy them for me” (21%). In 2010-11, 13% of students reported that they usually obtained cigarettes by buying them themselves. This number has decreased since 2008-09, when it was 23%. Of students that reported buying cigarettes from a store
Discussion

themselves, in 2010-11, only 30% were asked for identification. This may be why, in 2010-11, 70% of Island students from grades 6-9 and 90% of students from grades 10-12 felt it would be easy to get cigarettes if they wanted to smoke. These numbers have increased since 2006-07 (60% of grade 6-9 students felt it would be easy to acquire cigarettes) and 2004-05 (44% felt it would be easy).

Student smoking was found to be associated with smoking behaviors of family members and friends. In 2010-11, 57% of smokers reported having 5 or more friends that smoked, compared to only 4% of non-smokers. Similarly, 68% of smokers reported having at least one parent or guardian that smoked, compared to 41% of non-smokers.

Tobacco use, other than standard cigarettes, was also observed. Students were asked about their cigarillo, cigar, roll-you-own cigarette, and smokeless tobacco use. It was found that the most prevalent tobacco product used by Island students was cigarillos (11% of students have ever used this), followed by roll-your-own cigarettes (9%), cigars (8%), and smokeless tobacco (4%). Rates of use of all these tobacco products has decreased considerably compared to 2008-09. All tobacco products (including cigarettes, cigarillos, roll-your-own cigarettes, cigars, and smokeless tobacco) were observed at higher rates in males than females.

Cannabis:
In 2010-11, 19% of students from grades 6-12 reported using cannabis in the last 12 months. The cannabis use rate has remained steady since the 2006-07 survey, and a higher proportion of male users (21%) was observed compared to female users (16%). Like alcohol and tobacco, cannabis use rates increase with increasing grade level; in 2010-11 2% of grade 7 students reported smoking cannabis in the last 12 months, compared to 36% of grade 12 students. The average age at which grade 12 students first used cannabis was 14.7 years old, this has decreased slightly compared to previous years (2008-09 was 15.1 years old and 2006-07 was 15.0). Of those using cannabis in the last 12 months, 42.3% are frequent users (more than 40 times used). A similar trend was observed for emotional well-being and academic achievement questions as alcohol and tobacco. Cannabis users were more likely to demonstrate lower self-esteem on emotional well-being questions than non-cannabis users. Similarly, cannabis users were found to be more likely to indicate having lower marks on academic achievement questions than non-cannabis users.

Other Drugs (excluding cannabis):
Other drug use was classified into the following categories: prescription/OTC use, illicit drug use, and miscellaneous drug use. No category was more prevalent than the others. It was found that the most prevalent “other drugs” were pain relievers (4.6% of students used them in the last 12 months), followed by MDMA (4.3%), hallucinogens (3.8%), dextromethorphan (3.3%), stimulants (3.0%), solvents and salvia (2.9% each), amphetamines (2.7%), cocaine (2.6%), sleeping medication (2.2%), sedatives and tranquilizers (2.0%), and heroin (1.4%). The average age at which grade 12 students first tried these drugs was 14.4 years old, with solvents being the youngest (13.1 years old), and pain relievers/MDMA being the oldest (15.3 years old). Males generally demonstrated higher rates of “other drug” use than females, with the exception of dextromethorphan use.
**Emotional Well-Being and Academic Achievement:**
All of the substances presented throughout this report demonstrated similar trends with respect to emotional well-being and academic achievement. Generally, drinkers, smokers, cannabis users, and other drug users were more likely to demonstrate lower self-esteem and lower academic achievement scores on the survey compared to non-substance users. According to the differences within the rates of substance users and non-substance users for each category, smokers vs. non-smokers demonstrated the highest differences in emotional well-being. This was followed by “other drug” users, cannabis users, and concluded with drinkers. A similar trend was observed with academic achievement: smokers vs. non-smokers demonstrated the largest difference, followed by cannabis users, “other drug” users, and concluded with drinkers.

**Sex:**
Generally, for most of the substances on the survey, males demonstrated a higher prevalence of use than females.
Consequences of Drug Use

Drug use and abuse can be associated with a host of negative consequences. These consequences are typically the result of various impairments related to drug use. Other than chronic conditions (such as overdose, addiction, dependence, and disease), using alcohol, tobacco, cannabis, or other drugs may affect or influence the following:

- **Schoolwork**\(^\text{16}\): Drug and substance use by students is heavily correlated with poor behavior at school and overall poor scholarly performance. Many drugs can have negative consequences on attendance, memory and attention, and may cause the user to experience distraction, disconnect from the classroom, a loss of interest in learning and a reduction in desire to do well in school. Convincing evidence demonstrates that there is a link between lower grade point average (GPA) and drug use. Students that use drugs are more likely to have a lower GPA than those who do not use drugs.

