



2018 PEI Cannabis Survey Report

Knowledge, Attitudes and Behaviours before Legalization

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EXECUTIVE SUMMARY

On October 17, 2018, the Government of Canada legalized cannabis for non-medical purposes. Non-medical purposes include recreational, social, spiritual, lifestyle, and other non-medical uses.

The PEI Cannabis Survey was developed by PEI's Chief Public Health Office in response to the need to supplement health and safety data collected through national surveys. The survey contains questions on cannabis use behaviours, attitudes towards cannabis, and knowledge of lower-risk cannabis use. This report describes non-medical cannabis use among Islanders aged 16 years and older who completed the first PEI Cannabis Survey in August to September 2018, *preceding* the legalization of cannabis for non-medical purposes. Results of the survey will help inform public health and safety programs, and policies.

Who completed the survey?

More than 4,300 Islanders completed the survey. Two-thirds were female. The demographics of respondents included a range of ages, regions, income levels, marital and employment statuses, educational levels, and ratings of general and mental health.

Cannabis use in PEI

In this report, 'non-use' is defined as no cannabis use at all or using cannabis only once in a lifetime. 'Current use' refers to cannabis use occurring in the past 12 months. 'Former use' means cannabis use that did not occur in the past 12 months. Unless identified otherwise, in this report, cannabis refers to cannabis used for non-medical purposes.

How many Islanders are using cannabis?

About half of respondents used cannabis more than once in their lifetime, with an average age of first use being 19 years.

Among all respondents, 27% used currently, and 75% of the current users had used in the previous month.

Who uses cannabis?

While cannabis use was reported among all demographic groups, some characteristics were more likely to be associated with current cannabis use than others.

- Younger people were more likely to be currently using cannabis compared to older people.
- People who started using cannabis before age 15 were more likely to be current users.
- Males were more likely than females to currently or formerly use cannabis.
- Those who had never been married were more likely to be using cannabis currently.
- Students were more likely than non-students to be current users of non-medical cannabis.
- People who were unemployed were more likely to currently use non-medical cannabis.
- Current cannabis use was higher among individuals with lower education.
- Cannabis use was highest among those with lower household incomes.
- The highest proportion of people who currently use cannabis was among Queens County residents.
- Individuals who currently use cannabis were significantly more likely to have poorer self-rated mental health compared to non-users of cannabis.

Findings regarding the relationship between cannabis use and marital status, employment status, general health status, household income, and level of education still held after adjusting for participants' age.

How are Islanders using cannabis, and what products are they consuming?

Smoking is the most common method of consumption, followed by eating, vaporizing, dabbing and then drinking.

Dried flower/leaf is the product most commonly used, followed by edibles, higher THC products (hashish/keif and solid and liquid concentrates), and then cannabis oils.

How often are Islanders using cannabis?

Among people who used cannabis in the previous month, 26% used it daily, half used it more than two days per week and, on the days they used cannabis, more than half reported using more than once per day.

The median amount of money spent to purchase cannabis over the past 30 days was \$50.

Where are Islanders getting their cannabis now, and will that change after legalization?

Among current users, cannabis was most commonly obtained from family and friends, followed by online, sharing among friends, and from an acquaintance.

70% of people who currently use cannabis said legalization may change how they obtain cannabis.

Will legalization affect people's cannabis use?

41% of former users and 23% of non-users may try cannabis following legalization.

35% of current users may increase their consumption after legalization, and three-quarters may use different types of cannabis products after legalization.

Risky situations

Are people going to work or school when they are high?

Among employed people who currently use, 7% sometimes or often used cannabis before or during a work day, with a similar number indicating that they do so rarely.

Among students who currently use, 17% reported that they sometimes, often, or always used cannabis to get “stoned” or “high” before or while at school, with another 20% indicating that they do so rarely.

Are people using cannabis and driving, or riding with drivers who have used cannabis?

Nearly one-third of current cannabis users had driven a motor vehicle within six hours after using cannabis in the past 12 months.

14% of survey respondents had been passengers in vehicles with drivers who had used cannabis up to six hours before driving in the past year.

Current cannabis users were more likely to have been passengers of drivers who had used cannabis.

Are women using cannabis while pregnant or breastfeeding?

4% of women who have used cannabis and given birth reported consuming cannabis during pregnancy and/or breastfeeding.

Are Islanders using other substances at the same time as cannabis?

Almost half of people who currently use cannabis sometimes, often, or always consumed cannabis in combination with alcohol, while 31% consumed in combination with tobacco or e-cigarettes.

Alcohol and tobacco were the most common substances used in combination with cannabis.

Are people who use cannabis experiencing negative effects from their use?

Between 4% and 33% of current users had at least one positive indicator of dependency in the past 12 months; the most common indicator of dependency was having an urge to use cannabis.

Between 1% and 7% of people who use cannabis currently reported a negative effect on different aspects of their lives in the past 12 months, most often on finances.

Among those who used cannabis before or during their work day, 1.5% had been absent from work one to three days per month because of their cannabis use.

Of people who used cannabis before or during their school day, 4.5% reported that they missed one to three days of school per month because of their cannabis use.

Islanders' attitudes toward cannabis

How risky do people think using cannabis is?

Occasional use of non-medical cannabis was seen to carry a lower risk than regular use.

Current users tended to perceive a lower risk associated with consuming cannabis compared with non-users and former users.

Over 80% of respondents believed that cannabis use could become habit-forming. People who currently use cannabis were less likely to believe this than former users and non-users.

Do Islanders believe cannabis use impairs driving ability?

Three-quarters of respondents believed that cannabis use impairs one's ability to drive a vehicle.

People who currently use cannabis were less likely than former users and non-users to believe it impairs ability to drive.

How do Islanders feel about the social acceptability of cannabis?

Occasional cannabis use was perceived to be less socially acceptable than occasional alcohol use, but slightly more acceptable than occasional tobacco use.

Those who currently use cannabis were most likely to perceive cannabis consumption as socially acceptable, and non-users least likely to think cannabis use was socially acceptable.

The majority of survey participants were bothered by cannabis use in front of children, over half were bothered by cannabis use in public, while just over a third were bothered by having a store that sells cannabis for non-medical purposes in their neighborhood. Generally, current users tended to be the least bothered, non-users the most, and former users fell in-between.

Do Islanders feel able to refuse cannabis if offered?

Over 10% of current users responded that they may have difficulty refusing cannabis when offered.

Knowledge of lower risk cannabis use

What do Islanders know about lower-risk cannabis use?

In general, knowledge about lower-risk cannabis use and related health risks was low.

Most people were aware that people less than 19 years should not use cannabis, and that cannabis is unsafe in pregnancy.

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Less than 60% of individuals responded correctly to the following statements derived from Canada's Lower-Risk Cannabis Use Guidelines:

- Cannabis has short-term and long-term health risks
- Cannabis with higher THC than CBD is unsafe
- Cannabis edibles should not be eaten on an empty stomach
- Delaying cannabis use until later in life is safer
- Cannabis is unsafe for people with a family history of psychosis
- Smoking cannabis is not safer than vaping or eating it
- Cannabis use with alcohol is unsafe
- Synthetic cannabinoids increase health risks

Cannabis for medical purposes

What about cannabis use for medical purposes in PEI?

Over their lifetime, approximately 13% of respondents reported using cannabis for medical purposes.

- 86% had also consumed cannabis for non-medical purposes more than once.
- Just over half had driven within six hours of using cannabis for medical purposes.
- About half of respondents believed that medical cannabis impairs one's ability to drive.

Conclusions

The first PEI Cannabis Survey provides important information on non-medical cannabis use behaviours, attitudes towards cannabis, and knowledge of lower-risk cannabis use before legalization.

Key findings include the following:

- 1. Cannabis use is common in PEI and is likely to increase:** Half of Islanders aged 16 years and older have used cannabis previously and just over a quarter have used in the past 12 months. Among people who used cannabis in the previous month, 26% used it daily, and half used it more than 2 days per week. With legalization, consumption is anticipated to increase, as 35% of current users may increase consumption, and roughly 30% of former users and non-users may try cannabis.

2. Cannabis use is more common among vulnerable populations:

Youth, people who are unemployed, and those with lower education levels, lower income, and lower self-rated mental health are more highly represented among people who use cannabis.

3. Many people who currently use cannabis are engaging in higher risk behaviors:

Reported higher risk behaviors included daily or near daily cannabis use, beginning cannabis use at a younger age, using cannabis with a poor mental health status, using high-potency cannabis products, using combusted cannabis products, using cannabis in combination with alcohol and tobacco, driving within 6 hours of cannabis use or being a passenger of someone who used within six hours, and using cannabis to get “stoned” or “high” before or while at school or at work.

4. People who currently use cannabis have a lower perception of cannabis-related health and social risks:

They are most likely to perceive cannabis consumption as socially acceptable, to perceive a lower risk associated with consuming cannabis, and to be the least bothered by exposure to cannabis or to cannabis stores.

5. There are considerable knowledge gaps regarding lower-risk cannabis use:

There was an understanding that people less than 19 years should not consume cannabis, and that cannabis is unsafe during pregnancy. However, less than 50% of individuals responded correctly that cannabis has short-term and long-term health risks, cannabis with higher THC than CBD is unsafe, cannabis edibles should not be eaten on an empty stomach, cannabis use with alcohol is unsafe, and synthetic cannabinoids increase health risks.

This information will help guide public health and safety policies, programs, and research going forward. The next PEI Cannabis Survey will be launched in August 2019.

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CHAPTER 1

Introduction

On October 17, 2018, the Government of Canada legalized cannabis for non-medical purposes. Non-medical purposes include recreational, social, spiritual, lifestyle, and other non-medical uses. In response to federal legalization of non-medical cannabis, all provinces and territories have developed laws and policies to regulate non-medical cannabis use.



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INTRODUCTION

The Government of Prince Edward Island's approach to legalization and regulation of cannabis has three main goals:

- 1) Reducing access, exposure, and inducements to children and youth
- 2) Protection of public health and safety
- 3) Minimizing the illicit cannabis market


Given the emphasis on reducing access, exposure and inducements to children and youth and protecting public health and safety, PEI's Chief Public Health Office has been working with federal government and provincial and territorial experts to identify priority indicators of cannabis use, knowledge, attitudes and behaviours, and health effects. Several national surveys currently collect information regarding cannabis including the Canadian Tobacco, Alcohol and Drugs Survey (CTADS), the Canadian Student Tobacco, Alcohol and Drugs Survey (CSTADS), the Canadian Cannabis Survey (CCS), and the National Cannabis Survey (NCS). However, the size of the PEI sample in these surveys limits analysis and reporting at the provincial level.

The PEI Cannabis Survey was developed in response to the need to supplement data collected through these existing national surveys. The first PEI Cannabis Survey was launched in August 2018, prior to the legalization of non-medical cannabis. The survey contains questions on cannabis use behaviours, attitudes towards cannabis, and knowledge of lower-risk cannabis use. Results of the survey will help inform public health and safety programs, and policies.

CHAPTER 2

Sociodemographic Characteristics

This chapter describes the 4,324 individuals who participated in the PEI Cannabis Survey and submitted complete responses. It provides information about survey participants as a whole and describes three groups of participants based on their cannabis use: ‘non-use,’ ‘current use,’ and ‘former use.’ ‘Non-use’ is defined as no cannabis use at all or using cannabis only once in a lifetime. ‘Current use’ refers to cannabis use occurring in the past 12 months. ‘Former use’ means cannabis use that did not occur in the past 12 months. Using cannabis for non-medical purposes includes using it recreationally, socially, or spiritually.



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Non-use:
no cannabis use
at all or using
cannabis only once
in a lifetime.

Current use:
cannabis use
occurring in the
past 12 months.

Former use:
cannabis use that
did not occur in the
past 12 months.

Non-medical cannabis use

The distribution of non-medical cannabis use among survey participants is presented in Table 2.1. Less than half (47.5%) of participants were non-users, and more than a quarter (27.2%) were currently using cannabis.

TABLE 2.1. DISTRIBUTION OF NON-MEDICAL CANNABIS GROUPS AMONG THE SURVEY PARTICIPANTS

NON-MEDICAL CANNABIS USE GROUPS	NUMBER	FREQUENCY (%)
Non-users	1,990	47.5
Current users	1,138	27.2
Former users	1,196	25.3

Based on data from the 2018 PEI Cannabis Survey.

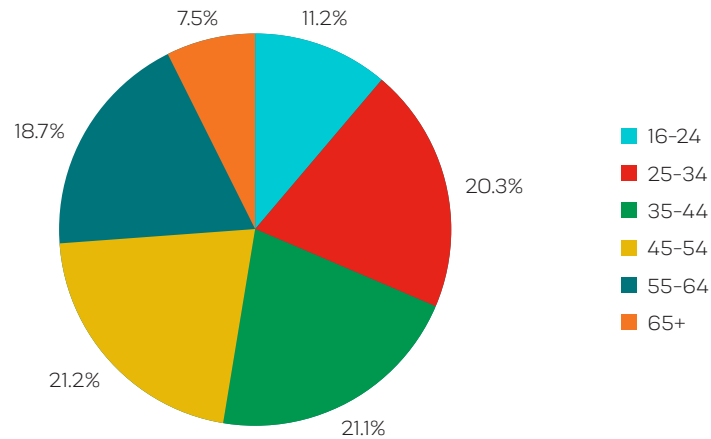
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Younger participants were more likely to be currently using non-medical cannabis compared to older participants.

Age

The average age of survey participants was 43.4 years. The distribution of the age groups shows that the youngest and oldest age groups (16-24 years and 65+ years) accounted for less than 20% of the sample. The other age groups were almost equally represented (Figure 2.1).

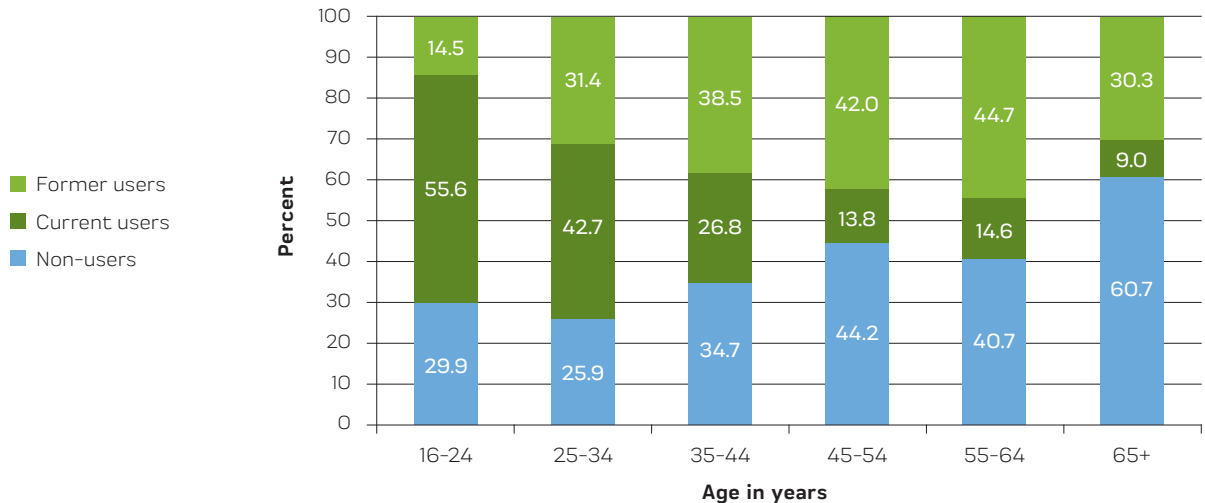
FIGURE 2.1. AGE (IN YEARS) OF SURVEY PARTICIPANTS



Based on data from the 2018 PEI Cannabis Survey.

Figure 2.2 shows participants' age distribution according to cannabis use. The highest proportion of people who currently use cannabis (55.6%) was among the youngest age group (16-24), while the lowest proportion (9.0%) was among those aged 65 years and older.

FIGURE 2.2. AGE (IN YEARS) BY CANNABIS USE



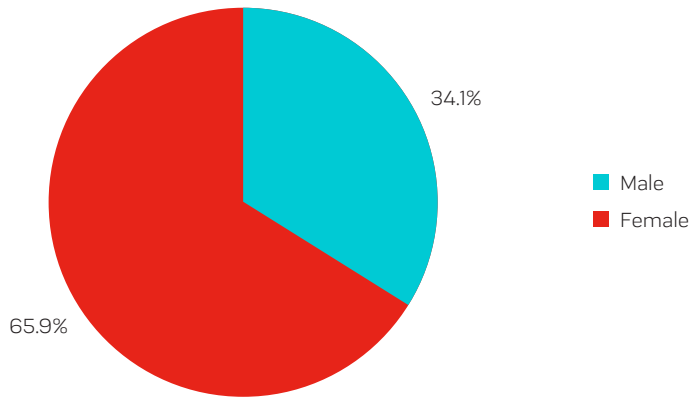
Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at p<0.05.

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Sex

Approximately two-thirds of survey participants were female at birth (Figure 2.3). Also, 16 participants (0.4%) reported that their current gender expression was different from their sex at birth.

FIGURE 2.3. SEX OF SURVEY PARTICIPANTS

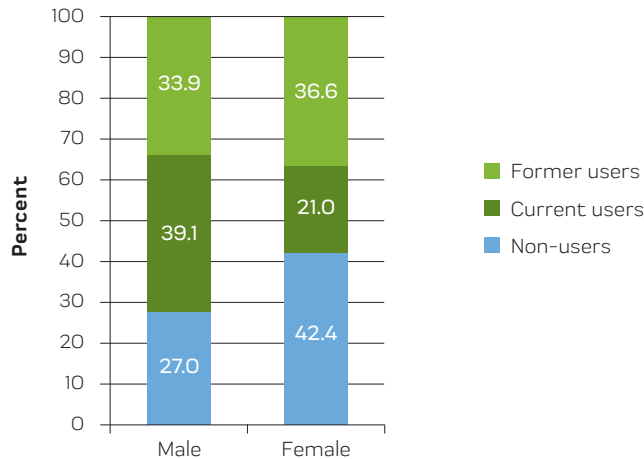


Based on data from the 2018 PEI Cannabis Survey.

Males were more likely than females to currently or formerly use non-medical cannabis.

Figure 2.4 shows the sex distribution according to cannabis use. About 39.1% of males currently used cannabis compared to 21.0% of females. On the other hand, 42.4% of females were non-users compared to 27.0% of males.

FIGURE 2.4. SEX OF SURVEY PARTICIPANTS BY CANNABIS USE



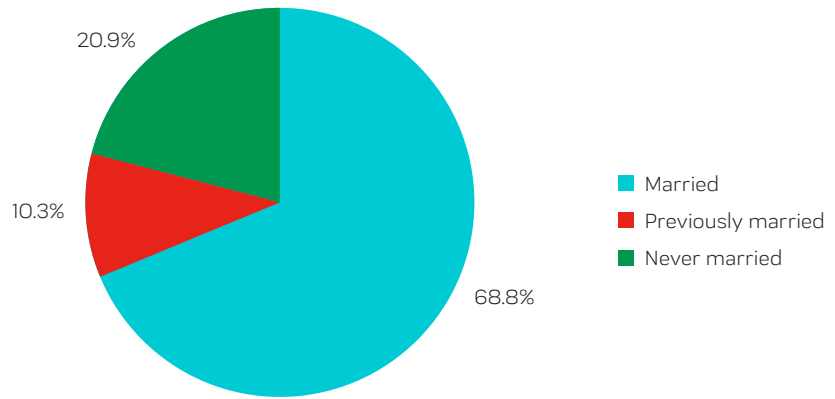
Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

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Marital status

Most survey participants (68.8%) were married or had a common-law partner, while 20.9% had never been married (Figure 2.5).

FIGURE 2.5. MARITAL STATUS OF SURVEY PARTICIPANTS

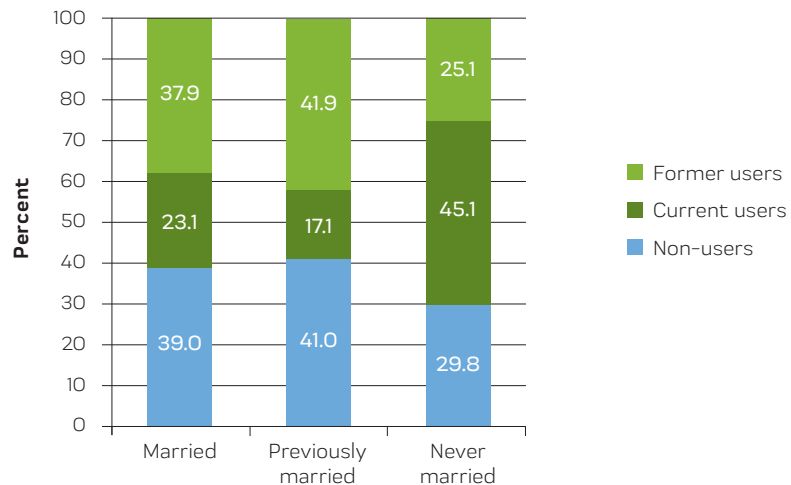


Based on data from the 2018 PEI Cannabis Survey.

Those who had never been married were more likely than any other group to be using non-medical cannabis currently.

Figure 2.6 shows marital status and cannabis use. The highest proportion of people who currently use cannabis was among those who had never been married (45.1%), and the lowest proportion (17.1%) was among those who were married previously (i.e., those who were separated, divorced, or widowed). This pattern remained after adjusting for participants' age.

FIGURE 2.6. MARITAL STATUS BY CANNABIS USE

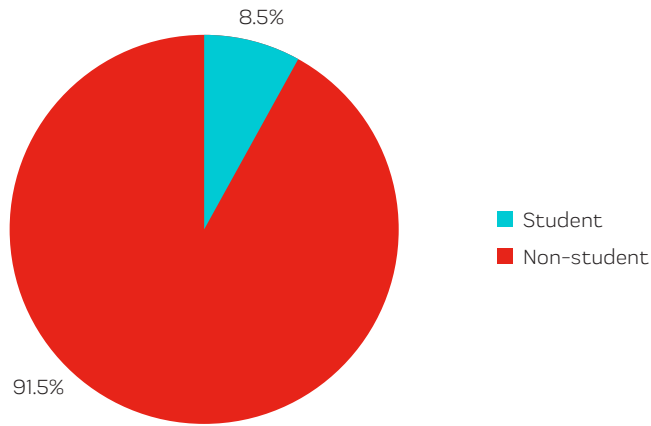


Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

Student status

Almost nine percent (8.5%) of survey participants were students, regardless of age (Figure 2.7).

