



Brief to the House Standing Committee on Health Regarding Bill C-45

The Canadian Centre on Substance Use and Addiction (CCSA) is Canada's only agency with a legislated **national** mandate to reduce the harms of alcohol and other drugs on Canadians. We do so by gathering the latest evidence and promoting it widely. Created by an Act of Parliament in 1988, CCSA has provided national leadership and expert advice, advanced knowledge, and prepared information and resources to inform policy, practice and programs. Together with our partners, we help mobilize individual and collective efforts to achieve impact on the major health and social issue of problematic substance use.

CCSA is submitting this brief in accordance with our mandate to use the best available evidence to inform drug policy in Canada. The brief is not exhaustive, but presents the evidence on topic areas where there is alignment between CCSA's research focus and the thematic areas identified by the Standing Committee on Health (HESA).¹

The evidence on reducing the harms associated with cannabis use supports taking a public health approach, which enables health and social harms to be addressed with the following recommendations:

- Delaying the initiation of cannabis use and reducing the frequency of cannabis use;
- Reducing the quantity and potency of cannabis used;
- Reducing higher-risk use, including among at-risk populations (e.g., pregnant women and those at risk of mental health issues), in higher-risk situations (e.g., while driving and in combination with other substances such as alcohol), and with higher-potency products;
- Ensuring that regulated products meet strict quality control standards;
- Increasing access to services and supports for those who engage in problematic or higher-risk use; and
- Reducing involvement with the criminal justice system.

Considerations for Youth

Youth aged 15–24 are more than twice as likely to have used cannabis in the past year as adults aged 25 or higher. Among youth, prevalence generally increases with age, with 2015 rates according to the Canadian Tobacco, Alcohol, and Other Drugs Survey at 20.6% for age 18, 29.4% at age 19, 28.4% at 20, and 35.8% at 21. Youth are also at greater risk of experiencing harms associated with cannabis use. The risks associated with use increase the earlier youth begin to use, and the greater the frequency and quantity they consume.

Minimum Legal Age of Consumption

Given the number of youth aged 18–24 who currently use cannabis illegally, the increased risk of health impacts must be considered alongside the risks associated with the continued use of cannabis obtained outside the regulated market. These risks include lack of quality control and contact with the illegal market. They also include the health, social and economic impacts of criminal justice involvement. Establishing a minimum legal age above 18 at the federal level would result in young people continuing to face criminal justice sanctions associated with cannabis use. A federal

¹ A version of this brief with full references is available upon request.



minimum age of 18 allows the provinces and territories to establish a higher minimum age, but with those who do use below the minimum age facing administrative rather than criminal sanctions.

Minimum legal age is one component of a comprehensive approach to reducing youth cannabis use. (For another component, see the subsection on Prevention and Education, below.) Evidence from alcohol research indicates that consistent implementation of regulations across jurisdictions (e.g., consistent minimum age), social norms against underage use and certainty of enforcement are essential components of effective minimum legal age regulations. Implementing additional levers, such as pricing controls, and enforcement-based diversion options, such as warnings and referrals to treatment, can reduce youth use.

Health and Social Impacts

Brain Development: Cannabis use affects the prefrontal cortex, which continues to develop into the mid-twenties. This portion of the brain is critical to higher-order cognitive processes such as impulse control, working memory, decision making, planning, problem solving and emotional regulation. Long-term, regular use of cannabis beginning in adolescence is associated with long-term impairments in attention, memory and verbal learning.

Dependence: Approximately 9% of those who use cannabis will experience dependence. That rate increases to 17% for those who begin use during adolescence.

Mental Health: Regular cannabis use in adolescence is associated with an increased risk of experiencing psychotic symptoms, particularly schizophrenia, and especially when there is a family or personal history of psychotic disorders. Data collected by the Canadian Institute for Health Information indicate that between 2006 and 2011, hospital stays due to cannabinoid-related disorders increased by approximately 44%.

Impaired Driving: Cannabis use impairs driving ability, and doubles the risk of motor vehicle collisions. This risk might be compounded in youth, who are already more likely than adults to experience vehicle crashes. Young Canadians (age 15–24) were more than twice as likely as those aged 25 and above to report driving after using cannabis (5.0% vs 2.3%, respectively). There is evidence that youth are more likely to drive after using cannabis than after using alcohol. Evidence from research around alcohol policy also indicates that reaching minimum legal drinking age is associated with an increase in alcohol-impaired driving harms and crimes, supporting increased cannabis-related restrictions and targeted education for those reaching minimum age of legal access.

