How People Living in Canada Consume and Acquire Cannabis: Assessing Progress in Minimizing Harms and Establishing a Safe Supply Chain

Summary of a report prepared for the Canadian Centre on Substance Use and Addiction by Joel Armstrong, PhD, Signum Insights

Key Findings

- Preliminary evidence suggests progress has been made on two stated goals of the Cannabis Act, to minimize harms and to establish a safe and responsible supply chain.
- As a broader range of regulated product options become available, people who consume cannabis are shifting away from higher-risk, inhalation-based methods of consumption, and towards oral ingestion.
- The evidence suggests that although people’s attitudes are slightly less opposed to concurrent alcohol and cannabis usage than before legalization, their behaviours do not reflect that change as concurrent alcohol and cannabis usage did not increase throughout the surveyed years.
- The number of people buying cannabis through legal channels has increased significantly year after year. In 2017, a private dealer was the most common avenue of acquisition. In 2020, the two most common avenues were legal physical dispensaries and legal online dispensaries.
- Individuals who continued to purchase cannabis through illegal channels were more likely to be male, less likely to be college or university graduates, consumed cannabis more frequently, and agreed more strongly that illegal cannabis is cheaper and of higher quality, and should not be regulated by the government.
- Overall, the report findings suggest a shift in cannabis usage patterns and attitudes before and after legalization. This data provides valuable knowledge on existing beliefs around cannabis use and acquisition, and can inform cannabis use prevention initiatives and education messaging.

Background

Among the Government of Canada’s stated goals in legalizing cannabis, two of the most prominent were to minimize the harms of use and to establish a safe and responsible supply chain (Health Canada, 2016). To understand the degree to which these goals have been achieved, this report examined data collected annually from 2017–2020 to examine how relevant behaviours and attitudes have changed over time and to identify who is engaging in different risk behaviours. The intended audience of this report is researchers, substance use treatment and prevention specialists, and policy makers.
**Sample**

A sample of 9,265 people living in Canada aged 35 to 44 years old were surveyed across four years from 2017–2020. The datasets analyzed in this report were provided by Dig Insights, a market research firm in Toronto, Ontario. The sample was 50.2% female, and 49.7% male, with less than 0.2% preferring not to respond. The sample was composed of 47.6% cannabis consumers, 33.8% potential cannabis consumers and 18.7% abstainers.

**Usage Patterns**

Cannabis usage rates have changed throughout the surveyed years. Although the proportion of respondents who consume cannabis daily increased slightly (+1.2%), there were increases in the percentage of people who report using cannabis a few times a week (+4.5%) and a small decrease among those who consume cannabis a few times a year or yearly (-4.2%). There were also small differences between genders in terms of usage rates in 2020. Men and women who consume cannabis were equally likely to consume cannabis daily (27.2% versus 26.4%), a few times a week (22.3% vs 20.1%), weekly (9.1% vs 6.7%) and less than yearly (3.3% versus 4.3%). Women, however, were significantly more likely than men to report consuming cannabis a few times a year (19.5% vs 15.0%).

Consumers’ preferred methods of consumption have changed over time. Two clear trends emerged, in which fewer consumers preferred inhalation-based methods of consumption and more consumers preferred oral ingestion. In 2017, smoking a hand-rolled joint was the preferred method for a majority of consumers, but this preference has decreased markedly over time. Similarly, preference for smoking from a pipe as well as smoking from a bong has decreased slightly over time. Despite these decreases, inhalation remains the dominant method of cannabis consumption.

We see a marked increase over time in the preference for ingesting cannabis orally. This increase was spread across several different oral ingestion methods, including cannabis oil, pills and capsules, and edible cannabis. Summing up preferences for all methods of cannabis consumption, the trend is clear that the preferred methods for cannabis consumption are shifting away from inhalation and towards oral ingestion.

**Concurrent Cannabis and Alcohol Use**

The concurrent use of cannabis and alcohol is of particular concern, as it is linked to a number of risks and adverse effects (i.e., greater impairment of driving ability; see full report for additional information). The data suggests that attitudes opposed to concurrent cannabis and alcohol use became less negative throughout the surveyed years with a notable decline in the percentage of respondents who reported disliking drinking alcohol after consuming cannabis (2018 47.5% versus 2020 44.8%).

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1 More information on sampling and analytic methods, as well as comprehensive statistics, are included in the full report, available upon request.
2020 33.5%). This decline was more prominent in men (31.2%) compared to women (35.9%). In contrast, however, both men and women respondents, on average, agreed that “It is very harmful to health to combine alcohol and cannabis,” and that they “try to avoid drinking after consuming cannabis.” These judgments were stable across time.

Most importantly, the primary behavioural measure of concurrent cannabis and alcohol usage, which asked whether participants had consumed alcohol the last time they consumed cannabis, showed little evidence of increased concurrent alcohol and cannabis use for both men and women. When asked about their patterns of consumption for social events, cannabis consumers preferred alcohol to cannabis for all public events. Only when they were home with their partners watching television did they prefer cannabis. Altogether, the evidence suggests that although people’s attitudes are slightly less opposed to concurrent alcohol and cannabis usage, their behaviours do not reflect that change, and concurrent usage has not increased throughout the surveyed years.

**Points of Access**

Cannabis consumers have drastically shifted their purchasing and acquisition patterns before and after legalization. Among cannabis consumers who purchase their own cannabis, there has been consistent decreases in reported purchasing from all illegal sources. At the same time, we see consistent increases in legal purchasing since the introduction of these options, both from legal physical dispensaries and legal online dispensaries.

To understand who is still purchasing cannabis illegally, we split participants into legal and illegal purchase profiles, then analyzed the groups for demographic differences and differences in attitudes and beliefs. Cannabis consumers who still purchase cannabis illegally are most likely to be less educated (high school graduate versus university or college graduate), male individuals who consume cannabis more frequently and have been consuming cannabis for a longer period of time, believe that illegal cannabis is cheaper and of higher quality, and believe that cannabis sales should not be regulated by the government.

**Limitations**

A primary limitation of this report is that the data for 2020 were collected during early COVID-19 lockdowns, which means that consumption in the 2020 survey may have been elevated. Another limitation of this report was the absence of analyses focused on equity, diversity and inclusion. Finally, the dataset oversampled cannabis consumers, and therefore is not fully representative of all the people living in Canada. Statistical weighting techniques were used to account for the oversampling. (More information on the analytical strategy can be provided upon request.)
Conclusion

Overall, these data show a shift in patterns of cannabis use before and after legalization, with certain behaviours and attitudes trending in a positive direction. These trends may suggest enhanced public awareness of the health risks associated with cannabis use. While more evidence is required, these findings may point to some preliminary success in achieving two goals of the Cannabis Act, to minimize the harms of use and to establish a safe and responsible supply chain (Health Canada, 2016). Evidence of changing attitudes among individuals who use cannabis is important to consider given the negative impacts it has been shown to have on psychological, physical and social functioning (Hasin et al., 2016; World Health Organization, 2016) and other mental health implications (Konefal et al., 2019). It is important that cannabis consumers avoid higher-risk consumption methods and patterns (i.e., inhalation and concurrent consumption with alcohol) and continue to move toward purchasing cannabis in regulated, legal settings.

References