FIGURE 2.7. STUDENT STATUS OF SURVEY PARTICIPANTS

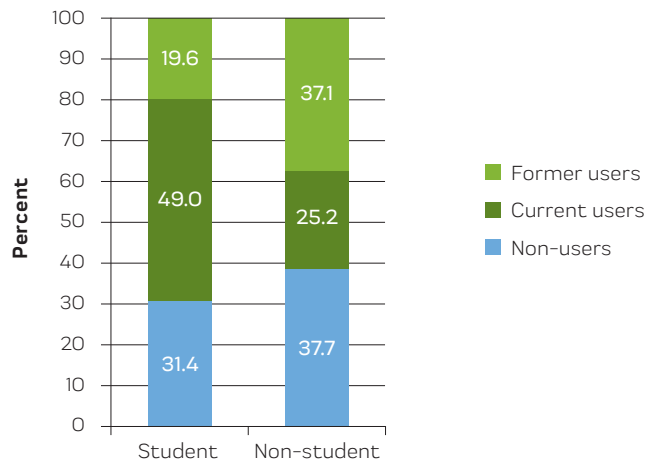


Based on data from the 2018 PEI Cannabis Survey.

Students were more likely than non-students to be current users of non-medical cannabis.

Figure 2.8 illustrates cannabis use for non-medical purposes among student and non-student survey participants. Almost half (49.0%) of the students in the sample were currently using cannabis; for non-students, the proportion was 25.2%. The proportion of non-users was lower among students than among non-students (31.4% versus 37.7%, respectively).

FIGURE 2.8. STUDENT STATUS BY CANNABIS USE



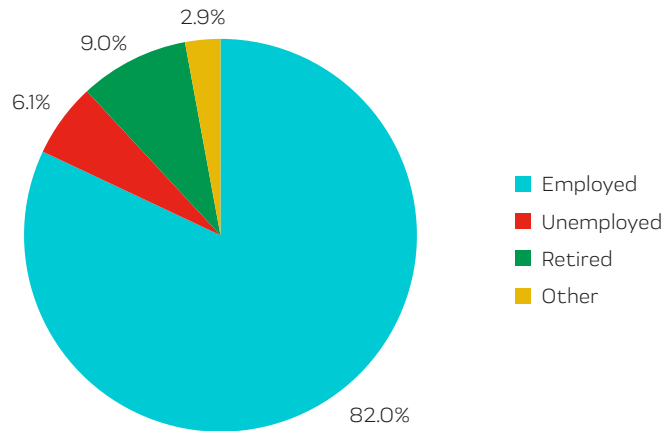
Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

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Employment status

Most survey participants (82.0%) worked full-time or part-time, or were self-employed. A small percentage (6.1%) was unemployed, and 9.0% were retired (Figure 2.9).

FIGURE 2.9. EMPLOYMENT STATUS OF SURVEY PARTICIPANTS

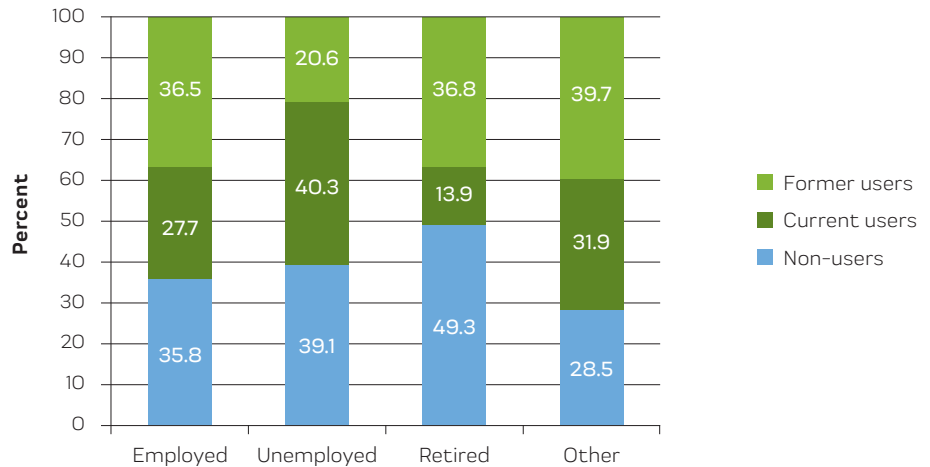


Based on data from the 2018 PEI Cannabis Survey.

People who were unemployed were more likely to currently use non-medical cannabis than any other group.

Figure 2.10 shows cannabis use for non-medical purposes according to participants' employment status. The highest proportion of people who currently use cannabis was among the unemployed (40.3%), and the lowest proportion was among retirees (13.9%). This pattern was unchanged after adjusting for participants' age.

FIGURE 2.10. EMPLOYMENT STATUS BY CANNABIS USE

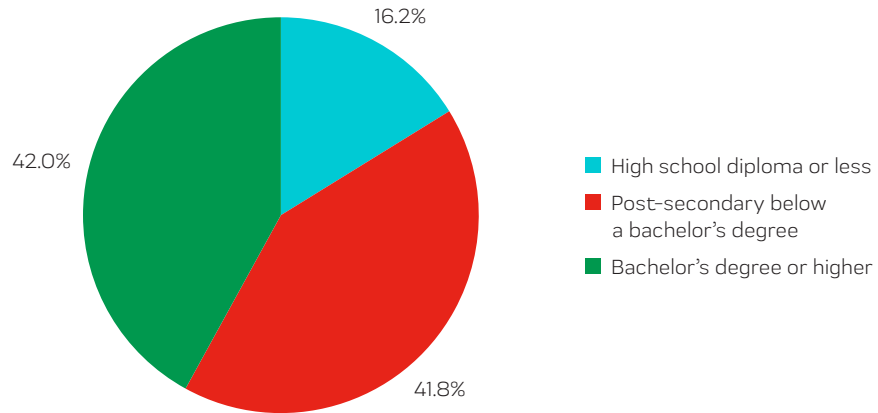


Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

Level of education

About 84% of survey participants had at least some post-secondary education, while 16.2% held a high school diploma or less (Figure 2.11).

FIGURE 2.11. LEVEL OF EDUCATION OF SURVEY PARTICIPANTS

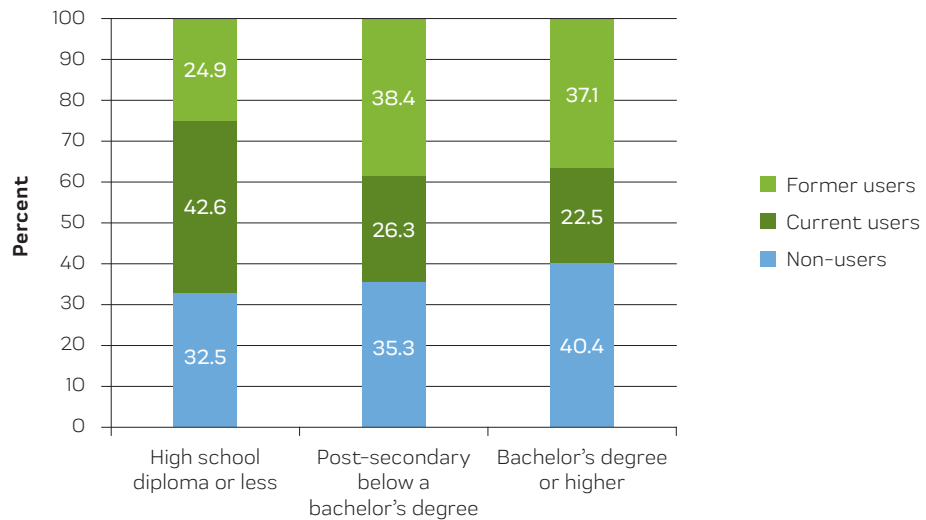


Based on data from the 2018 PEI Cannabis Survey.

Current non-medical cannabis use was higher among individuals with lower education.

Figure 2.12 shows cannabis use for non-medical purposes according to level of education. The highest proportion of people who currently use cannabis (42.6%) was among those with a high school education or less, while the lowest proportion (22.5%) was among those with a bachelor's degree or higher. The proportion of non-users was highest among participants with at least a bachelor's degree (40.4%), and lowest among those with a high school education or less (32.5%). The observed pattern was independent of participants' age.

FIGURE 2.12. LEVEL OF EDUCATION BY CANNABIS USE

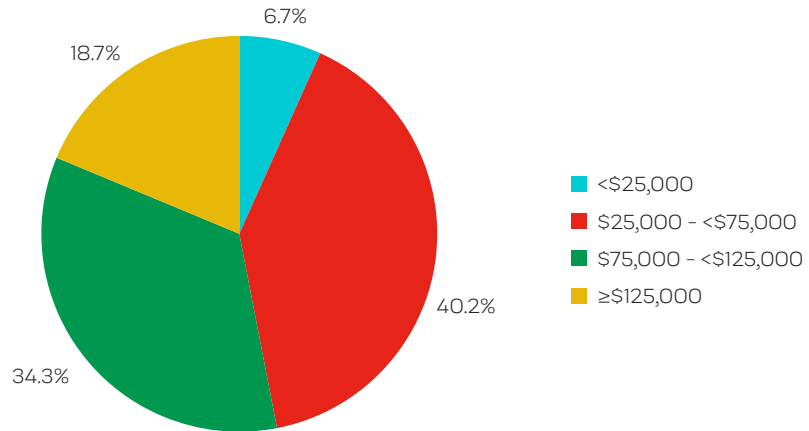


Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

Household income

As demonstrated in Figure 2.13, 6.7% of survey participants had a household income of less than \$25,000 per year, and 18.7% had a household income of \$125,000 or more.

FIGURE 2.13. HOUSEHOLD INCOME OF SURVEY PARTICIPANTS

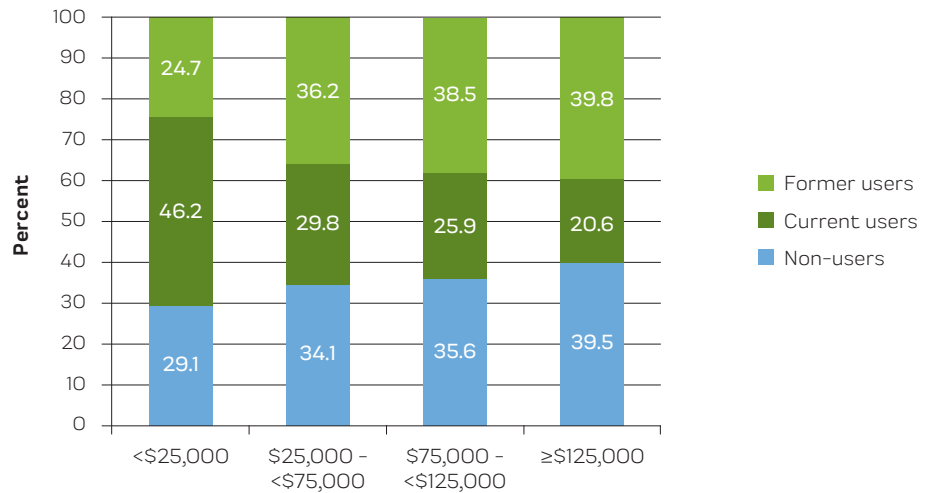


Based on data from the 2018 PEI Cannabis Survey.

Non-medical cannabis use was highest among those with lower household incomes.

Figure 2.14 presents non-medical cannabis use according to household income. The highest proportion of people who currently use cannabis (46.2%) was among the lowest income group. In addition, participants in households that earn \$125,000 or more had the lowest proportion of people who use cannabis currently (20.6%). This pattern remained after adjusting for participants' age.

FIGURE 2.14. HOUSEHOLD INCOME BY CANNABIS USE



Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

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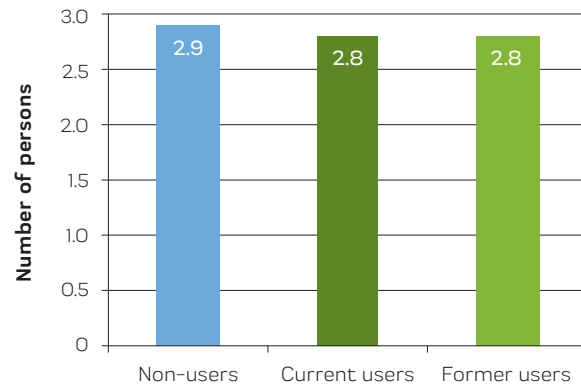
Average household size did not differ by cannabis use.

Average household size

Survey participants' average household size was 2.8 persons, while the median was three.

There was no difference in average household size when cannabis use was considered (2.15).

FIGURE 2.15. AVERAGE HOUSEHOLD SIZE (PERSONS) BY CANNABIS USE

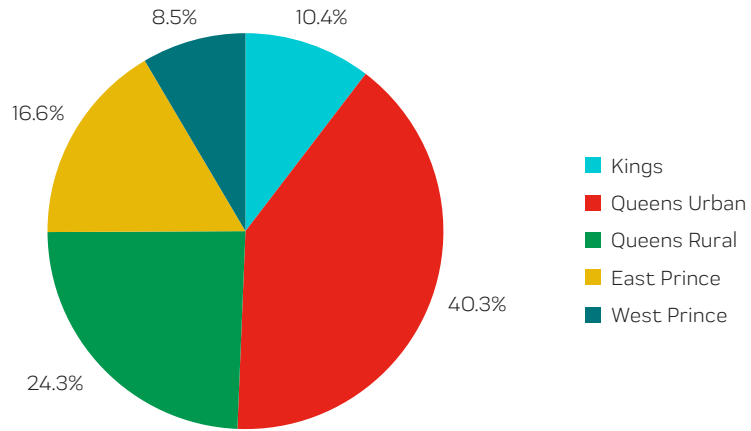


Based on data from the 2018 PEI Cannabis Survey.

Regional zone

Close to two-thirds of survey participants (64.6%) resided in Queens County (Figure 2.16).

FIGURE 2.16. REGION OF RESIDENCE AMONG SURVEY PARTICIPANTS

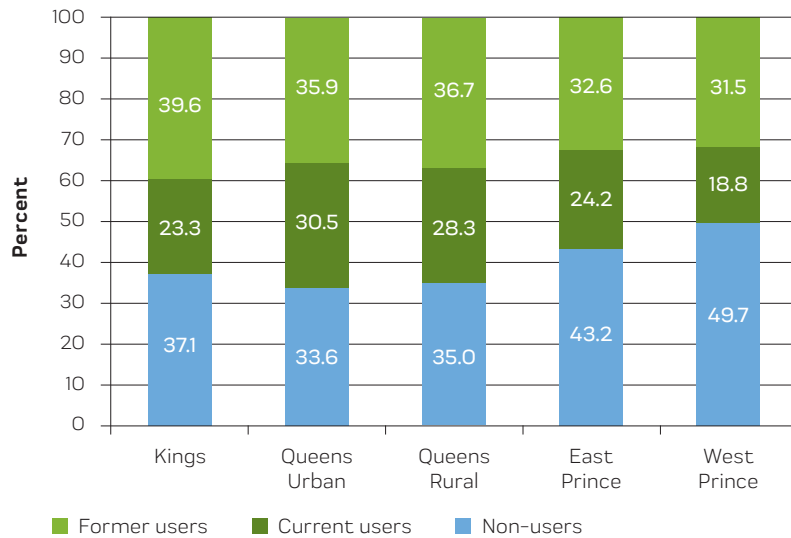


Based on data from the 2018 PEI Cannabis Survey.

The highest proportion of people who currently use non-medical cannabis was among Queens County residents.

Figure 2.17 shows experience with non-medical cannabis use based on the regional zones in which participants resided. Queens County residents (30.5% in Queens Urban and 28.3% in Queens Rural) had the highest proportion of people who currently use cannabis. On the other hand, participants from West Prince had the highest proportion of people who were non-users (49.7%).

FIGURE 2.17. REGION OF RESIDENCE BY CANNABIS USE

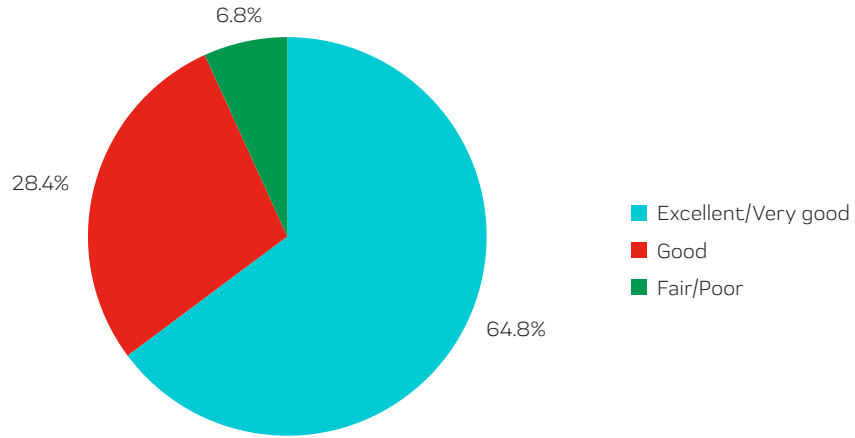


Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at p<0.05.

Rating of general health

Almost two-thirds of participants (64.8%) rated their general health as excellent or very good, while only 6.8% rated it as fair or poor (Figure 2.18).

FIGURE 2.18. GENERAL HEALTH RATING AMONG SURVEY PARTICIPANTS

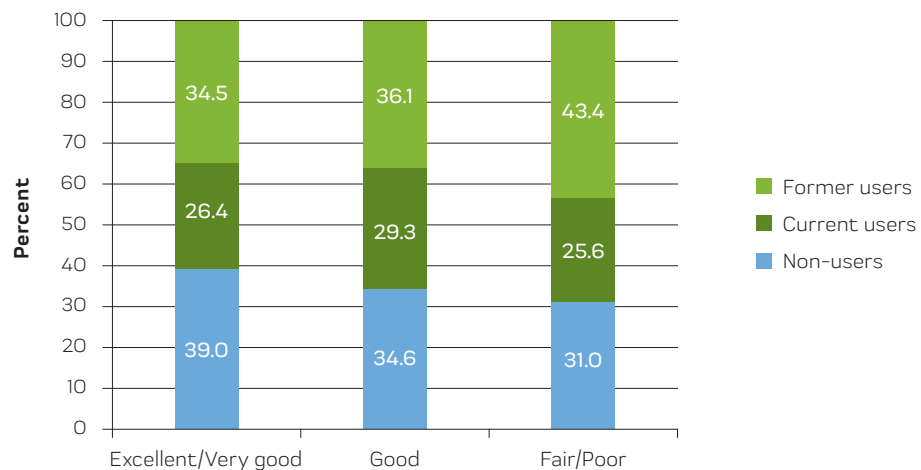


Based on data from the 2018 PEI Cannabis Survey.

There was no clear pattern in general health rating according to cannabis use.

Figure 2.19 shows general health rating based on experience with non-medical cannabis use. People who rated their general health as excellent or very good were most likely to be non-users of cannabis (39.0%), and the largest proportion of people who rated their health as fair or poor had used cannabis formerly (43.4%). People who currently use cannabis were less likely to rate their health as fair or poor. This pattern was unchanged after adjusting for participants' age.

FIGURE 2.19. GENERAL HEALTH RATING BY CANNABIS USE

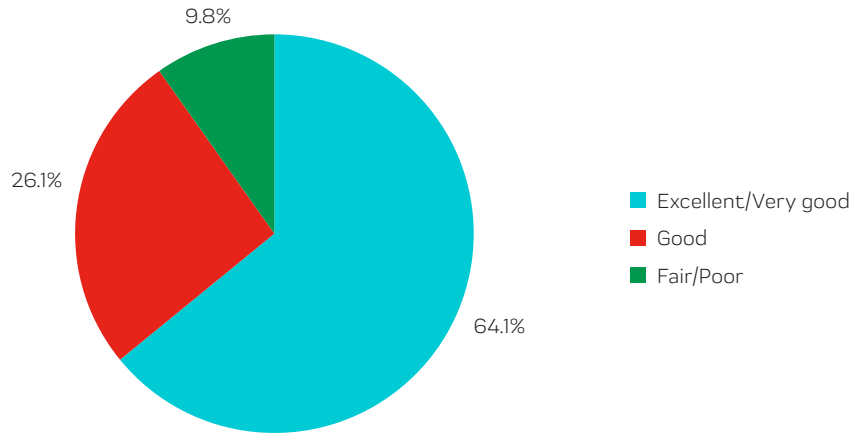


Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

Rating of mental health

Almost two-thirds of participants (64.1%) rated their mental health as excellent or very good, while just 9.8% rated it as fair or poor (Figure 2.20).

FIGURE 2.20. MENTAL HEALTH RATING AMONG SURVEY PARTICIPANTS

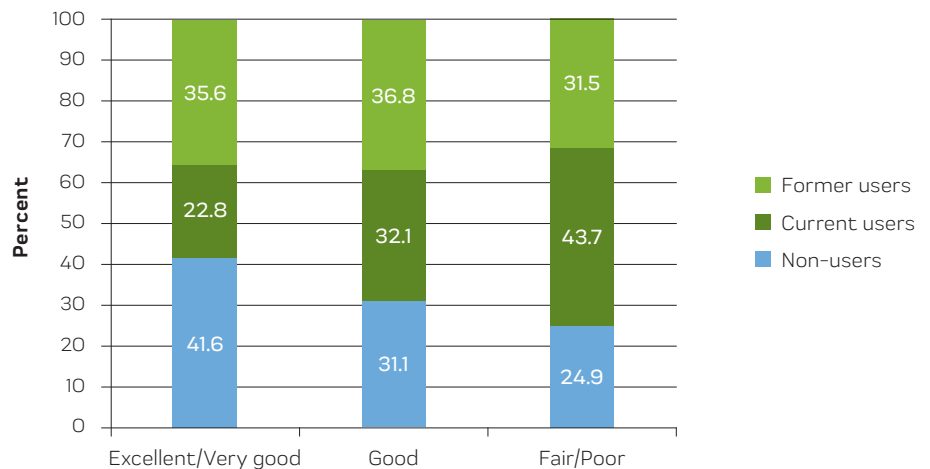


Based on data from the 2018 PEI Cannabis Survey.