Education and Employment: Youth cannabis use is associated with reduced academic achievement and education as well as levels of income and employment.

Justice and Public Safety

Consistent, timely and relevant sanctions are more effective deterrents to criminal behaviour than severe sanctions, such as lengthy prison sentences, particularly when anticipated profits outweigh the estimated likelihood of apprehension and prosecution. Experience in Colorado and Washington indicates that legalization involves challenges for police such as developing tools for education, enforcing new regulations, detecting cannabis-impaired driving and enforcing laws against it,² and responding to shifts in the illegal market.

² CCSA has considerable expertise and resources on this topic; however recognizing that Bill C-46 addresses this topic separately we have not addressed it in the current brief. We would be pleased to provide supplemental information or address questions about cannabis-impaired driving, as appropriate.



Prevention, Lower-Risk Use and Treatment

Proactive investment in a comprehensive, evidence-informed system of prevention, early identification and treatment is essential to the successful implementation of cannabis regulation. Prevention, education and regulations can work together to promote healthy decisions by increasing awareness of risk and awareness of strategies for risk reduction.

Prevention and Education

A comprehensive, evidence-informed approach to prevention and education can provide Canadians, especially youth, with the knowledge and skills they need to make informed decisions about cannabis use. Effective prevention requires clear, accurate and consistent messaging that is targeted and relevant to key audiences such as youth, parents and medical professionals. Prevention messages and education are best received when delivered by trusted messengers and when youth can engage in open, non-biased dialogue. For youth, such messengers include peers, parents and youth allies such as educators. A comprehensive approach, particularly when targeting youth, means going beyond substance-specific information and focusing on factors that build resilience, such as positive adult role models, and life skills, such as improved coping skills and increased options to manage stress. Youth also need support in developing refusal and critical thinking skills, and for attaining educational achievement.

Lower-Risk Use

The recently released Lower-Risk Cannabis Use Guidelines provide ten recommendations for reducing the risks associated with cannabis use, based on the best available evidence. The recommendations include abstinence as the most effective approach, use of lower-THC products and avoidance of multi-substance use. Research in the alcohol field indicates that investment in clearly communicated and broadly distributed low-risk guidelines can increase knowledge and have an impact on behaviour. However, the risks associated with cannabis use are not as well-documented as those associated with alcohol, and there is no equivalent to a standard drink on which specific consumption levels can be based.

Treatment

There are currently no nationally consistent data on the primary substance for which Canadians access treatment. However, for those provinces able to provide this information, cannabis was the second most common substance for which treatment was sought in Ontario and third most common in Nova Scotia and Prince Edward Island. Although there are pockets of excellent practice across the country, there are also many gaps in access to effective treatment that is evidence-based, and significant investment is required to meet current and anticipated needs.

Labeling, Packaging and Marketing

Marketing is a fundamental part of promoting sales and generating revenue. These interests are inherent to any for-profit distribution system or system component, whether private or publicly owned. They are also in opposition to the public health objective of reduced levels of consumption.

Product packaging can play an important role in consumer education and in risk reduction. Childproof packaging and prohibition of products and packaging that appeal to children, such as candies and cartoons, have been implemented for potentially harmful products, including tobacco, pharmaceuticals and alcohol, to reduce the risk of accidental ingestion. Research on tobacco products has indicated that plain packaging reduces consumer appeal, particularly among youth.



Point-of-sale education through messaging on packaging, on-site materials and sales staff can provide information to support informed decision making and reduce the risks of harm. For example, education about time to onset can be provided to reduce the risk of accidental over-ingestion of edible products (once regulated), a problem experienced among naïve consumers following legalization in Colorado. The efficacy of such education can be supported by ongoing evaluation to determine impact, and by placing responsibility for developing and implementing educational programs with independent or government agencies with a health or public health mandate.