- **Trouble with the law and police**\(^\text{17}\): Drug and substance use by students is often associated with trouble with the law and/or police. For most of the students surveyed, even legal drugs (alcohol and tobacco) are considered illicit because the age of legal consumption on Prince Edward Island is 19 years old. Furthermore, the use, possession, or trafficking of illicit drugs is considered a serious criminal offence that is punishable by law. Beyond illegal possession, use, or trafficking of drugs, students can get in trouble with the law and police when under the influence of drugs. Drugs often alter the user’s judgment and perception, and therefore can trigger irrational or impulsive decisions and actions that may be illegal.

- **Disagreement or tension with family and friends**\(^\text{18}\): Drug and substance use by students can have negative implications on relationships with family and friends. Disagreements or tension can stem from impulsive/irrational decisions made by the user, issues with money for funding the drug habit, disinterest of the user in maintaining friendships/other relationships, lying about drug use, forgoing commitment/promises, forgetting, being irritable/easily offended, etc.

- **Driving while intoxicated**\(^\text{19}\): Driving while under the influence of drugs or substances poses a serious risk for the user/driver, passengers, pedestrians, and other people on the road. Drug and substance use can affect balance, coordination, and reaction time; all factors which are crucial when operating a motor vehicle. Potential consequences could include: driving off the road, collision with a pedestrian, another car, and/or an object (building, tree, road sign, etc.).

- **Harm (to self, others, or property)**\(^\text{6}\): Student drug and substance users are at an increased risk of inflicting harm (mental, emotional, or physical) on themselves, on others, or on property. Substance and drug use can cause irrational, impulsive decisions, mood swings, depression, alteration in perception, hallucinations, and heightened self-awareness; all factors that could be the precursors to inflicting harm on oneself, someone else or something.
• Unplanned sex and contracting an STI\textsuperscript{20,21}: Student drug and substance users are at an increased risk of participating in unplanned sex, and consequently contracting a sexually transmitted infection. Substance and drug use can cause users to make irrational decisions about sexual partners, condom use, and frequency of sexual activity.
Future Reports
The intent of this report is to be used as a basis for public health surveillance and to aid in program planning for education and school boards. Existing programs should be reviewed and gaps identified as appropriate.

The YSS has been changed for the next student survey year (2014-15). Additional questions have been added that will allow for a more detailed analysis of alcohol, tobacco, cannabis and other drug use.

Data from the 2012-13 school year will be available in the summer of 2014 for PEI and will be used to update this report to allow for a continuous look at student drug use trends over time.
Appendix: National Comparison 2010-11

Using the YSS reports produced by the Propel Centre\textsuperscript{22}, we compared the PEI results to those nationally (Canada). Below is a table comparing drug use. In some instances the PEI results may differ from the previous report. This difference can be due to different techniques for analysis and slightly different data sets.

<table>
<thead>
<tr>
<th>Question</th>
<th>Prince Edward Island \textsuperscript{13}</th>
<th>Canada \textsuperscript{22}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you a current smoker?</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Have you ever tried a cigarette (even just a puff)?</td>
<td>25%</td>
<td>26%</td>
</tr>
<tr>
<td>Have you ever smoked a whole cigarette?</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>Susceptibility to start smoking</td>
<td>25%</td>
<td>30%</td>
</tr>
<tr>
<td>Do you think it would be easy to get cigarettes if you wanted to smoke?</td>
<td>42%</td>
<td>42%</td>
</tr>
<tr>
<td>How old were you when you first tried smoking cigarettes?</td>
<td>14 years old</td>
<td>14 years old</td>
</tr>
<tr>
<td>Have you had a drink of alcohol that was more than just a sip in the last 12 months?</td>
<td>41%</td>
<td>45%</td>
</tr>
<tr>
<td>How old were you when you first had a drink of alcohol that was more than just a sip?</td>
<td>14 years old</td>
<td>14 years old</td>
</tr>
<tr>
<td>If you have had more than a sip, have you had 5 or more drinks of alcohol on one occasion (binge drank) in the last 12 months?</td>
<td>77%</td>
<td>72%</td>
</tr>
<tr>
<td>How old were you when you first had 5 or more drinks of alcohol on one occasion?</td>
<td>15 years old</td>
<td>15 years old</td>
</tr>
<tr>
<td>Have you used/tried marijuana in the last 12 months?</td>
<td>19%</td>
<td>21%</td>
</tr>
<tr>
<td>How old were you when you first used or tried marijuana?</td>
<td>15 years old</td>
<td>15 years old</td>
</tr>
<tr>
<td>Have you used illicit drugs to get high in the last 12 months (excluding marijuana)?</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Have you used prescription and over-the-counter drugs to get high in the last 12 months?</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>If you are a smoker, have you had a drink of alcohol in the last 12 months?</td>
<td>91%</td>
<td>90%</td>
</tr>
<tr>
<td>If you are a non-smoker, have you had a drink of alcohol in the last 12 months?</td>
<td>35%</td>
<td>56%</td>
</tr>
<tr>
<td>When you first tried cigarettes, were you drinking alcohol at the same time?</td>
<td>44%</td>
<td>34%</td>
</tr>
</tbody>
</table>
References