Non-users of cannabis were more likely to have better mental health ratings, and those who currently use cannabis were significantly more likely to have the worst mental health ratings.

Figure 2.21 presents cannabis use and mental health rating. Non-users formed the largest proportion of those who rated their mental health as excellent or very good (41.6%) compared to current users who formed the smallest proportion of this group (22.8%). This pattern is reversed among those who rated their mental health as fair or poor (24.9% versus 43.7%, respectively).

FIGURE 2.21. MENTAL HEALTH RATING BY CANNABIS USE



Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

CHAPTER 3

Lifetime Non-medical Cannabis Use

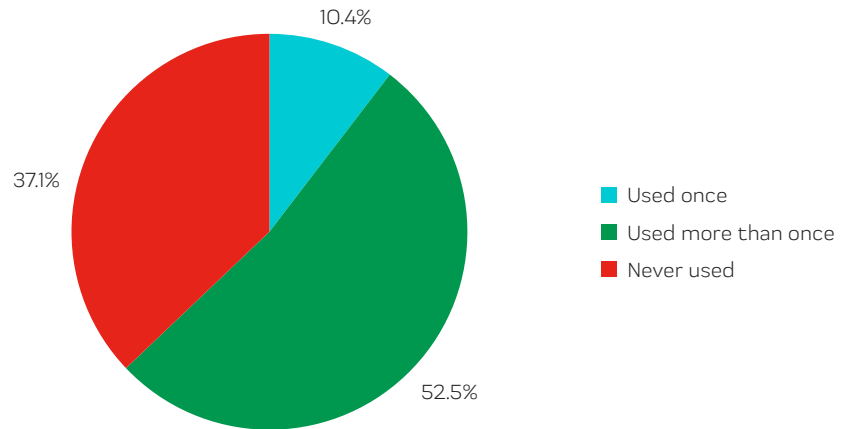
This chapter provides information about behaviours and experiences related to non-medical cannabis use among survey participants in their lifetime. This information is useful for understanding experiences with cannabis use overall, as well as the impacts of legalization. As with the previous chapter, ‘current use’ means cannabis use occurring within the past 12 months. ‘Former use’ refers to cannabis use that did not occur in the past 12 months. People who used cannabis only once in their lifetime and those who have never used cannabis are considered ‘non-users.’ This chapter focuses on people who have used cannabis more than once (i.e., current users and former users). Non-medical cannabis use includes recreational, social, or spiritual uses.

About half of participants have used non-medical cannabis more than once in their lifetime.

Lifetime non-medical cannabis use

More than half of participants (52.5%) used cannabis for non-medical purposes more than once in their lifetime, while 37.1% had never used cannabis (Figure 3.1).

FIGURE 3.1. LIFETIME NON-MEDICAL CANNABIS USE



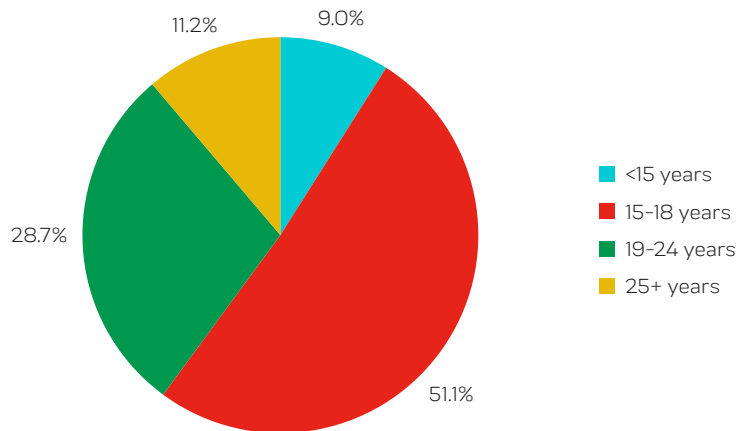
Based on data from the 2018 PEI Cannabis Survey.

Age at first use of non-medical cannabis

Among those who currently use cannabis and those who formerly used it, the average age at which survey participants first started using cannabis for non-medical purposes was 19.2 years, and the median was 18 years.

Figure 3.2 shows that most participants (60.1%) first started using cannabis prior to the age of 19 years (i.e., the age at which non-medical cannabis use is legal in PEI). Also noteworthy, only 11.2% of participants started using cannabis at age 25 years or older.

FIGURE 3.2. AGE AT FIRST USE OF NON-MEDICAL CANNABIS, CURRENT AND FORMER USERS



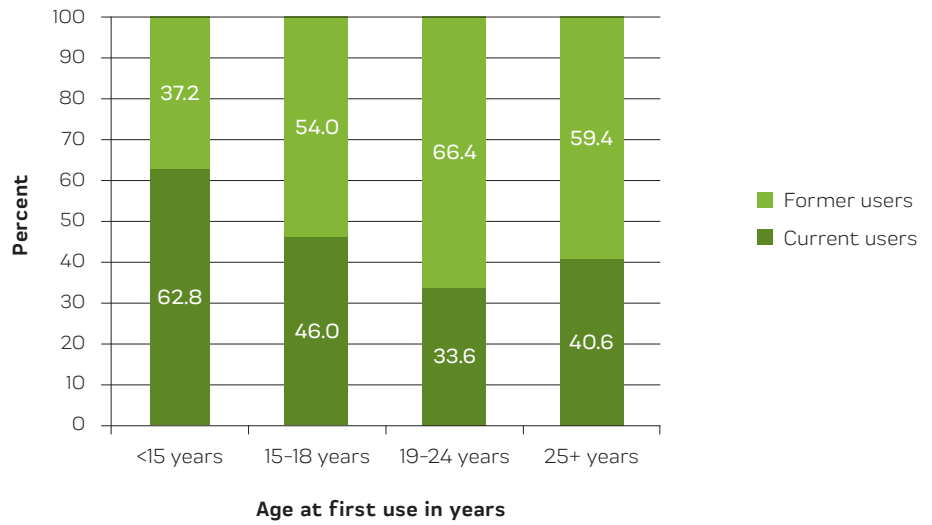
Based on data from the 2018 PEI Cannabis Survey.

19

People who started using non-medical cannabis at a younger age were more likely to be using it currently.

Figure 3.3 illustrates age at first use of cannabis for persons who currently use or formerly used cannabis. People who started using cannabis before the age of 15 were more likely to be using it currently (62.8%), and those who started using it at age 25 or older were more likely to have formerly used cannabis (59.4%).

FIGURE 3.3. AGE AT FIRST USE OF NON-MEDICAL CANNABIS BY CANNABIS USE, CURRENT AND FORMER USERS



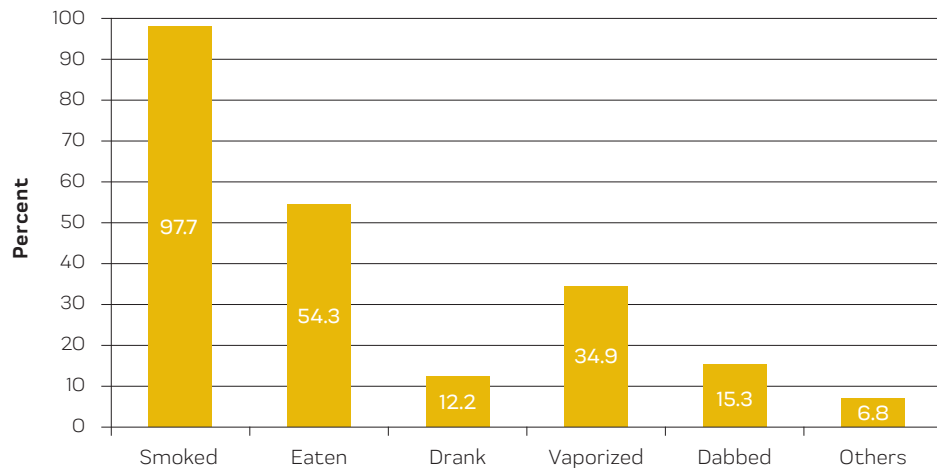
Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

Smoking was the most common method used to consume non-medical cannabis among survey participants.

Methods for using non-medical cannabis

As shown in Figure 3.4, 97.7% of those who currently use non-medical cannabis or used it formerly have smoked it. The second-most common method was eating, which was reported by more than half (54.3%) of those who have used cannabis. Vaporizing cannabis was the third-most common method, and it was reported by 34.9%.

FIGURE 3.4. METHODS USED TO CONSUME NON-MEDICAL CANNABIS, CURRENT AND FORMER USERS



Based on data from the 2018 PEI Cannabis Survey.

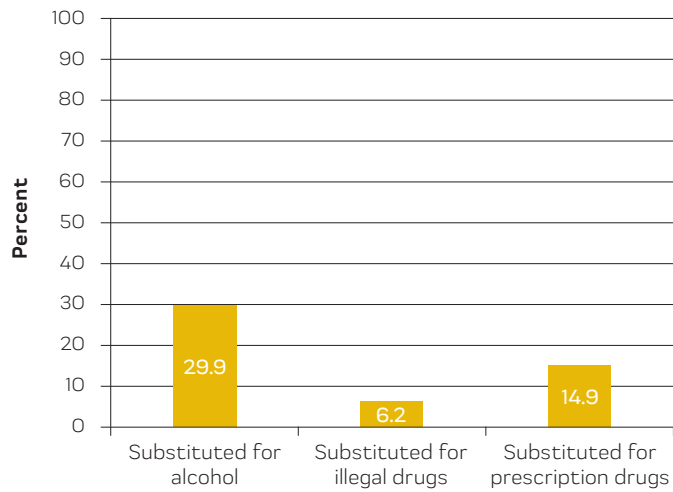
21

Although rare, non-medical cannabis has been used as a substitute for illegal drugs and prescription drugs. It is more often used as a substitute for alcohol.

Substitution of non-medical cannabis for other substances

Most people who used cannabis did not use it as a substitute for other substances. Substituting non-medical cannabis for alcohol was reported by 29.9% of participants. Figure 3.5 shows that 6.2% and 14.9% of participants who currently use cannabis or used it formerly consumed cannabis as a substitute for illegal drugs or for prescription drugs, respectively.

FIGURE 3.5. SUBSTITUTING NON-MEDICAL CANNABIS FOR OTHER SUBSTANCES, CURRENT AND FORMER USERS

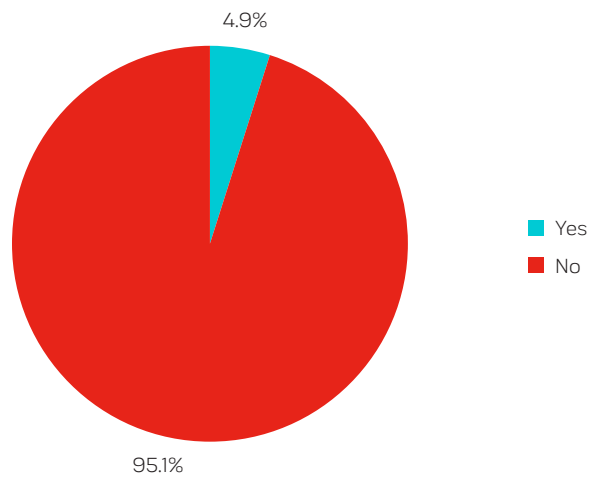


Based on data from the 2018 PEI Cannabis Survey.

Issues related to non-medical cannabis use

While the vast majority of participants who have used non-medical cannabis (95.1%) reported never having any health, social, legal, or financial problems due to cannabis use, 4.9% reported having such problems (Figure 3.6).

FIGURE 3.6. HAVING PROBLEMS DUE TO NON-MEDICAL CANNABIS USE, CURRENT AND FORMER USERS



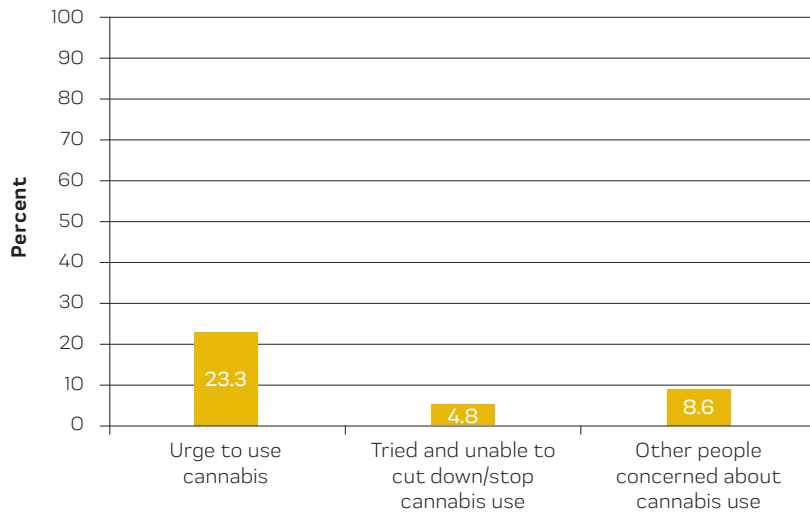
Based on data from the 2018 PEI Cannabis Survey.

23

The most common indicator of dependency was having an urge to use cannabis.

Figure 3.7 shows experience related to different aspects of cannabis dependency. The most common indicator of dependency was having an urge to use cannabis. This was experienced by 23.3% of those who have used cannabis. A small proportion of participants who used non-medical cannabis were unable to cut down or stop using it when they tried to do so (4.8%); and 8.6% reported that a friend or relative had expressed concern about their cannabis use.

FIGURE 3.7. EXPERIENCING ASPECTS OF DEPENDENCY ON NON-MEDICAL CANNABIS, CURRENT AND FORMER USERS



Based on data from the 2018 PEI Cannabis Survey.

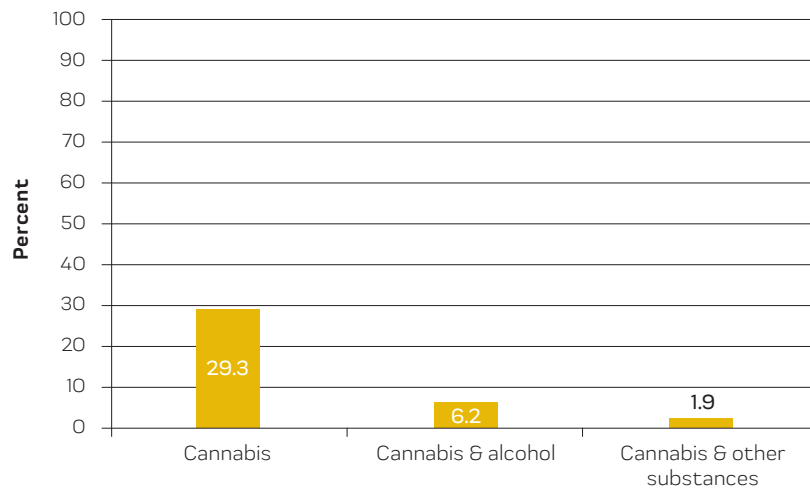
24

Nearly one-third of participants who have used non-medical cannabis have driven within six hours of its use.

Driving up to six hours after non-medical cannabis use

Figure 3.8 shows that 29.3% of participants who currently use or formerly used non-medical cannabis drove within six hours of using it. Driving within six hours of using non-medical cannabis in combination with alcohol was reported by 6.2%, and 1.9% drove within six hours of using cannabis in combination with other substances.

FIGURE 3.8. DRIVING UP TO SIX HOURS AFTER NON-MEDICAL CANNABIS USE, CURRENT AND FORMER USERS

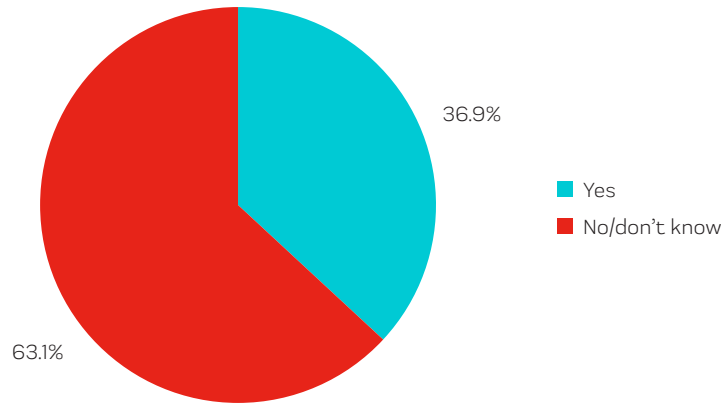


Based on data from the 2018 PEI Cannabis Survey.

Passenger of a driver who used non-medical cannabis up to six hours before driving

More than one-third (36.9%) of survey participants reported that they had been passengers of drivers who had used non-medical cannabis up to six hours before driving (Figure 3.9).

FIGURE 3.9. PASSENGER OF A DRIVER WHO USED NON-MEDICAL CANNABIS UP TO SIX HOURS BEFORE DRIVING, ALL SURVEY PARTICIPANTS

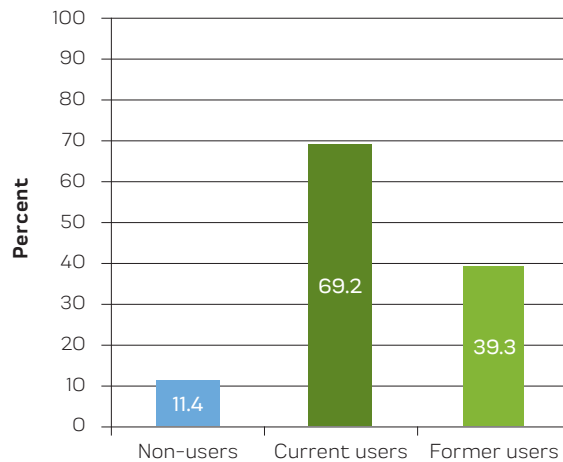


Based on data from the 2018 PEI Cannabis Survey.

People who currently use non-medical cannabis were more likely than the other groups to have ever been passengers of a driver who may have been impaired by cannabis.

When looking at the responses to this question by cannabis use, people who currently use cannabis were significantly more likely to have been a passenger of a driver who used non-medical cannabis up to six hours before driving, than non-users and people who used cannabis formerly (69.2% versus 11.4% and 39.3%; Figure 3.10).

FIGURE 3.10. CANNABIS USE BY EXPERIENCE OF BEING A PASSENGER OF A DRIVER WHO USED NON-MEDICAL CANNABIS UP TO SIX HOURS BEFORE DRIVING, ALL SURVEY PARTICIPANTS



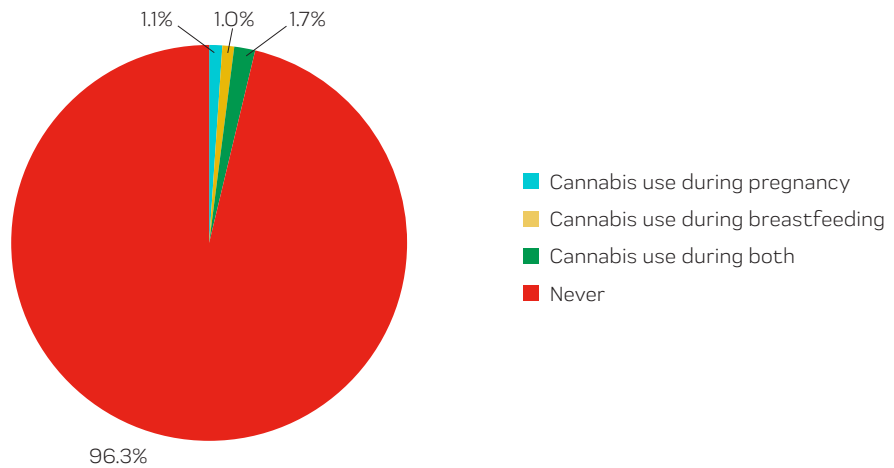
Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

While the vast majority of females did not use cannabis while pregnant or breastfeeding, 3.8% used it during pregnancy, breastfeeding, or both.

Pregnancy and breastfeeding, and cannabis use

About 60.0% of females who have used non-medical cannabis have also given birth. The vast majority of them (96.3%) did not use cannabis (whether medical or non-medical) during their last pregnancy or while breastfeeding their last child. However, 3.8% indicated that they used cannabis during pregnancy, breastfeeding, or both (Figure 3.11).

FIGURE 3.11. PREGNANCY AND BREASTFEEDING, AND CANNABIS USE



Based on data from the 2018 PEI Cannabis Survey.

CHAPTER 4

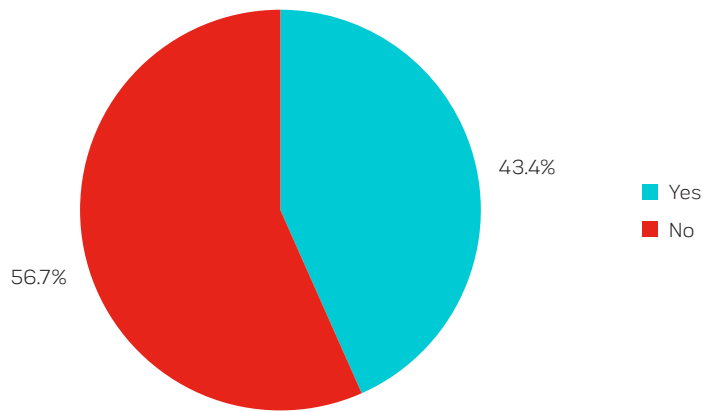
Non-medical Cannabis Use in the Past 12 Months

This chapter describes behaviours and experiences related to non-medical cannabis use in the 12 months prior to survey completion. This helps to delve more deeply into recent cannabis use. Such information sets the baseline against which the short-term impacts of legalization can be assessed. As such, the chapter mainly provides information about participants who are defined as currently using cannabis (i.e., they used cannabis within the past 12 months). As with previous chapters, ‘former use’ refers to cannabis use that did not occur in the past 12 months. People who used cannabis only once in their lifetime and those who have never used cannabis are considered ‘non-users.’ Non-medical cannabis use is defined broadly to include recreational, social, or spiritual uses.