Pricing

Research on alcohol sales indicates that standardized minimum pricing is an effective mechanism for reducing levels of consumption. Volumetric pricing, in which minimum cost increases according to escalating levels of THC concentration, can also be used to incentivize consumption of lower-potency products that present lower risk for consumers. This strategy aligns with the objective of reducing harms while balancing concern that the illegal market will respond to demand for higher-potency products if not available through the regulated system. Experience with alcohol regulation also highlights the importance of indexing minimum prices to the annual rate of inflation to ensure that the relative cost does not decrease over time. Ongoing analysis will be important to ensure that pricing maintains a balance between reducing consumption and encouraging diversion to the illegal market.

Forms of Sale

The creation of a regulated market provides the opportunity to ensure that Canadians who choose to use cannabis have access to a product that meets stringent quality control standards. However, for these standards to protect the health of Canadians, investment is required in research, testing, inspection and enforcement.

There is evidence that the use of products higher in THC is associated with higher levels of risk. However, there is not conclusive evidence for the restriction of levels of THC. Establishing a cap on levels of THC is consistent with a precautionary approach pending further research. However, it might also be seen as an arbitrary exercise, and result in the illegal market filling unmet market demand for more potent products. As discussed above, there are levers available to reduce the harms associated with higher-risk product formats, such as consumer education and pricing that incentivizes the purchase of lower-risk products.

Workplace

Cannabis impairment that affects the workplace is a concern to employers due to cannabis' effects on cognition and motor control. All employers, and especially those in safety-sensitive industries, have a duty to ensure a safe work environment. Best practice supports implementing comprehensive substance use policies that address multiple issues, such as employee education, prevention, support, testing criteria and procedures (if necessary), and opportunities for referral to treatment. These policies must also incorporate human rights considerations, such as the duty to accommodate if an individual is authorized to use cannabis for medical purposes or is dependent on cannabis. The legalization and regulation of cannabis provides an opportunity for employers to review and update their policies and practices, or to put them in place.³ Two overriding challenges facing many employers is how to monitor impairment or substance use, and how to respond. Testing, which is a highly debated issue in Canada and largely limited to select safety-sensitive industries, also poses a

³ The Canadian Centre for Occupational Health and Safety, for example, has developed a discussion paper with sample policy and incident templates: [Workplace Strategies: Risk of Impairment from Cannabis](#) (June 2017).



challenge, as most testing currently available detects the presence of cannabis in the system rather than level of impairment. The development of new approaches to detecting impairment is ongoing, and will be addressed more comprehensively through Bill C-46.

Jurisdictional Considerations

Bill C-45 provides the provinces and territories (P/Ts) with the discretion to identify penalties for possession of less than five grams and to increase the minimum age of access. Placing these decisions with the P/Ts contributes to the objective of reducing the impact on the criminal justice system by ensuring that the associated sanctions are non-criminal. This discretion allows the P/Ts to respond to unique jurisdictional considerations. However, it also creates an opportunity for inconsistency across jurisdictions, which in some cases, notably minimum age of access, might reduce the efficacy of the regulation.

Variation can also be a concern from an equity perspective. Such variation might, for example, create the possibility that an individual in one P/T could face considerably more severe sanctions than in another. Equity also includes ensuring that legislation, and particularly sanctions, do not discriminate against or differentially impact some groups versus others. For example, youth or marginalized populations might be more subject to fines for public consumption, but have fewer resources with which to pay.

Conclusion

A comprehensive, public health approach includes **proactive, ongoing investment** in:

- Evidence-informed education, skills-based cannabis use prevention and treatment services;
- Administration and law enforcement to establish, implement and enforce the regulatory system (e.g., licence processing, site inspections and product testing);
- Clear, consistent communications about regulations, risks of use and how to reduce risks;
- A rigorous data collection strategy, including establishing baseline measures and ongoing monitoring to evaluate the impact of regulations and guide their continuous improvement; and
- Ongoing research to continue to advance knowledge, particularly on the effects on rates and impacts of use among youth.⁴

Components of this work take place at all levels – federal, provincial, territorial, municipal and organizational. This complexity creates challenges, but also opportunities to achieve economies of scale, reduce duplication of effort, and share information to understand different impacts and lessons learned under different conditions. National coordination and communication are vital in realizing these opportunities, and require dedicated and proactive investment.

⁴ CCSA hosted an expert meeting in October 2016 to develop a [National Research Agenda on the Health Impacts of Non-Medical Cannabis Use](#). Participants identified a number of research priorities, including defining and harmonizing key definitions and measures, conducting longitudinal studies to monitor long-term impacts, and involving key stakeholders, including youth, parents and communities.