Non-medical cannabis use in the past 12 months

Among survey participants who have used non-medical cannabis more than once, 43.4% used it in the past 12 months and are classified as people who currently use cannabis (Figure 4.1).

FIGURE 4.1. NON-MEDICAL CANNABIS USE IN THE PAST 12 MONTHS, CURRENT AND FORMER USERS

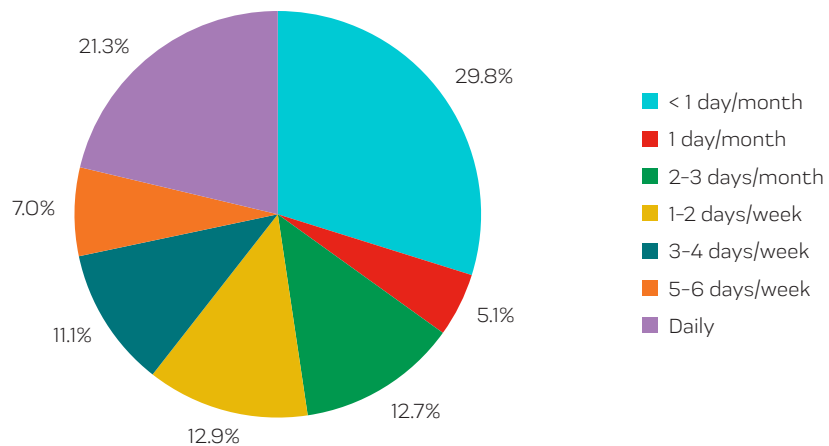


Based on data from the 2018 PEI Cannabis Survey.

Over 40% of participants who have used non-medical cannabis more than once have used it in the past 12 months.

As shown in Figure 4.2, of the participants who currently use cannabis for non-medical purposes, 39.4% used it more often than two days per week, and 21.3% used it daily.

FIGURE 4.2. FREQUENCY OF USING NON-MEDICAL CANNABIS IN THE PAST 12 MONTHS, CURRENT USERS



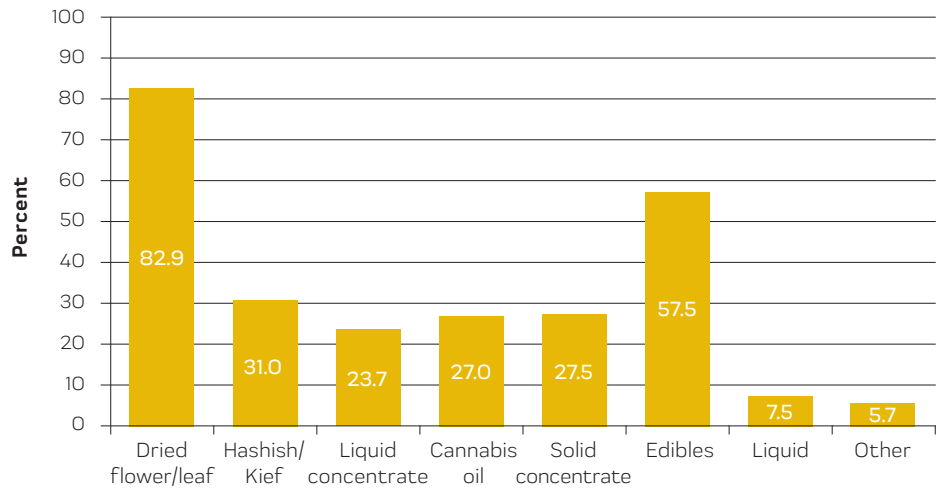
Based on data from the 2018 PEI Cannabis Survey.

Most people who used non-medical cannabis in the past 12 months used dried flower/leaf.

Types of non-medical cannabis products used

As Figure 4.3 shows, 82.9% of those who used cannabis for non-medical purposes in the past 12 months used dried flower/leaf. More than half (57.5%) of those who currently use cannabis consumed edibles.

FIGURE 4.3. NON-MEDICAL CANNABIS PRODUCTS USED IN THE PAST 12 MONTHS, CURRENT USERS



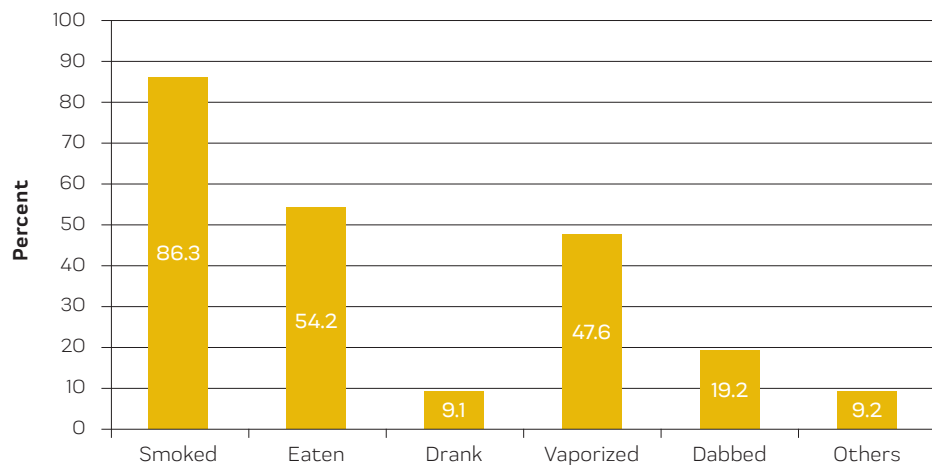
Based on data from the 2018 PEI Cannabis Survey.

Smoking was the most common method used for consuming non-medical cannabis in the past 12 months.

Methods for using non-medical cannabis

As shown in Figure 4.4, 86.3% of those who used non-medical cannabis in the past 12 months consumed it by smoking. The second-most common method was eating, which was reported by 54.2% of those who have used cannabis in the past 12 months. Vaporizing cannabis was the third-most common method, and it was reported by 47.6%.

FIGURE 4.4. METHODS USED TO CONSUME NON-MEDICAL CANNABIS IN THE PAST 12 MONTHS, CURRENT USERS



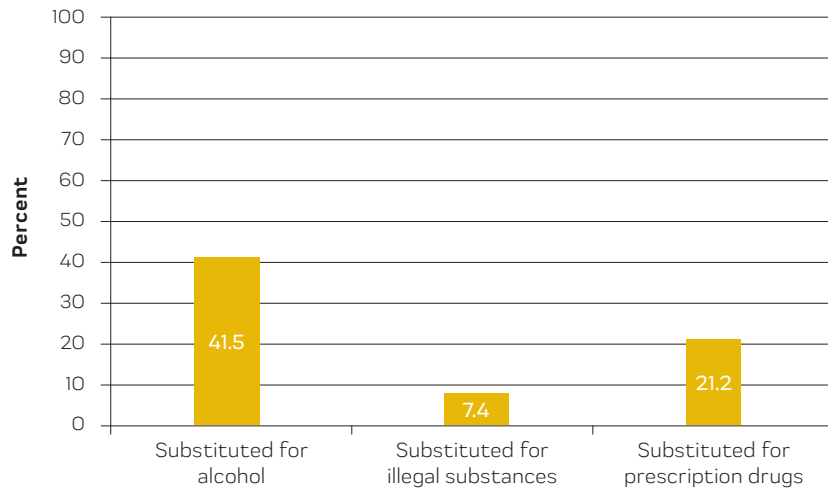
Based on data from the 2018 PEI Cannabis Survey.

In the past 12 months, non-medical cannabis was commonly substituted for alcohol.

Substitution of non-medical cannabis for other substances

Substitution of non-medical cannabis for alcohol in the past 12 months was fairly common; it was reported by 41.5% of people who currently use cannabis. Figure 4.5 also shows that 7.4% and 21.2% of participants who currently use cannabis substituted cannabis for illegal drugs or for prescription drugs, respectively.

FIGURE 4.5. METHODS USED TO CONSUME NON-MEDICAL CANNABIS IN THE PAST 12 MONTHS, CURRENT USERS



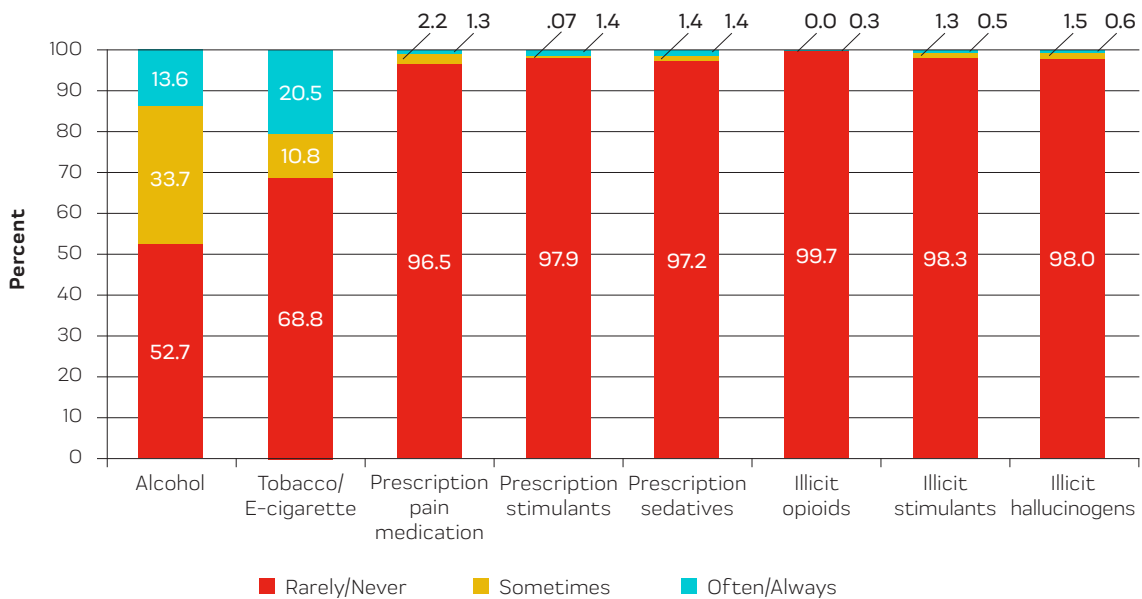
Based on data from the 2018 PEI Cannabis Survey.

Tobacco and alcohol were the most common substances used in combination with non-medical cannabis in the past 12 months.

Combining non-medical cannabis with other substances

Figure 4.6 shows how often respondents who currently use non-medical cannabis combined it with other substances. Just under half (47.3%) used alcohol with cannabis at least sometimes. Approximately one-third (31.2%) sometimes, often, or always used tobacco or e-cigarettes with cannabis. Fewer than 5% reported using cannabis with other substances.

FIGURE 4.6. USE OF NON-MEDICAL CANNABIS COMBINED WITH OTHER SUBSTANCES IN THE PAST 12 MONTHS, CURRENT USERS



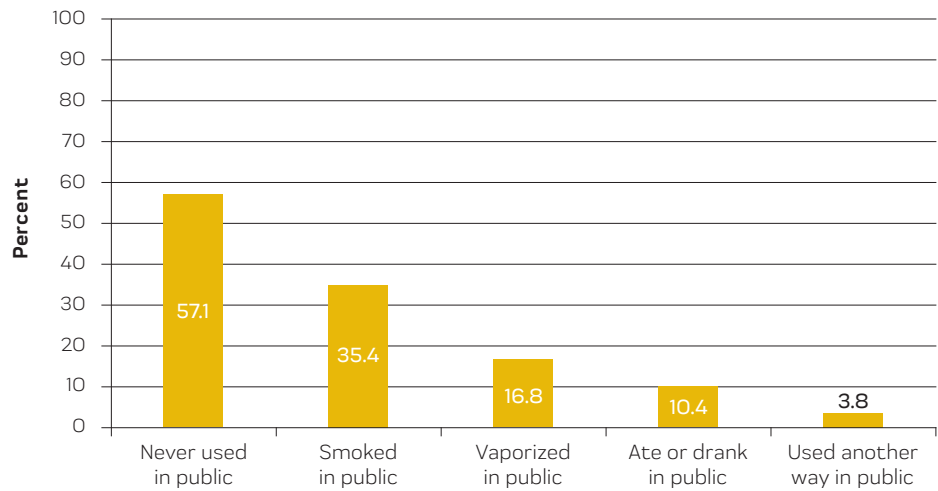
Based on data from the 2018 PEI Cannabis Survey.

Over one-third of people who currently use non-medical cannabis smoked it in public in the past 12 months.

Cannabis use in public places

Approximately six out of every 10 (57.1%) participants who currently use non-medical cannabis used it in a private dwelling only, while just over one-third (35.4%) smoked cannabis in public. Also, participants who currently use cannabis vaped it (16.8%), ate or drank it (10.4%), or used it some other way (3.8%) while in public (Figure 4.7).

FIGURE 4.7. USE OF NON-MEDICAL CANNABIS IN PUBLICLY ACCESSIBLE PLACES IN THE PAST 12 MONTHS, CURRENT USERS



Based on data from the 2018 PEI Cannabis Survey.

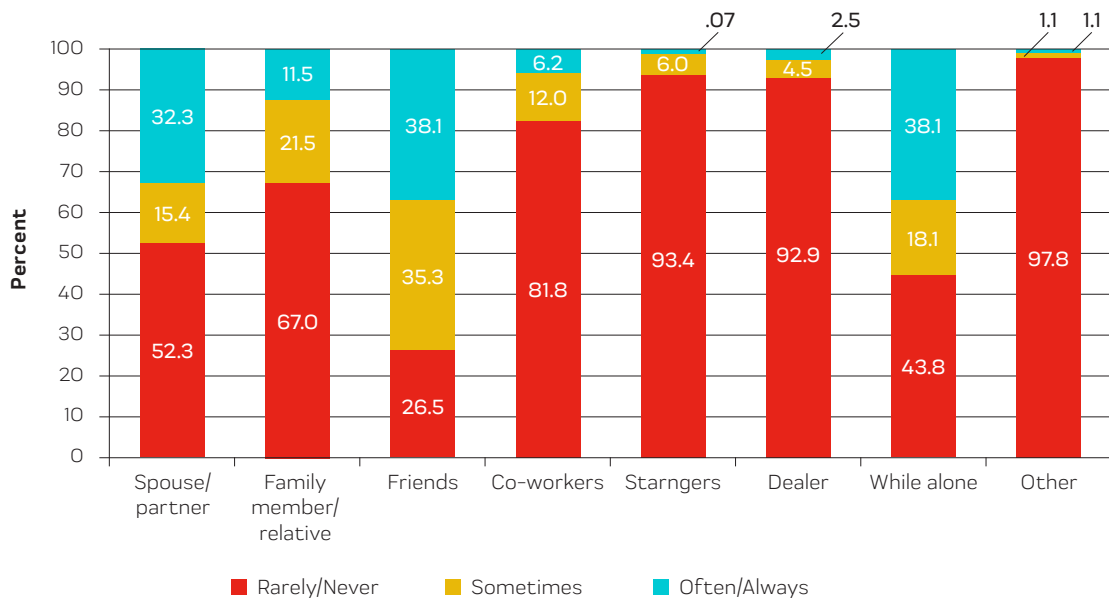
34

In the past 12 months, over one-third of those who currently use non-medical cannabis used it while alone.

Non-medical cannabis use with other persons

Figure 4.8 shows that 38.1% of participants who currently use non-medical cannabis often or always used it while alone. Participants also reported often or always using cannabis with friends (38.1%) or with a spouse or partner (32.3%).

FIGURE 4.8. USE NON-MEDICAL CANNABIS WITH SPECIFIC PEOPLE IN THE PAST 12 MONTHS, CURRENT USERS



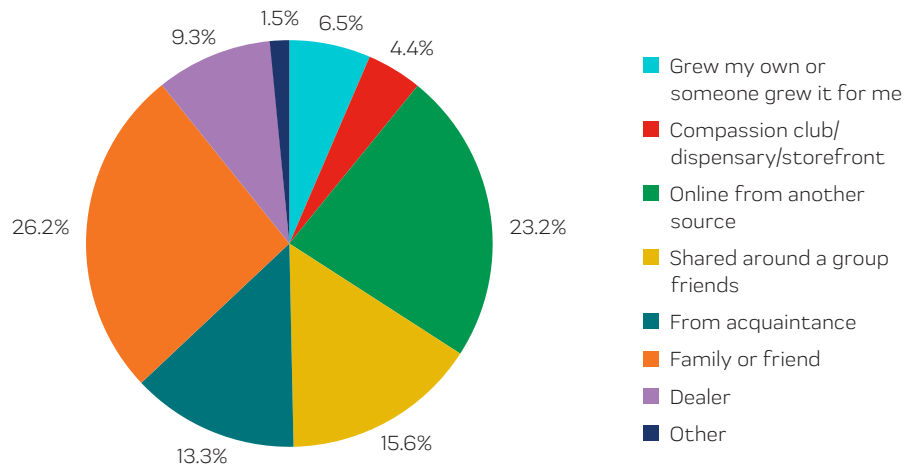
Based on data from the 2018 PEI Cannabis Survey.

People who used non-medical cannabis in the past 12 months were most likely to obtain it from family and friends or purchase it online.

Source of non-medical cannabis

Participants reporting current use obtained cannabis from a variety of sources (Figure 4.9). The most common sources were: family and friends (26.2%), online (23.2%), sharing among a group of friends (15.6%), and from acquaintances (13.3%).

FIGURE 4.9. SOURCE OF NON-MEDICAL CANNABIS IN THE PAST 12 MONTHS, CURRENT USERS



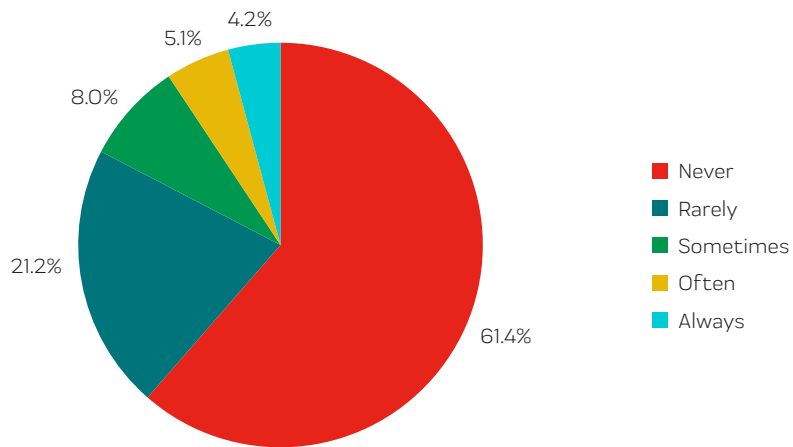
Based on data from the 2018 PEI Cannabis Survey.

About 17% of students who currently use non-medical cannabis reported that they sometimes, often, or always used it before or during the school day in the past 12 months.

Non-medical cannabis use at school

When asked about cannabis use and school, 17.3% of participants who currently use cannabis and were students said they sometimes, often, or always got “stoned” or “high” before or during the school day, and about one-fifth (21.2%) rarely did this. Figure 4.10 illustrates that the majority (61.4%) never used cannabis before or during the school day.

FIGURE 4.10. USE OF NON-MEDICAL CANNABIS BEFORE OR DURING THE SCHOOL DAY IN THE PAST 12 MONTHS, CURRENT USERS WHO ARE ATTENDING SCHOOL



Based on data from the 2018 PEI Cannabis Survey.

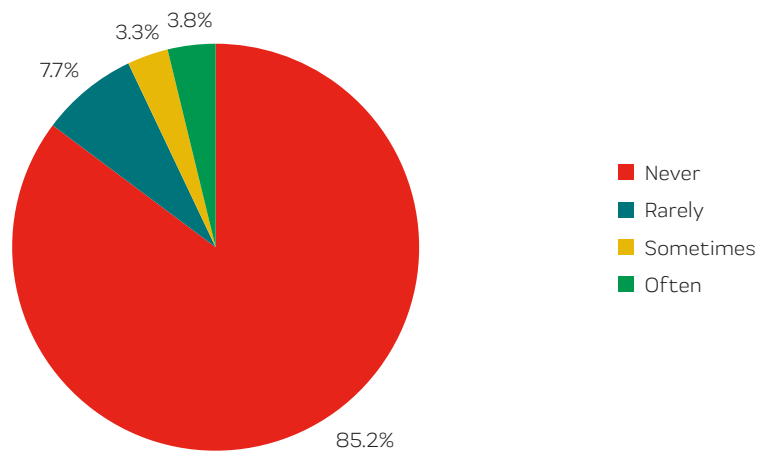
Of those who used cannabis before or during their school day, 4.5% missed one to three days of school per month because of their cannabis use. The others never missed school because of their cannabis use.

In the past 12 months, about 7% of employed people who currently use non-medical cannabis reported that they sometimes or often used it before or during the work day, while about 85% had not done this.

Non-medical cannabis use at work

When asked about cannabis use and work, in the past 12 months, 7.1% of employed people who currently use non-medical cannabis reported that they sometimes or often used it before or during the work day. The majority of employed people who currently use cannabis (85.2%) had never used cannabis before or during work (Figure 4.11).

FIGURE 4.11. USE OF NON-MEDICAL CANNABIS BEFORE OR DURING THE WORK DAY IN THE PAST 12 MONTHS, CURRENT USERS WHO ARE EMPLOYED



Based on data from the 2018 PEI Cannabis Survey.

Among those who used cannabis before or during their work day, 1.5% had been absent from work one to three days per month because of their cannabis use. The others never missed work due to their cannabis use.

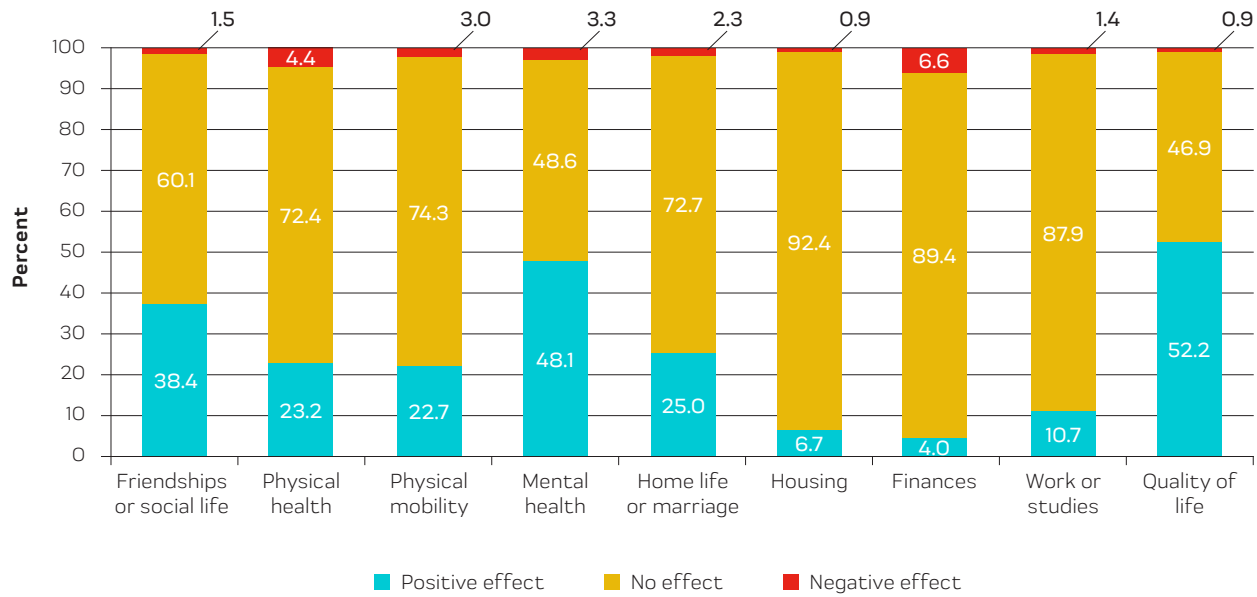
38

While between 1% and 7% of people who currently use non-medical cannabis reported that its use negatively affected different aspects of their lives in the past 12 months, the majority reported that its use had no negative effect.

Effect of non-medical cannabis use on aspects of life

For the majority of people who currently use cannabis, non-medical cannabis use had no effect on different aspects of their lives in the past 12 months (Figure 4.12). Cannabis negatively affected the finances of 6.6% of people, and 4.4% of people said cannabis had a negative effect on their physical health. For about half of those who currently use cannabis, cannabis use had a positive effect on their quality of life (52.2%) and on their mental health (48.1%). Some also felt that their cannabis use had a positive effect on their friendships or social life (38.4%).

4.12. EFFECTS OF NON-MEDICAL CANNABIS USE ON ASPECTS OF LIFE IN THE PAST 12 MONTHS, CURRENT USERS

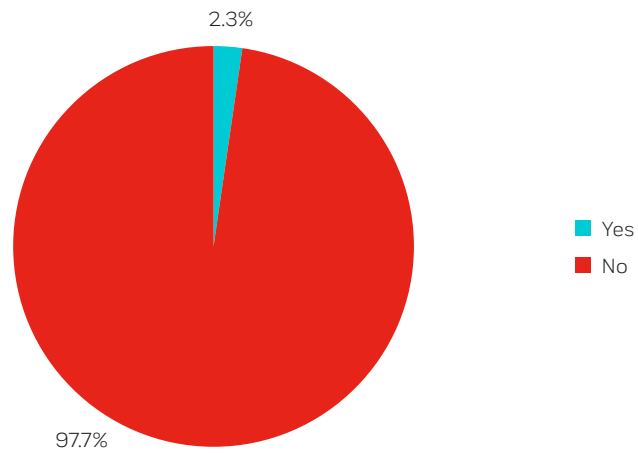


Based on data from the 2018 PEI Cannabis Survey.

Issues related to non-medical cannabis use

While, the vast majority of participants who currently use non-medical cannabis (97.7%) reported not having any health, social, legal, or financial problems due to cannabis use in the past 12 months, 2.3% reported having such problems (Figure 4.13).

FIGURE 4.13. HAVING PROBLEMS IN THE PAST 12 MONTHS DUE TO NON-MEDICAL CANNABIS USE, CURRENT USERS



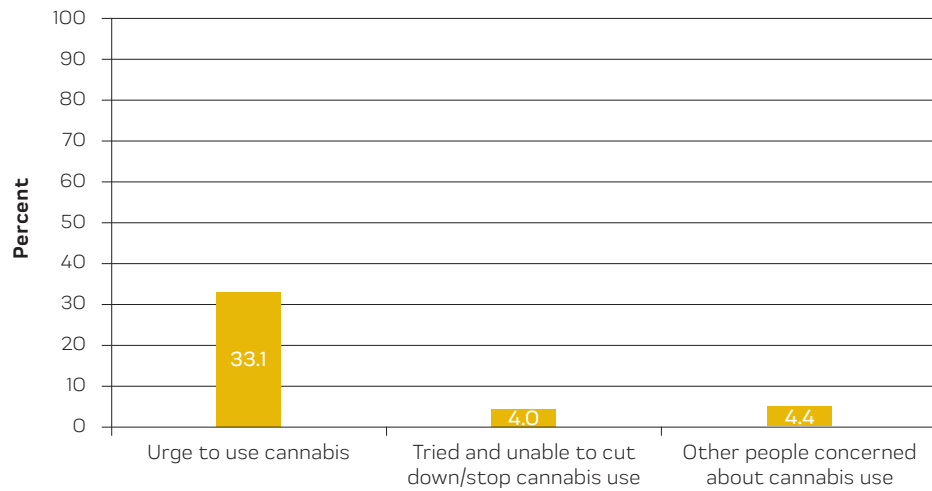
Based on data from the 2018 PEI Cannabis Survey.

40

One-third of people who currently use non-medical cannabis had an urge to use it in the past 12 months.

Figure 4.14 shows experience with different aspects of cannabis dependency. The most common indicator of dependency in the past 12 months was having an urge to use cannabis, which was experienced by 33.1% of those who currently use it. In the past 12 months, a small proportion of participants who currently use non-medical cannabis were unable to cut down or stop using it when they tried to do so (4.0%), and 4.4% reported that a friend or relative had expressed concern about their cannabis use.

FIGURE 4.14. EXPERIENCING ASPECTS OF DEPENDENCY ON NON-MEDICAL CANNABIS IN THE PAST 12 MONTHS, CURRENT USERS



Based on data from the 2018 PEI Cannabis Survey.

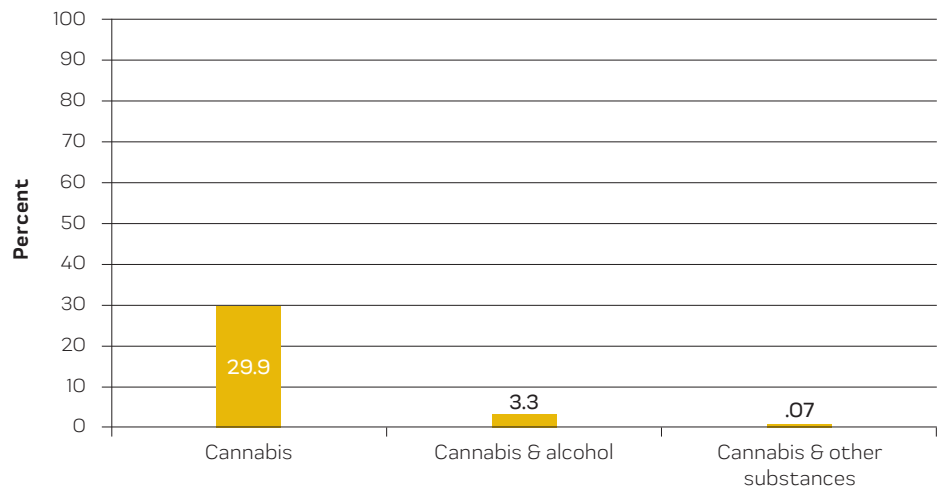
41

About 3 out of every 10 participants who currently use non-medical cannabis have driven within six hours of its use in the past 12 months.

Driving up to six hours after non-medical cannabis use

In the past 12 months, 29.3% of people who currently use non-medical cannabis drove within six hours of using it (Figure 4.15). Driving within six hours of using non-medical cannabis in combination with alcohol was reported by 3.3%, and 0.7% drove within six hours of using cannabis in combination with other substances.

FIGURE 4.15. DRIVING UP TO SIX HOURS AFTER NON-MEDICAL CANNABIS USE IN THE PAST 12 MONTHS, CURRENT USERS

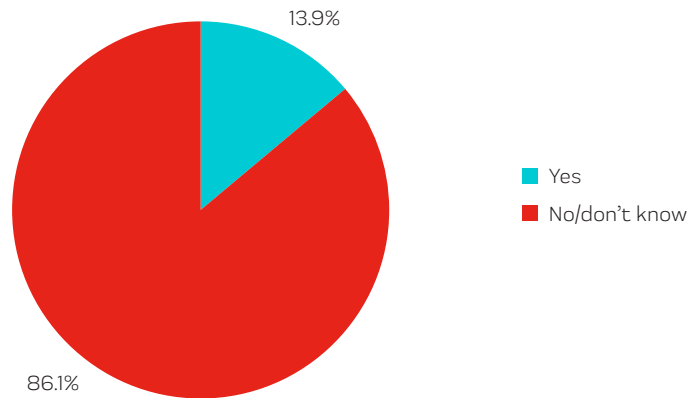


Based on data from the 2018 PEI Cannabis Survey.

Passenger of a driver who used non-medical cannabis up to six hours before driving

In the past 12 months, 13.9% of survey participants had reportedly been passengers of drivers who had used non-medical cannabis up to six hours before driving (Figure 4.16).

FIGURE 4.16. PASSENGER OF A DRIVER WHO USED NON-MEDICAL CANNABIS UP TO SIX HOURS BEFORE DRIVING IN THE LAST 12 MONTHS, ALL SURVEY PARTICIPANTS

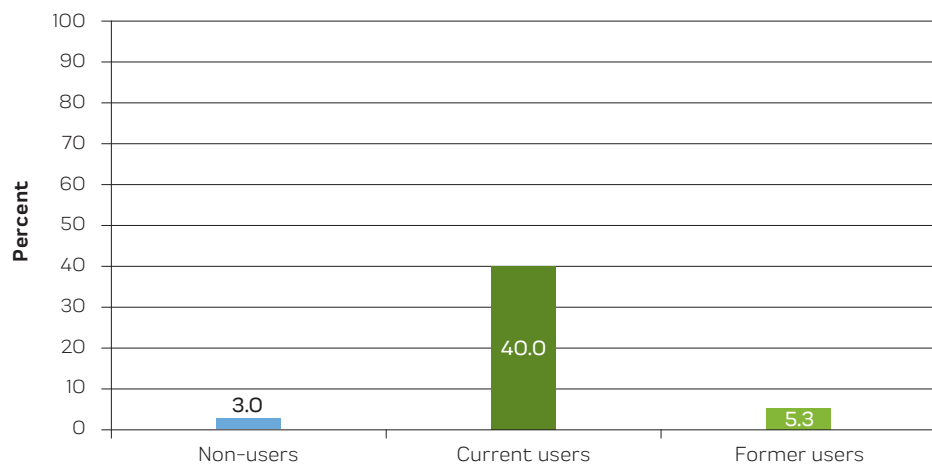


Based on data from the 2018 PEI Cannabis Survey.

In the past 12 months, people who currently use non-medical cannabis were more likely than the other groups to have been passengers of a driver who may have been impaired by cannabis.

When looking at the responses by cannabis use, people who currently use cannabis were significantly more likely to have had this experience than non-users and people who used cannabis formerly (40.0% versus 3.0% and 5.3%; Figure 4.17).

FIGURE 4.17. CANNABIS USE BY BEING A PASSENGER OF A DRIVER WHO USED NON-MEDICAL CANNABIS UP TO SIX HOURS BEFORE DRIVING IN THE LAST 12 MONTHS, ALL SURVEY PARTICIPANTS



Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at p<0.05.

CHAPTER 5

Non-medical Cannabis Use in the Past 30 Days

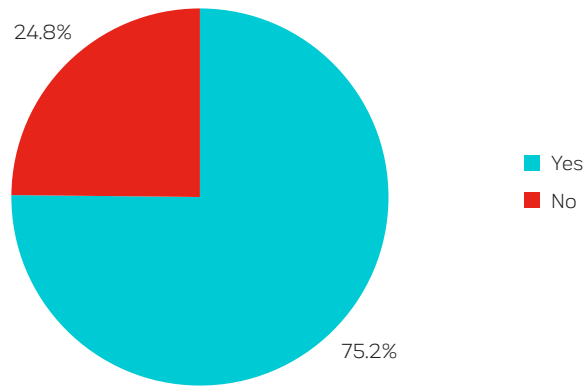
This chapter presents a summary of survey participants' experiences and behaviours related to non-medical cannabis use in the 30 days prior to survey completion. Such information is helpful for understanding Islanders' most recent experiences with non-medical cannabis use. Similar to the previous chapter, this information can be used to assess short-term impacts of legalization. As defined earlier, 'current use' means cannabis use within the past 12 months, 'former use' means cannabis use that did not occur in the past 12 months, and 'non-use' means never using cannabis or using it only once in one's lifetime. This chapter focuses on survey participants who currently use cannabis. Cannabis use for non-medical purposes includes recreational, social, or spiritual use.

The vast majority of participants who currently use non-medical cannabis used it in the past 30 days.

Non-medical cannabis use in the past 30 days

About three-quarters (75.2%) of survey participants who reported non-medical cannabis use in the past year had used cannabis in the past 30 days (Figure 5.1).

FIGURE 5.1. NON-MEDICAL CANNABIS USE IN THE PAST 30 DAYS, CURRENT USERS



Based on data from the 2018 PEI Cannabis Survey.

Of those who used cannabis in the past 30 days, the median amount of money spent to purchase it was \$50.

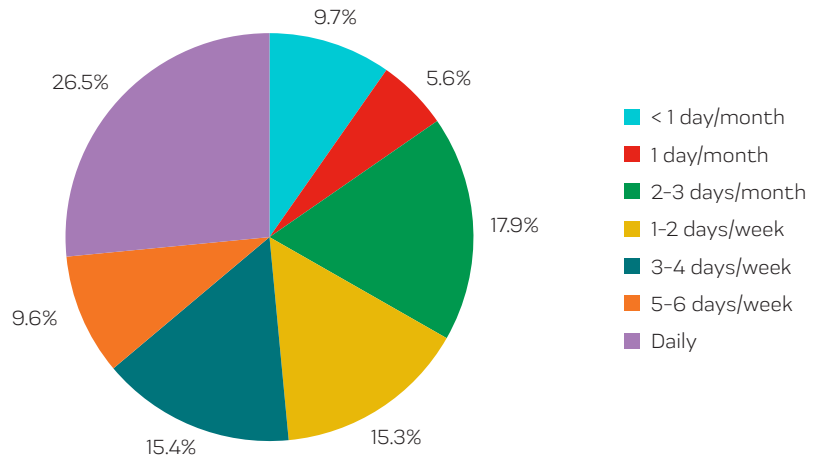
45

More than half of participants who used non-medical cannabis in the past 30 days used it three or more days per week.

Frequency of non-medical cannabis use in the past 30 days

In the past 30 days, the frequency of non-medical cannabis use ranged from less than once per month to daily. More than half (51.5%) of participants used cannabis for non-medical purposes in the past 30 days used it three or more days per week (Figure 5.2).

FIGURE 5.2. FREQUENCY OF NON-MEDICAL CANNABIS USE IN THE PAST 30 DAYS, CURRENT USERS



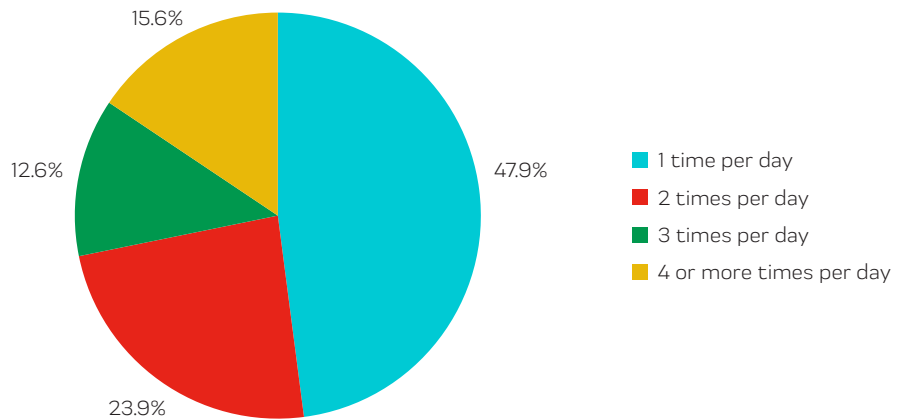
Based on data from the 2018 PEI Cannabis Survey.

On average, when non-medical cannabis was used, it was used 1-2 times per day.

Average number of times non-medical cannabis was used each day

Approximately half of participants (47.9%) who used cannabis for non-medical purposes in the past 30 days used it, on average, once per day. Approximately one-quarter (23.9%) used cannabis twice per day, 12.6% used it three times per day, and 15.6% used it four or more times per day (Figure 5.3).

FIGURE 5.3. AVERAGE NUMBER OF TIMES NON-MEDICAL CANNABIS WAS USED ON THE DAYS USED IN THE PAST 30 DAYS, CURRENT USERS



Based on data from the 2018 PEI Cannabis Survey.

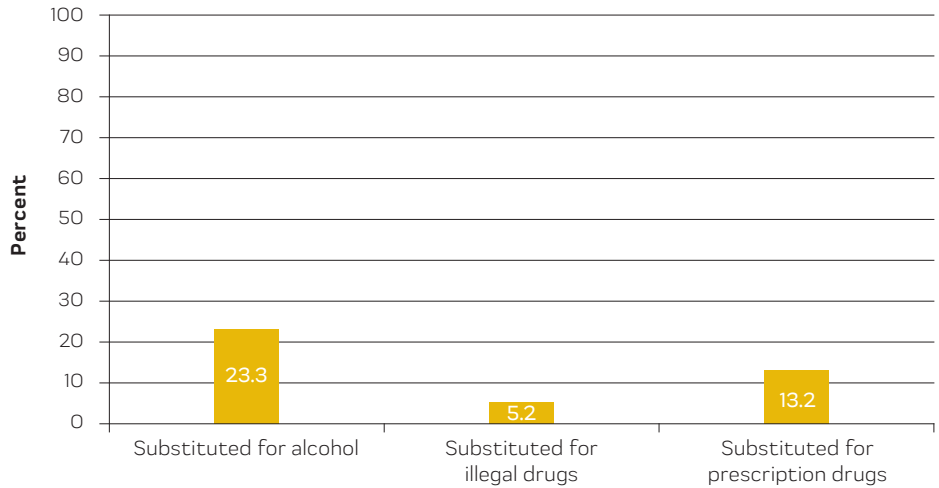
47

Non-medical cannabis was commonly used as a substitute for alcohol in the past 30 days.

Substitution of non-medical cannabis for other substances

About one-quarter (23.3%) of participants who currently use non-medical cannabis used it as a substitute for alcohol in the past 30 days (Figure 5.4). Additionally, 5.2% of participants who currently use non-medical cannabis substituted it for illegal drugs and 13.2% substituted it for prescription drugs in the past 30 days.

FIGURE 5.4. SUBSTITUTING NON-MEDICAL CANNABIS FOR OTHER SUBSTANCES IN THE 30 DAYS, CURRENT USERS

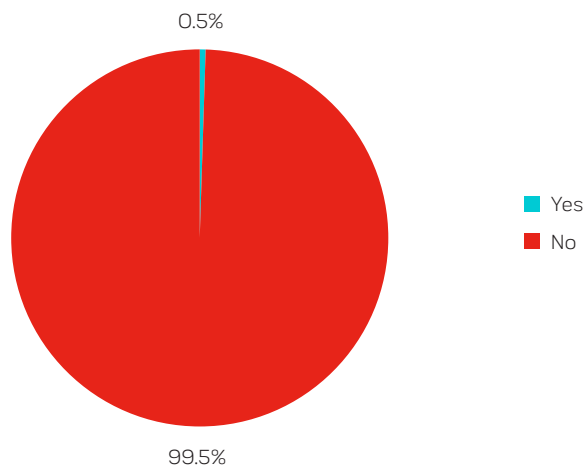


Based on data from the 2018 PEI Cannabis Survey.

Issues related to non-medical cannabis use

An overwhelming majority of participants who have used non-medical cannabis (99.5%) reported not having any health, social, legal, or financial problems due to using cannabis in the past 30 days, as illustrated in Figure 5.5. Half a percent (0.5%) reported having such problems, however.

FIGURE 5.5. HAVING PROBLEMS IN THE PAST 30 DAYS DUE TO NON-MEDICAL CANNABIS USE, CURRENT USERS



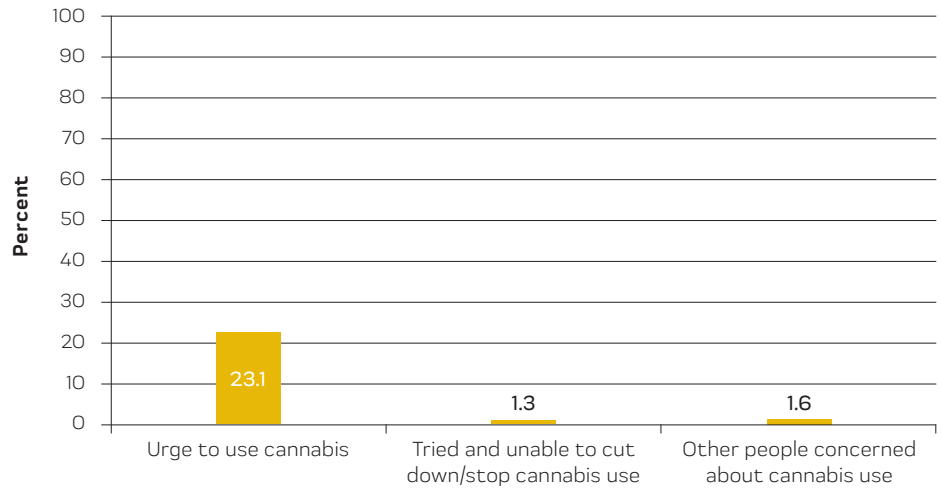
Based on data from the 2018 PEI Cannabis Survey.

49

About a quarter of people who currently use non-medical cannabis had an urge to use it in the past 30 days.

Figure 5.6 shows experience with different aspects of cannabis dependency in the past 30 days. The most common indicator of dependency, having an urge to use cannabis, was experienced by 23.1% of participants who currently use non-medical cannabis. Over one percent (1.6%) reported that a friend or relative had expressed concern about their cannabis use, and 1.3% were unable to cut down or stop using it when they tried to do so.

FIGURE 5.6. EXPERIENCING ASPECTS OF DEPENDENCY ON NON-MEDICAL CANNABIS IN THE PAST 30 DAYS, CURRENT USERS



Based on data from the 2018 PEI Cannabis Survey.

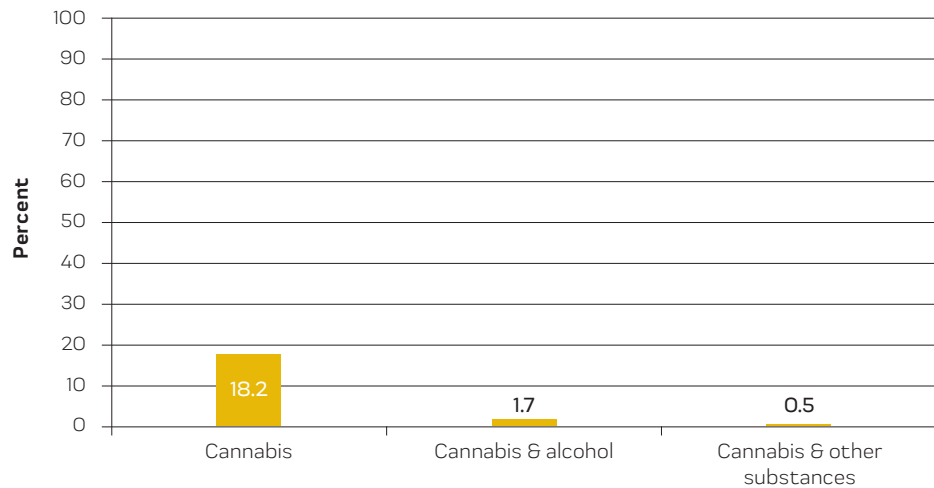
50

In the past 30 days, less than one-fifth of participants who currently use non-medical cannabis drove within six hours of its use.

Driving up to six hours after non-medical cannabis use

Almost one-fifth (18.2%) of survey participants who currently use non-medical cannabis drove motor vehicles within six hours of using it, either alone or in combination with other substances, in the past 30 days (Figure 5.7). Driving within six hours of using non-medical cannabis in combination with alcohol was reported by 1.7%, and 0.5% drove within six hours of using cannabis in combination with other substances.

FIGURE 5.7. DRIVING UP TO SIX HOURS AFTER NON-MEDICAL CANNABIS USE IN THE PAST 30 DAYS, CURRENT USERS

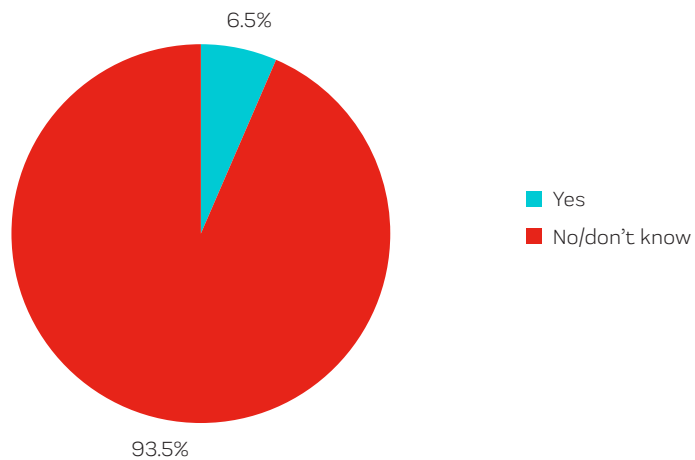


Based on data from the 2018 PEI Cannabis Survey.

Passenger of a driver who used non-medical cannabis up to six hours before driving

In the past 30 days, 6.5% of survey participants had been passengers of drivers who had used non-medical cannabis up to six hours before driving (Figure 5.8).

FIGURE 5.8. PASSENGER OF A DRIVER WHO USED NON-MEDICAL CANNABIS UP TO SIX HOURS BEFORE DRIVING IN THE LAST 30 DAYS, ALL SURVEY PARTICIPANTS

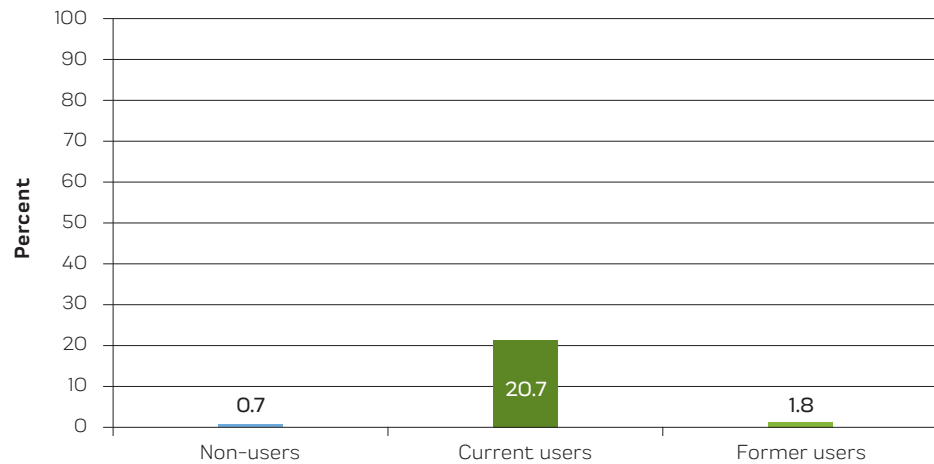


Based on data from the 2018 PEI Cannabis Survey.

In the past 30 days, people who currently use non-medical cannabis were more likely than the other groups to have been passengers of a driver who may have been impaired by cannabis.

When looking at the responses to this question by cannabis use, people who currently use cannabis were significantly more likely to have had this experience in the last 30 days (20.7%) than non-users (0.7%) and people who used cannabis formerly (1.8%; Figure 5.9).

FIGURE 5.9. CANNABIS USE BY BEING A PASSENGER OF A DRIVER WHO USED NON-MEDICAL CANNABIS UP TO SIX HOURS BEFORE DRIVING IN THE LAST 30 DAYS, ALL SURVEY PARTICIPANTS



Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

CHAPTER 6

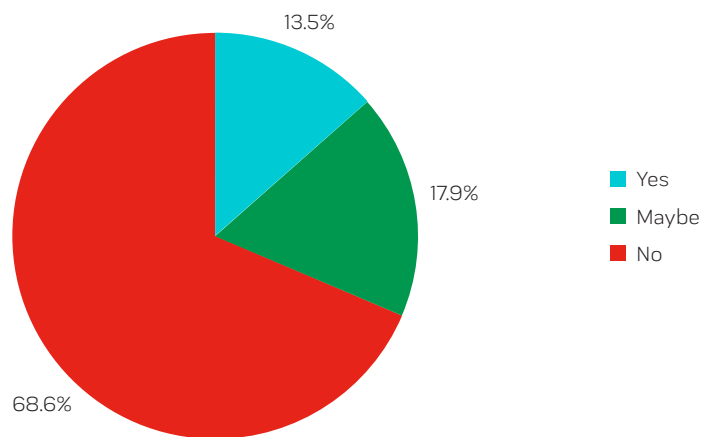
Impact of Legalization, Perceptions and Attitudes about Non-medical Cannabis, and Knowledge about Cannabis in General

This chapter describes potential impacts of legalization on patterns of non-medical cannabis use, perceptions and attitudes related to non-medical cannabis and its use, and general knowledge about lower-risk cannabis use and legal aspects of cannabis use in PEI. The information included here helps improve understanding about Islanders' views regarding cannabis use. It also helps with the development of public health and safety services, programs, and policies. As with other chapters, survey participants are described according to their cannabis use: 'non-use,' 'current use,' and 'former use.' 'Non-use' means no cannabis use at all or using cannabis only once. 'Current use' means cannabis use occurring in the past 12 months. 'Former use' refers to cannabis use that did not occur in the past 12 months. Using cannabis for non-medical purposes includes using it recreationally, socially, or spiritually.

Likelihood of trying non-medical cannabis after legalization

Most (68.6%) non-users and participants who formerly used cannabis said they were not more likely to try cannabis after legalization. On the other hand, 13.5% were more likely to try it, and 17.9% may be more likely to try it after legalization (Figure 6.1).

FIGURE 6.1. LIKELIHOOD OF TRYING NON-MEDICAL CANNABIS AFTER LEGALIZATION, NON-USERS AND FORMER USERS

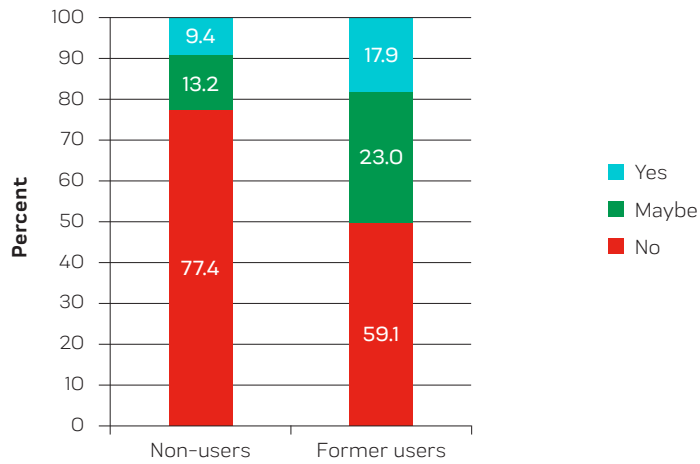


Based on data from the 2018 PEI Cannabis Survey.

Ten percent (10%) of non-users will likely try non-medical cannabis following legalization.

Figure 6.2 illustrates the likelihood of using cannabis after legalization among people who do not currently use it. Although the majority of non-users (77.4%) were unlikely to try cannabis after legalization, nearly a quarter said they would (9.4%) or may (13.2%) try it. Among those who had used cannabis formerly, 17.9% were likely to try it after legalization, and another 23.0% may try it.

FIGURE 6.2. CANNABIS USE BY LIKELIHOOD OF TRYING NON-MEDICAL CANNABIS AFTER LEGALIZATION, NON-USERS AND FORMER USERS



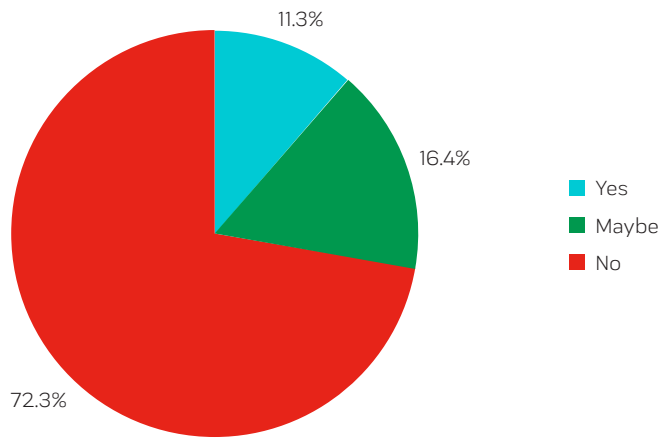
Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

About 28% of people who currently use or formerly used non-medical cannabis may increase their use following legalization.

Likelihood of increasing non-medical cannabis use after legalization

Among participants who currently use non-medical cannabis or who used it formerly, the majority (72.3%) were unlikely to increase their use after legalization (Figure 6.3). However, 11.3% reported that they would likely increase their use after legalization, and 16.4% reported that they may do so.

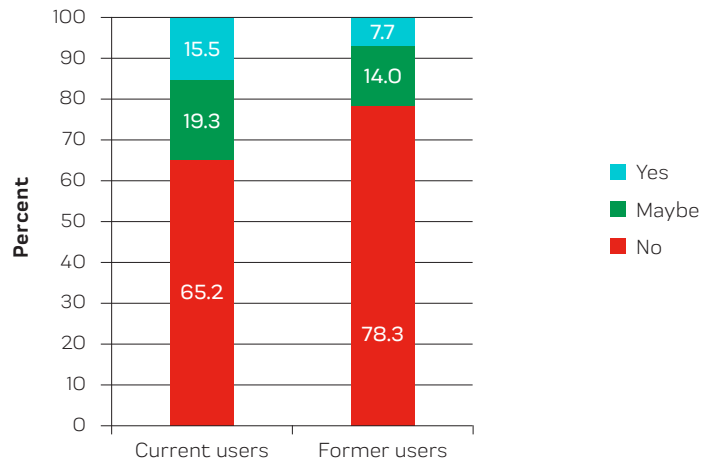
FIGURE 6.3. LIKELIHOOD OF INCREASING NON-MEDICAL CANNABIS USE AFTER LEGALIZATION, CURRENT AND FORMER USERS



Based on data from the 2018 PEI Cannabis Survey.

Figure 6.4 shows the likelihood of increasing cannabis use among those who currently use it and those formerly used it. Among those who currently use cannabis, 15.5% would likely increase their use, and 65.2% were unlikely to do so. Among those who formerly use cannabis, 7.7% would likely increase their use, while 78.3% would not.

FIGURE 6.4. CANNABIS USE BY LIKELIHOOD OF INCREASING NON-MEDICAL CANNABIS USE AFTER LEGALIZATION, CURRENT AND FORMER USERS

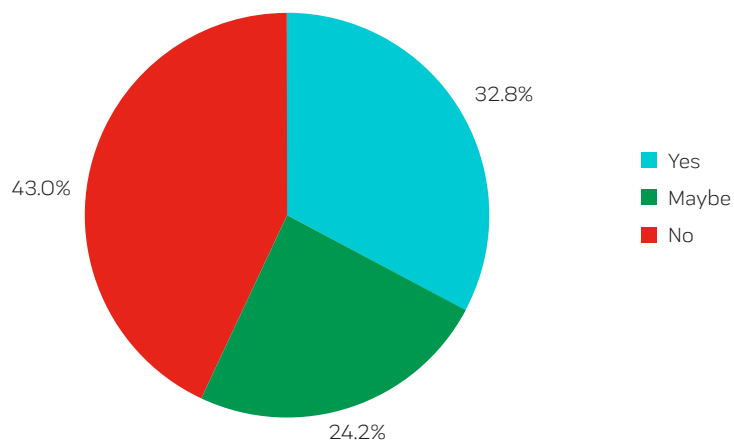


Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

Likelihood of using different types of non-medical cannabis products after legalization

Approximately one-third (32.8%) of those who currently use, or formerly used, non-medical cannabis would be more likely to consume different cannabis products after legalization, and 24.2% may be more likely to do so (Figure 6.5).

FIGURE 6.5. LIKELIHOOD OF USING DIFFERENT TYPES OF NON-MEDICAL CANNABIS PRODUCTS AFTER LEGALIZATION, CURRENT AND FORMER USERS

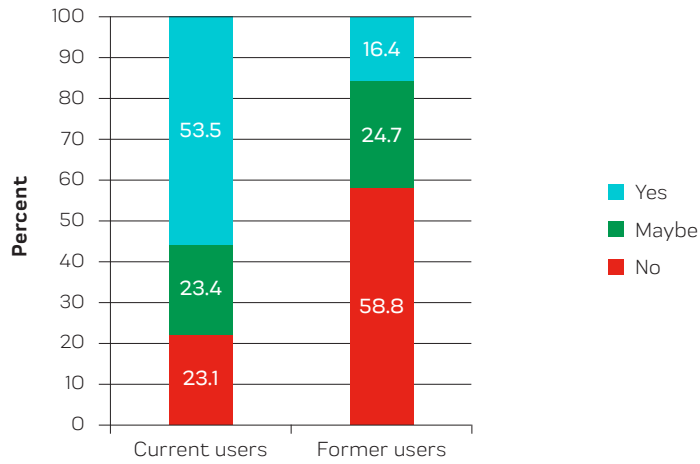


Based on data from the 2018 PEI Cannabis Survey.

Over half of people who consume cannabis currently or formerly may use different types of non-medical cannabis products after legalization.

The likelihood of consuming different products is shown by cannabis use in Figure 6.6. After legalization, people who currently use non-medical cannabis would be much more likely to try different types of products when compared to those who used it formerly (54.5% versus 16.4%).

FIGURE 6.6. CANNABIS USE BY LIKELIHOOD OF USING DIFFERENT TYPES OF NON-MEDICAL CANNABIS PRODUCTS AFTER LEGALIZATION, CURRENT AND FORMER USERS

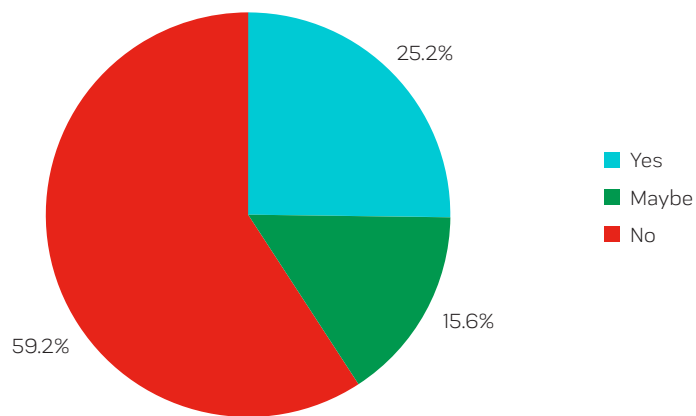


Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

Likelihood of obtaining non-medical cannabis from a different source after legalization

About one-quarter of survey participants who used non-medical cannabis formerly or who currently use it would likely obtain cannabis from a different source after legalization (25.2%), while 15.6% reported that they may do the same (Figure 6.7).

FIGURE 6.7. LIKELIHOOD OF OBTAINING NON-MEDICAL CANNABIS FROM A DIFFERENT SOURCE AFTER LEGALIZATION, CURRENT AND FORMER USERS



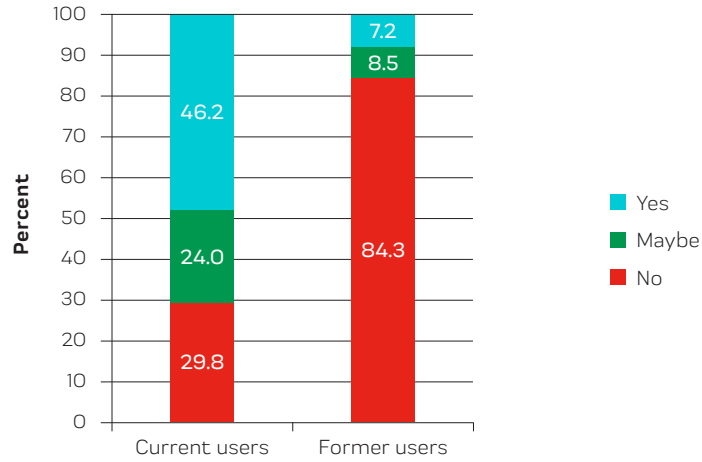
Based on data from the 2018 PEI Cannabis Survey.

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Legalization may result in changes in how 70% of people who currently use non-medical cannabis obtain it.

Figure 6.8 shows the likelihood of obtaining cannabis from a different source based on cannabis use. Almost half (46.2%) of people who currently use cannabis would likely change sources after legalization. For those who formerly used cannabis, this value was 7.2%.

FIGURE 6.8. CANNABIS USE BY LIKELIHOOD OF OBTAINING NON-MEDICAL CANNABIS FROM A DIFFERENT SOURCE AFTER LEGALIZATION, CURRENT AND FORMER USERS



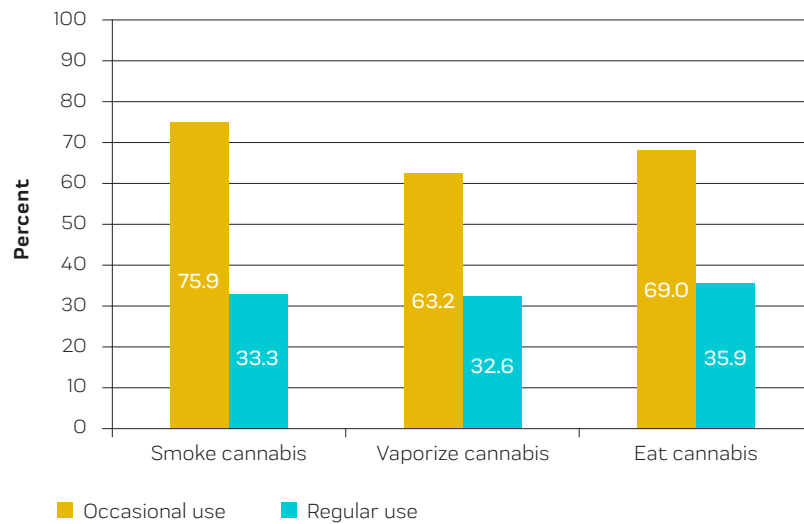
Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

Occasional use of non-medical cannabis was seen to carry a lower risk than regular use.

Perceived risks related to non-medical cannabis use

Figure 6.9 shows that overall, participants perceived occasional cannabis use to be of lower risk than regular cannabis use. For instance, while 75.9% of participants perceived smoking cannabis occasionally to carry no or slight risk, 33.3% perceived the same for smoking cannabis regularly. This pattern holds for vaporizing and eating non-medical cannabis.

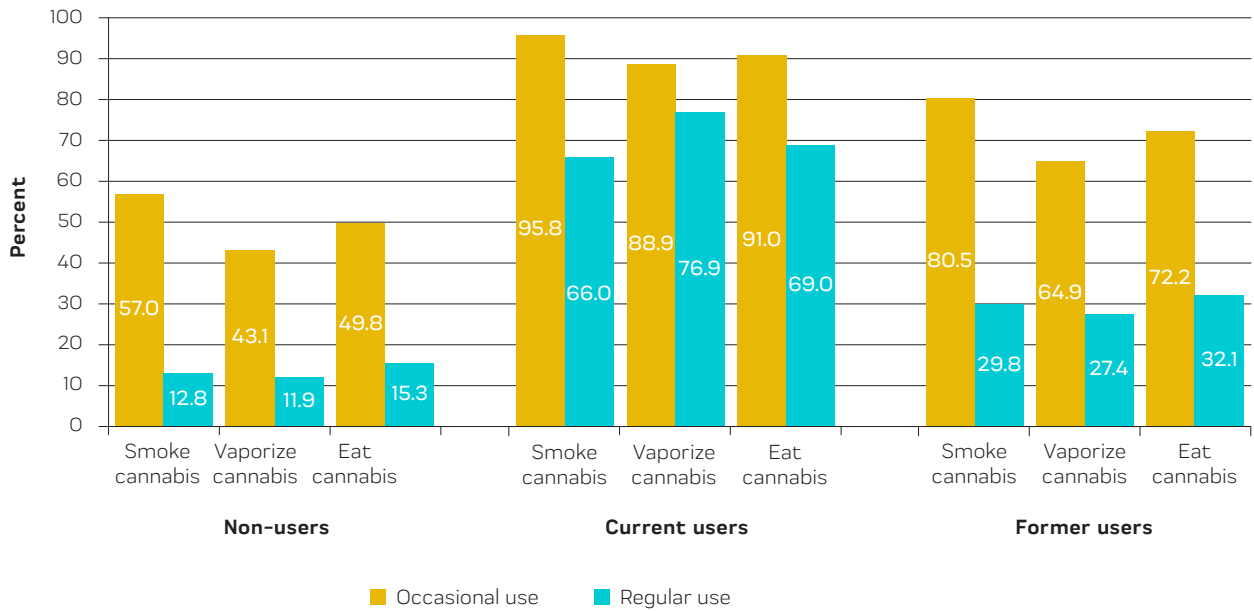
FIGURE 6.9. PERCEPTION THAT NON-MEDICAL CANNABIS USE CARRIES NO/SLIGHT RISK



Based on data from the 2018 PEI Cannabis Survey. The differences between the groups are statistically significant at $p < 0.05$.

Figure 6.10 shows participants’ perception of no or slight risk due to occasional or regular non-medical cannabis use according to cannabis use. Non-users, those who used cannabis formerly, and those who use cannabis regularly all perceived occasional cannabis use to carry a lower risk than regular cannabis use, regardless of how cannabis was consumed. However, people who currently use cannabis were more likely than the other groups to perceive regular and occasional cannabis use to carry no or slight risk, and non-users were least likely to have this perception. For example, 66.0% of those who currently use non-medical cannabis believed that smoking it regularly carried no or slight risk, compared to 29.8% of those who used cannabis formerly, and 12.8% of non-users.

FIGURE 6.10. CANNABIS USE BY PERCEPTION THAT NON-MEDICAL CANNABIS USE CARRIES NO/SLIGHT RISK



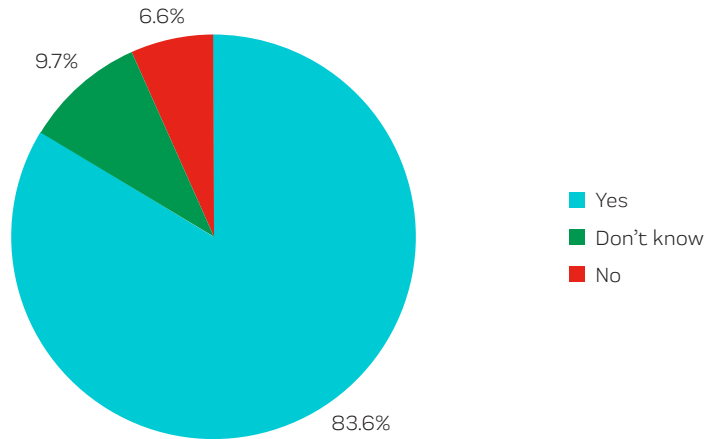
Based on data from the 2018 PEI Cannabis Survey. The differences between the groups are statistically significant at $p < 0.05$.

Over 80% of survey participants believe non-medical cannabis use can become habit-forming

Belief that non-medical cannabis use can become habit-forming

The majority of participants (83.6%) believed that non-medical cannabis use could become habit-forming (Figure 6.11).

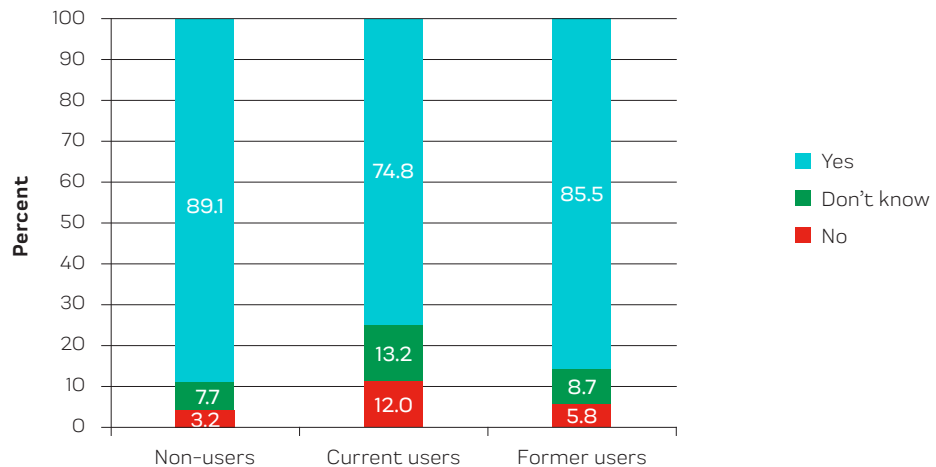
FIGURE 6.11. BELIEF THAT NON-MEDICAL CANNABIS CAN BECOME HABIT-FORMING



Based on data from the 2018 PEI Cannabis Survey.

In Figure 6.12, the belief that cannabis could become habit-forming is shown by cannabis use. While the majority of those who currently use cannabis (74.8%) believed that it could become habit-forming, they were less likely to have this belief than non-users (89.1%) and those who formerly used it (85.5%).

FIGURE 6.12. CANNABIS USE BY THE BELIEF THAT NON-MEDICAL CANNABIS CAN BECOME HABIT-FORMING

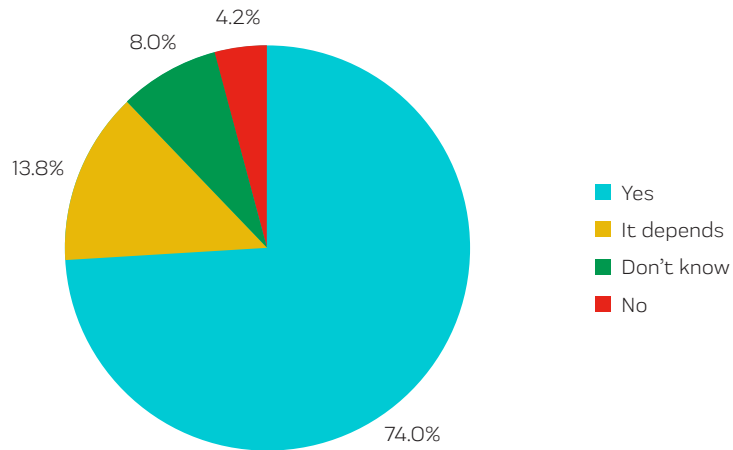


Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

Belief that non-medical cannabis use impairs one's ability to drive

The majority of participants (74.0%) believed that non-medical cannabis use impairs one's ability to drive a vehicle (Figure 6.13). Almost 14.0% of participants' responded "it depends". Some of the open-ended answers provided with this response include: the amount used; tolerance; contents of product (CBD versus THC); frequency of use; and method of use such as smoking, eating, etc.

FIGURE 6.13. BELIEF THAT NON-MEDICAL CANNABIS CAN IMPAIR ONE'S ABILITY TO DRIVE

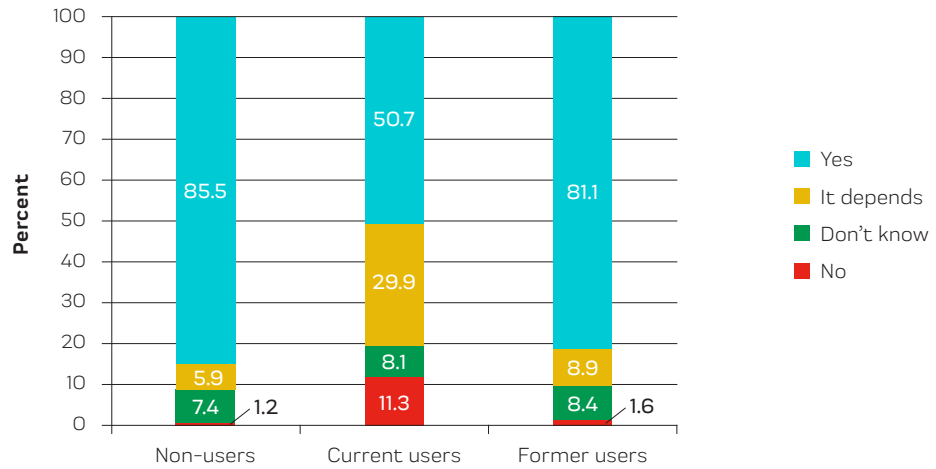


Based on data from the 2018 PEI Cannabis Survey.

People who currently use non-medical cannabis were less likely than others to believe it could impair their ability to drive.

Figure 6.14 shows the distribution of these beliefs by cannabis use. Over half (50.7%) of those who currently use cannabis believed that it could impair one’s ability to drive, compared to 85.5% among non-users and 81.1% among those who used cannabis formerly. People who use cannabis currently were also more likely to reply with “it depends” when compared to the other two groups (29.9% versus 5.9% and 8.9%, respectively).

FIGURE 6.14. CANNABIS USE BY THE BELIEF THAT NON-MEDICAL CANNABIS CAN IMPAIR ONE’S ABILITY TO DRIVE



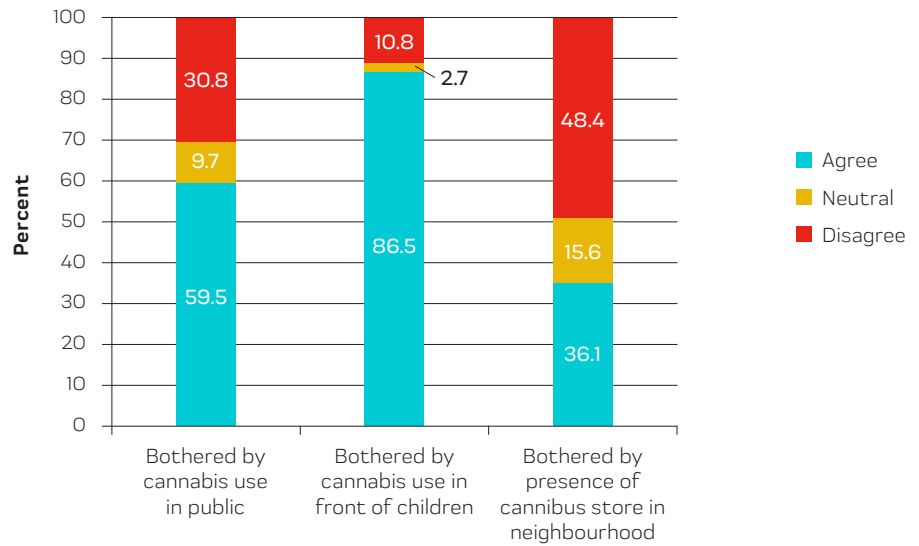
Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

The majority of non-users and former users were bothered by non-medical cannabis use in public or in front of children.

Attitudes towards non-medical cannabis use

The majority of participants were bothered by people using non-medical cannabis in public (59.5%) or in front of children (86.5%). Additionally, 36.1% of participants were bothered by having a cannabis store in their neighborhood (Figure 6.15).

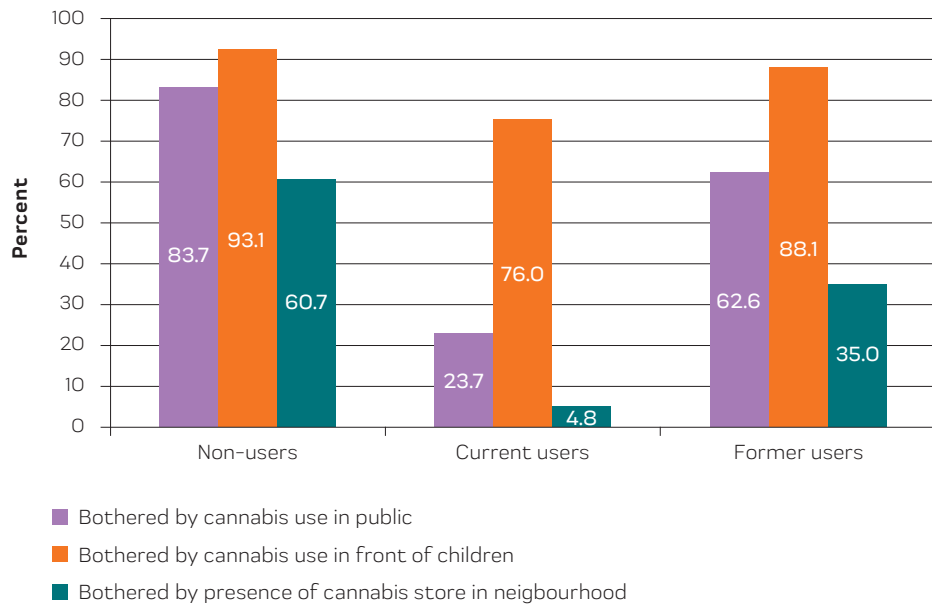
FIGURE 6.15. ATTITUDES TOWARDS NON-MEDICAL CANNABIS



Based on data from the 2018 PEI Cannabis Survey.

Figure 6.16 shows participants who were bothered by cannabis use in public, cannabis use in front of children, and cannabis stores in their neighbourhoods according to cannabis use. The majority of non-users (83.7%) and those who used non-medical cannabis formerly (62.6%) were bothered by its use in public. Across all three groups of participants, the majority were bothered by non-medical cannabis use in front of children (93.1%, 76.0%, and 88.1%). People who currently use cannabis were least likely to be bothered by having a cannabis store in their neighbourhood (4.8% versus 60.7% and 35.0%).

FIGURE 6.16. CANNABIS USE AND HAVING NEGATIVE ATTITUDES TOWARDS NON-MEDICAL CANNABIS



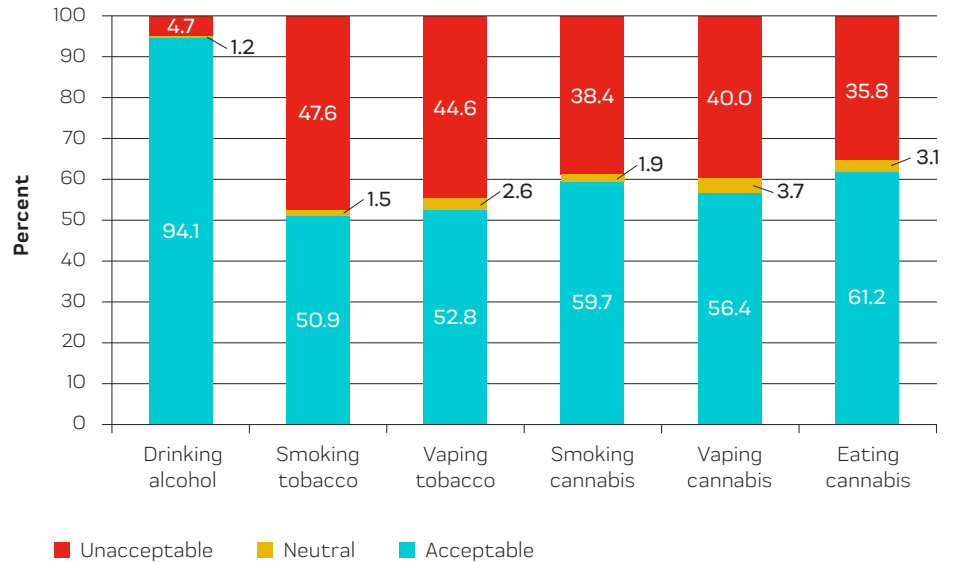
Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

Cannabis use was thought to be less socially acceptable than alcohol use.

Social acceptability of using substances occasionally

Figure 6.17 shows participants’ perceptions about the social acceptability of occasional use of alcohol, tobacco, and cannabis. The vast majority of participants (94.0%) thought drinking alcohol occasionally was socially acceptable. Cannabis use was thought to be less socially acceptable than alcohol use. Different methods of cannabis use were seen to be more or less equally socially acceptable (59.7% for smoking, 56.4% for vaping, and 61.2% for eating).

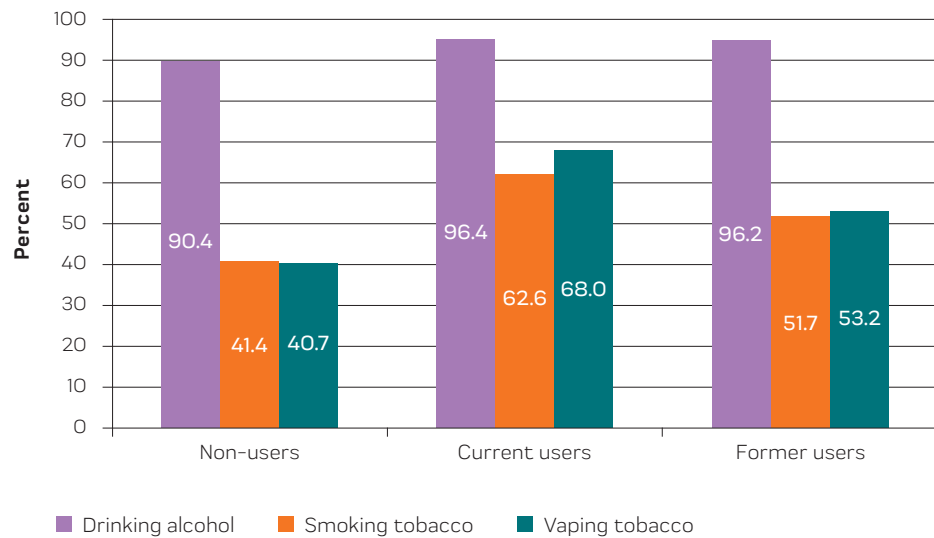
FIGURE 6.17. SOCIAL ACCEPTABILITY OF USING SUBSTANCES OCCASIONALLY



Based on data from the 2018 PEI Cannabis Survey.

Figure 6.18a focuses on those who thought occasional alcohol or tobacco use was socially acceptable. Regardless of cannabis use group, the vast majority of participants thought it was socially acceptable to drink alcohol occasionally. Most people who currently use cannabis thought that vaping (68.0%) and smoking (62.6%) tobacco were socially acceptable.

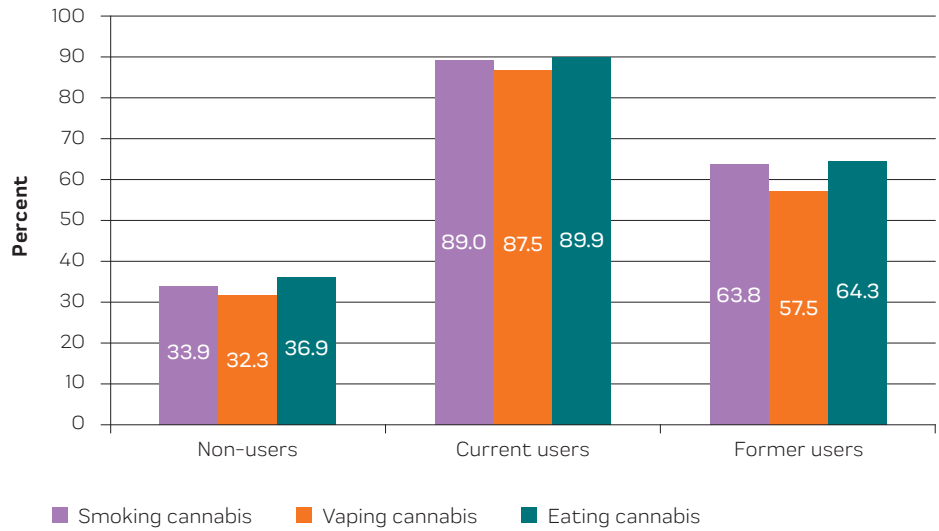
FIGURE 6.18A. CANNABIS USE AND BELIEVING OCCASIONAL ALCOHOL AND TOBACCO USE ARE SOCIALLY ACCEPTABLE



Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

Figure 6.18b shows those who thought occasional cannabis use was socially acceptable. Non-users were least likely to think any cannabis use was socially acceptable (33.9% for smoking, 32.3% for vaping, and 36.9% for eating). Among those who currently use cannabis, the corresponding percentages were 89.0%, 87.5%, and 89.9%, respectively.

FIGURE 6.18B. CANNABIS USE AND BELIEVING OCCASIONAL NON-MEDICAL CANNABIS USE IS SOCIALLY ACCEPTABLE

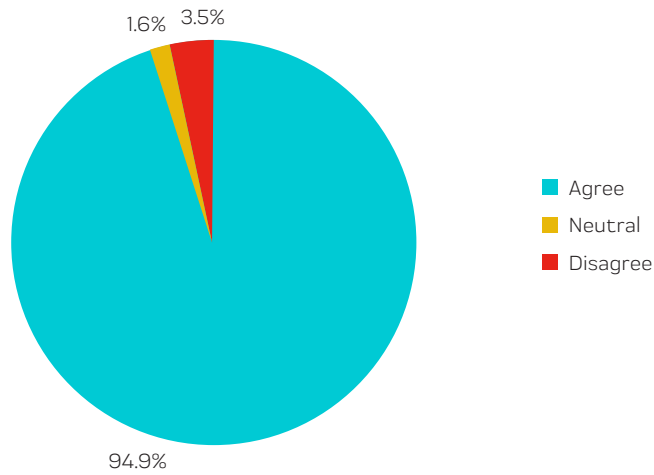


Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

Ability to refuse cannabis

Figure 6.19 shows participants' belief that they would be able to refuse non-medical cannabis when they did not want to use it. While some participants (3.5%) thought they may have difficulty refusing non-medical cannabis when offered, the great majority of participants (94.9%) thought they would be able to refuse cannabis when offered.

FIGURE 6.19. ABLE TO REFUSE NON-MEDICAL CANNABIS



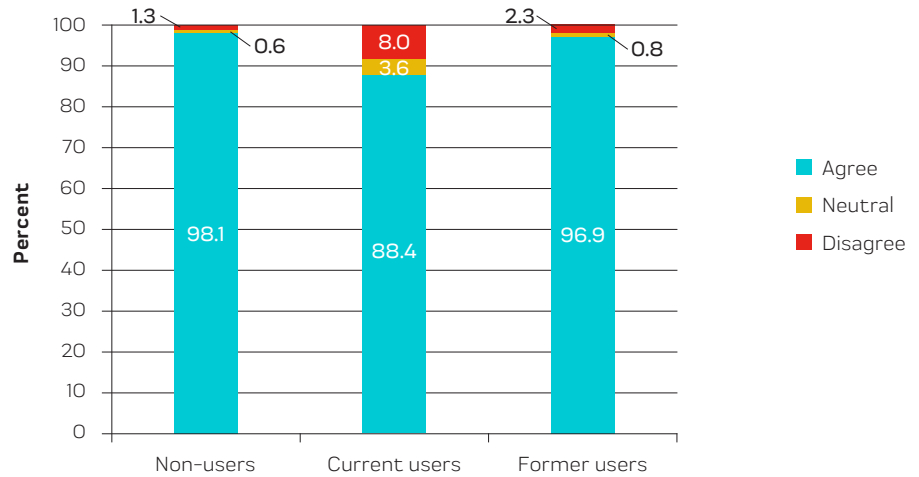
Based on data from the 2018 PEI Cannabis Survey.

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Eight percent (8%) of current users would have difficulty refusing non-medical cannabis when offered, and about 88% would not.

Figure 6.20 shows this belief by cannabis use. Although the majority of people who currently use cannabis believe they would be able to refuse it (88.4%), they were the group least likely to have this belief. In fact, 11.6% of them disagreed or were unsure they would be able to refuse cannabis. For non-users, the percentages were 98.1% and 1.9%, respectively.

FIGURE 6.20. CANNABIS USE AND BEING ABLE TO REFUSE NON-MEDICAL CANNABIS



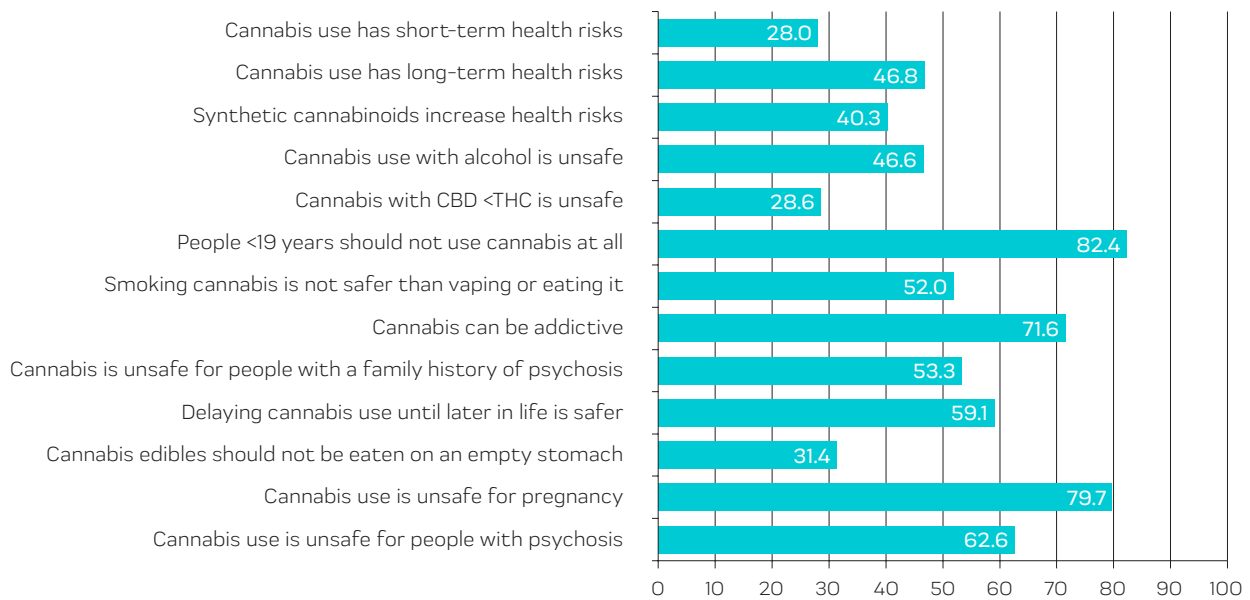
Based on data from the 2018 PEI Cannabis Survey. The differences between the groups were statistically significant at $p < 0.05$.

In general, knowledge about lower-risk cannabis use and related health risks was low.

Knowledge about cannabis

Figure 6.21 shows the proportion of participants who provided correct answers for each knowledge item about cannabis (i.e., based on Canada’s Lower-Risk Cannabis Use Guidelines). Participants scored highest on the knowledge item “people less than 19 years shouldn’t use cannabis” (82.4% answered this correctly), followed by “cannabis use is unsafe for pregnancy,” which is correctly answered by 79.7%. The knowledge item that had the least correct answers was “cannabis use has short-term health risks;” it was answered correctly by only 28.0% of participants.

FIGURE 6.21. PERCENT OF CORRECT ANSWERS FOR EACH KNOWLEDGE ITEM



Based on data from the 2018 PEI Cannabis Survey.

CHAPTER 7

Cannabis Use for Medical Purposes

Unlike previous chapters that focused on non-medical cannabis use, this chapter focuses on cannabis use for medical purposes (i.e., cannabis prescribed by a physician) among survey participants in their lifetime. This information is helpful in understanding experiences with medical cannabis use, and its relationship to use of non-medical cannabis and other substances.

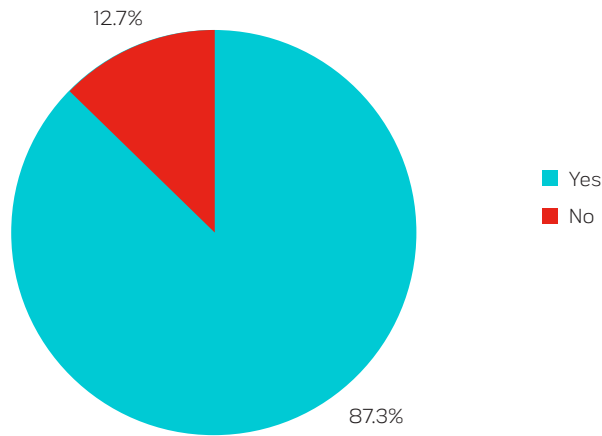


About 86% of survey participants who used cannabis for medical purposes also used it for non-medical purposes.

Use of cannabis for medical purposes

Figure 7.1 shows that 12.7% of survey participants had used cannabis for medical purposes at some point in their lives. Approximately 86% of these participants also reported using cannabis for non-medical purposes more than once.

FIGURE 7.1. LIFETIME MEDICAL CANNABIS USE



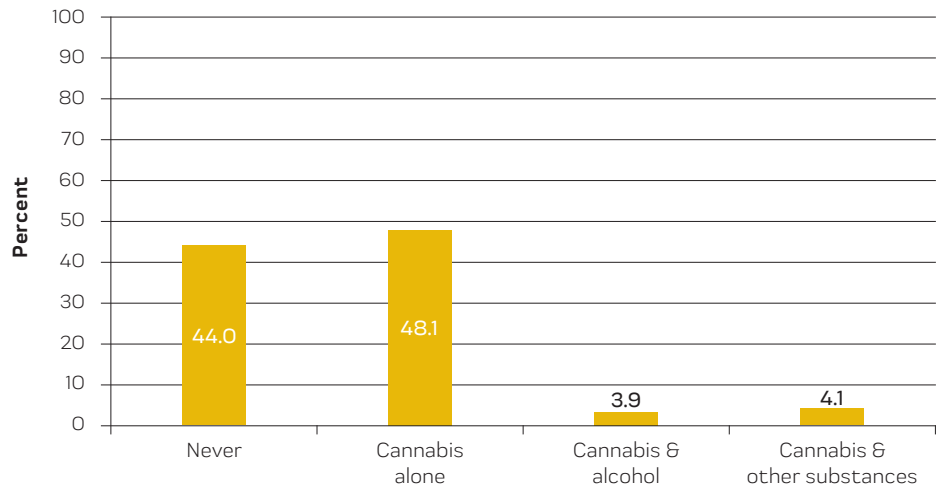
Based on data from the 2018 PEI Cannabis Survey.

Over half of those who used cannabis for medical purposes reported ever driving within six hours of its use.

Driving up to six hours after medical cannabis use

Almost half of participants who used cannabis for medical purposes (48.1%) reported ever driving within six hours of using cannabis alone (Figure 7.2). About four percent reported driving within six hours of using cannabis combined with either alcohol (3.9%) or other substances (4.1%). Over half of those who reported using cannabis for medical purposes have ever driven within six hours of using cannabis.

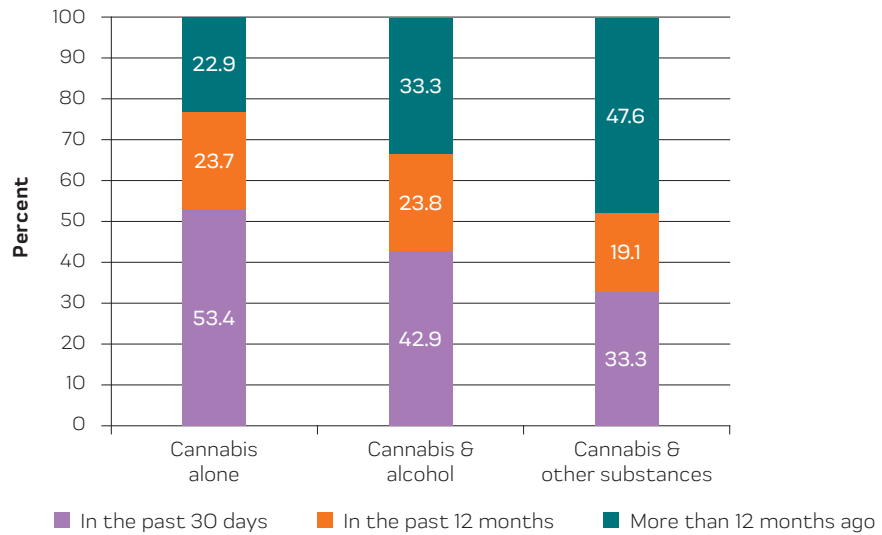
FIGURE 7.2. DRIVING WITHIN 6 HOURS OF MEDICAL CANNABIS USE, MEDICAL CANNABIS USERS



Based on data from the 2018 PEI Cannabis Survey.

Figure 7.3 shows how recently survey participants had driven within six hours of using cannabis medically. Most participants who reported driving within six hours of using cannabis alone did this in the past 30 days (53.4%), 42.9% of those who drove within six hours of using medical cannabis with alcohol did this in the past 30 days, and 33.3% of those who drove within six hours of using medical cannabis with other substances did this in the past 30 days.

FIGURE 7.3. RECENTNESS OF DRIVING WITHIN SIX HOURS OF MEDICAL CANNABIS USE, MEDICAL CANNABIS USERS



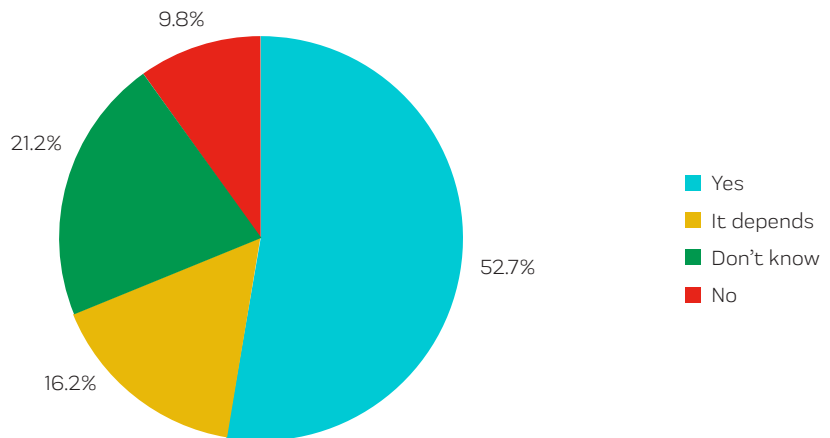
Based on data from the 2018 PEI Cannabis Survey.

About half of participants believed that medical cannabis impairs one's ability to drive.

Belief that medical cannabis use impairs one's ability to drive

More than half of survey participants (52.7%) said using cannabis for medical purposes can impair one's ability to drive (Figure 7.4). Another 16.2% responded "it depends," and themes provided in the open-ended answers qualifying this response included: the amount used, tolerance, contents of product (CBD versus THC), frequency of use, and method of use.

FIGURE 7.4. BELIEF THAT MEDICAL CANNABIS CAN IMPAIR ONE'S ABILITY TO DRIVE, SURVEY PARTICIPANTS



Based on data from the 2018 PEI Cannabis Survey.

CHAPTER 8

Conclusions

The first PEI Cannabis Survey provides important information on non-medical cannabis use behaviours, attitudes towards cannabis, and knowledge of lower-risk cannabis use before legalization



Key findings include the following:

- 1. Cannabis use is common in PEI and is likely to increase:** Half of Islanders aged 16 years and older have used cannabis previously and just over a quarter have used in the past 12 months. Among people who used cannabis in the previous month, 26% used it daily, and half used it more than 2 days per week. With legalization, consumption is anticipated to increase, as 35% of current users may increase consumption, and roughly 30% of former users and non-users may try cannabis.
- 2. Cannabis use is more common among vulnerable populations:** Youth, people who are unemployed, and those with lower education levels, lower income, and lower self-rated mental health are more highly represented among people who use cannabis.
- 3. Many people who currently use cannabis are engaging in higher risk behaviors:** Reported higher risk behaviors included daily or near daily cannabis use, beginning cannabis use at a younger age, using cannabis with a poor mental health status, using high-potency cannabis products, using combusted cannabis products, using cannabis in combination with alcohol and tobacco, driving within 6 hours of cannabis use or being a passenger of someone who used within six hours, and using cannabis to get “stoned” or “high” before or while at school or at work.
- 4. People who currently use cannabis have a lower perception of cannabis-related health and social risks:** They are most likely to perceive cannabis consumption as socially acceptable, to perceive a lower risk associated with consuming cannabis, and to be the least bothered by exposure to cannabis or to cannabis stores.
- 5. There are considerable knowledge gaps regarding lower-risk cannabis use:** There was an understanding that people less than 19 years should not consume cannabis, and that cannabis is unsafe during pregnancy. However, less than 50% of individuals responded correctly that cannabis has short-term and long-term health risks, cannabis with higher THC than CBD is unsafe, cannabis edibles should not be eaten on an empty stomach, cannabis use with alcohol is unsafe, and synthetic cannabinoids increase health risks.

This information will help guide public health and safety policies, programs, and research going forward. The next PEI Cannabis Survey will be launched in August 2019.



TECHNICAL APPENDIX: SURVEY AND ANALYSIS METHODS

A survey was used to collect information about cannabis use for medical and non-medical purposes, and to assess participants' knowledge and attitudes towards cannabis use and legalization in PEI.

Survey population and sample size

Only PEI residents aged 16 years and older were eligible to participate in the survey. The survey included a non-probability (conventional convenience), cross-sectional sample. Using 80% power and 5% level of significance, a sample size of 2500 participants was targeted. The sample size calculation was based on estimating the proportion of people who used non-medical cannabis past year with a margin of error of 5% and a confidence level of 95%. It used estimates from previous surveys (in the 2015 Canadian Tobacco Alcohol and Drugs Survey, 44.5% of Canadians ever used cannabis and 12.3% used cannabis in the past year) and accounted for the skip patterns in the survey questionnaire. There were 4,324 participants who submitted completed questionnaires, and the response rate among eligible participants was 84.4%.

Survey administration

The survey was administered in English and French using a web-based, pre-coded questionnaire that was launched on August 1, 2018. The survey remained open until September 18, 2018. A marketing plan was used to increase Islanders' awareness about the survey and to drive recruitment. The plan included promotions through a radio interview, newspaper articles, and social media posts that including a promotional video.

Upon completing the survey, participants could enter a draw to win a prize. A member of the project team did a random draw every one-to-two weeks to select winners. Four iPads and 20 Confederation Bridge passes were distributed to survey participants.

Survey questionnaire

The survey questionnaire included 70 questions. The majority of the questions were carefully selected from previous validated questionnaires designed for public health surveillance of cannabis use. The sources of the validated questionnaires were: Canadian Cannabis Survey 2018- Draft; National Cannabis Survey ; Canadian Student Tobacco, Alcohol and Drugs Survey 2016/2017; Canadian Tobacco, Alcohol and Drugs Survey 2017; Cannabis Access for Medical Purposes Survey; and Tobacco Panel Survey, Health Promotion & Chronic Disease Prevention

Program, Oregon Public Health Division. In addition, some questions were developed by the team by modifying existing validated questions from the aforementioned surveys.

The survey questionnaire was divided into seven sections. The first section contained socio-demographic characteristics of the participant such as age, gender, educational attainment, level of income, employment status, and regional zone of residency.

The second section inquired about lifetime use of cannabis for medical and non-medical purposes. The questions about cannabis use for medical purposes asked about driving after using cannabis and whether cannabis was used in combination with alcohol or other substances before driving. The questions about cannabis use for non-medical purposes covered topics such as: age of onset, methods for using cannabis, frequency of the urge to use cannabis and of using it with friends, driving within six hours of using cannabis or after using it in combination with alcohol, and using cannabis as a replacement for other drugs. Additionally, this section inquired about history of using cannabis during pregnancy or breastfeeding.

The third section focused on cannabis use for non-medical purposes in the 12 months preceding the survey. This section incorporated questions about frequency of use, methods of use, and whether cannabis was used alone or in combination with other substances such as alcohol, tobacco, or illicit drugs. Additionally, the section inquired about using cannabis in public; frequency of using it with different people such as spouse, friends, or family members; source of obtaining cannabis; absenteeism due to using cannabis; and impact of cannabis use on different aspects of life such as friendships, physical and mental health, finances, and quality of life.

The fourth section of the questionnaire considered cannabis use for non-medical purposes in the 30 days preceding the survey. This section included questions about frequency of use on a monthly and daily basis and the amount of money spent on cannabis during the month.

The fifth section is related to impact of legalization of non-medical cannabis use in Canada on respondents' use or intention to: use it, increase consumption, or obtain it from different sources.

The sixth section of the questionnaire covered participants' perceptions and attitudes towards using cannabis for non-medical purposes. This included their opinions about: whether cannabis use in different forms

has harmful effects on users' health or can impair driving, and the social acceptability of using cannabis for non-medical reasons. In addition, an assessment of respondents' assertiveness was included.

The last section of the survey questionnaire evaluated participants' knowledge about different aspects of cannabis use for non-medical reasons. For example, their knowledge about short- and long-term health risks of using cannabis, whether using it is safe in different circumstances, age to legally use cannabis for non-medical purposes, and cannabis' addictiveness.

After development, the questionnaire was pre-tested twice among public servants working on the cannabis file, and recommended changes were made to ensure understandability of the questions' meanings and the logical flow of the survey overall. The survey's information letter was also reviewed by clients in an addiction treatment program.

Analysis groups

The following groups were used to stratify the analyses:

1. Non-users: participants who reported that they have never used non-medical cannabis in their lifetime or who used it only once.
2. People who used cannabis for non-medical purposes: participants who reported using cannabis for non-medical purposes such as recreational, social, spiritual, lifestyle, and other non-medical uses. This group was further subdivided to:
 - a. *People who currently use cannabis for non-medical purposes (current users)*: those who used cannabis for non-medical purposes in the 12 months preceding the survey.
 - b. *People who no longer use cannabis for non-medical purposes (former users)*: those who used cannabis for non-medical purposes more than 12 months before completing the survey.

Statistical analyses

Data were analyzed using Stata 15.1. Proportions were calculated for categorical variables and continuous variables that had been categorized. Averages and medians were calculated for continuous variables such as age of participants and duration of cannabis use. To examine the association between the analysis groups and other variables, chi-square and one-way ANOVA tests were conducted. A p-value of <0.05 and a 95% confidence interval were used to determine statistical significance.

Ethical considerations

Participation in the survey was voluntary. Participants were provided with an information letter outlining the purpose, content, benefits, risks, and incentives for participating in the survey. At the end of the letter, participants were asked to give consent before being granted access to the survey. Participants could withdraw from the survey at any time by leaving their questionnaires incomplete or not submitting their responses. They could also choose not to answer questions. Incomplete questionnaires and those not submitted by participants were excluded from these analyses.

To ensure privacy and confidentiality, the questionnaire was anonymous and participants could not be identified. In addition, the collected data was treated with confidentiality and could only be accessed by members of the Population Health Assessment and Surveillance team in the Chief Public Health Office.

