

Public Health Considerations

The Board of Health for the City of Ottawa Health Unit was represented on the City's Cannabis Legalization Steering Committee and Operational Team through Ottawa Public Health (OPH) representatives. In the context of that group, OPH representatives provided the following advice and recommendations relating to cannabis retail stores.

Recommendation:

Based on the information provided below, the Medical Officer of Health supports the staff recommendation to not opt-out of retail cannabis stores in Ottawa so that a legal, quality-controlled source of recreational cannabis is available to cannabis consumers within a legal market, as further noted below. In the absence of retail cannabis outlets, people in Ottawa are likely to continue to access illegal product that is not subject to Good Production Practices. However, the Medical Officer of Health notes the importance for the City to take all opportunities to address the harms from increasing access to cannabis, such as through the consultation process on specific retail sites and through continued advocacy by the Mayor's Office, drawing on the recommendations adopted by the Board of Health related to density of cannabis retail outlets.

Ottawa Context

In 2015-2016, 15% of Ottawa residents aged 19 years of age or older reported using cannabis in the past year.¹ In 2017, 18% of Ottawa students in Grades 7 to 12 reported using cannabis in the past year, which is similar to students in the rest of Ontario (19%). Youth consumption of alcohol and tobacco continues to occur even though access to these substances is illegal for those under 19 years of age. In Ottawa, 6% of students (grade 7-12) report consuming tobacco and 36% report consuming alcohol in the past year.² In 2017, Ottawa high school students reported that it would be very easy or fairly easy to get tobacco (53%), alcohol (62%) and cannabis (47%).³

Harm to health from increased consumption of cannabis

Cannabis consumption can have benefits for consumers, and harm to health can result for those who start to use cannabis at a young age (i.e. under the age of 25), who use frequently (daily or near daily), and those who use products with high levels of tetrahydrocannabinol (THC, the psychoactive component of cannabis)⁴.

Using cannabis at an early age and using it every day or almost every day can:

- Increase the chance of experiencing symptoms of psychosis and schizophrenia, especially if there is a family history of these conditions;
- Increase the chance of becoming dependent, especially for youth; and

- Affect how the brain grows and works with effects on memory, concentration, intelligence and the ability to think and make decisions.⁵

There is also strong evidence that high intensity and frequency of cannabis use is associated with pulmonary or bronchial system problems, particularly for those who smoke cannabis, motor-vehicle incidents, and poorer pregnancy outcomes (i.e. lower birth weight and lower alertness of newborns). In addition, research has found associations between the frequency or intensity of cannabis use and mental health problems, including psychosis, depressive symptoms, mania, and suicide, as well as cardiovascular problems, especially for those with established heart disease⁶.

Access to Quality Product

Ottawa residents who choose to use cannabis may have less risk to their health by accessing regulated products, within the legal system – whether purchased through the online store or at a legal store front - due to the presence of Health Canada’s Good Production Practices. Good Production Practices include product testing for microbial and chemical contaminants among other requirements to ensure product quality and safety. Microbial contaminants, heavy metals and pesticides have been found in various cannabis products, and there have been poisonings from illicit synthetic cannabis products^{7,8}. As illegal stores are not subject to practices that ensure product quality, safety, and evidence-based product information, residents are consuming an unregulated product and may experience increased risks to their health.

The choice to purchase online, as compared to retail storefronts, can be influenced by overall customer experience, insights derived from customer and retail network analytics, and effective security and product integrity.⁹ Recent news outlets have reported early challenges with the Ontario online system (i.e. privacy, poor delivery service, lack of stock). Should the online store not meet consumer demand and no legal retail stores are present, consumers may choose to purchase cannabis from other sources (i.e. illegal dispensaries or illegal online market). In Canada, among those who used cannabis in the past year, 19% reportedⁱ accessing cannabis from an illegal dealer or illegal dispensary.¹⁰ As noted by the Ottawa Police Service, there have been 12-18 illicit and illegal retail storefronts selling cannabis in Ottawa for the past two (2) years.

Lessons Learned from Alcohol and Tobacco Regulation

Policy research that explores the impact of cannabis legalization is in its infancy, and as such, there is limited evidence to demonstrate the impact on public health and safety from privately-operated retail storefronts for the sale of cannabis. In authorizing retail storefronts in Ottawa, a number of factors can be taken into consideration to determine potential short- and long-term implications for public health and safety. These factors include examining the lessons learned from the regulation of tobacco and alcohol sales.

ⁱ Note: The Canadian Cannabis Survey was completed prior to legalization.

Greater access, higher density of outlets, and extended hours of sale increase alcohol use and alcohol-related harms (i.e. injury, motor vehicle incidents and domestic violence, consumption in excess of Canada's Low-Risk Alcohol Guidelines), particularly among youth and young adults, which leads to increased costs to government.¹¹ Despite this evidence, in Ontario, there has been a trend over time of an increase in the number of authorized alcohol retailersⁱⁱ, with 95% of Ontarians living within 10 kilometres of an alcohol retailer.¹²

Limits on density, retail location, and hours of operation can help minimize harms associated with increased access to alcohol and tobacco. These restrictions are supported with evidence of the following¹³:

- The widespread availability of tobacco and alcohol products normalizes use and undermines messaging about how these substances can harm health¹⁴. Availability provides the contextual cue that tobacco and alcohol are commonplace. Contextual cues play a significant role in determining risk perception.
- Frequent cues (e.g. seeing products in many outlets) prompt impulse buys among people who experiment with smoking, smoke occasionally and people trying to quit smoking. For people who formerly smoked, receiving cues to smoke in places where they regularly shop also contributes to high levels of returning to smoking.
- Easy access to tobacco reduces the total cost (price plus time, distance and transportation) to use. More than one third of people who smoke and a higher proportion of young people who smoke said they would smoke less if they had to travel further to buy cigarettes.

At the September and November 2018 Board of Health meetings, the Ottawa Board of Health adopted Ottawa Public Health's recommendation to the Government of Ontario regarding restrictions to retail outlets in order to protect public health and safety, including:

- Establish limits on density and number of retail locations, based on population;
- Implement density and distance controls to prevent clusters of cannabis retail locations;
- Establish buffer zones of cannabis retail locations for additional sensitive areas (including recreation and community centres, public parks and alcohol or tobacco retailers);
- Set hours and days of operation in such a way that balances the need to reduce access to the illegal market with the need to prevent over-availability and increased consumption; and.
- Provide sufficient standard training for employees.

In October 2018, the recommendations were submitted to the members of the Government of Ontario's Standing Committee on Social Policy in response to the Bill 36, *Cannabis Statute Law Amendment Act, 2018* consultation. On November 14, 2018,

ⁱⁱ Note: Authorized alcohol retailers refers to retailers whose primary revenue is from the sale of alcohol

the Government of Ontario released the regulations of the *Cannabis Licence Act, 2018*. The current regulations do not include all of the public health recommendations supported by the Board of Health, specifically to establish limits on density, number of retail locations, and distances to sensitive areas in addition to schools. Based on the available research, the current provincial retail model may lead to harms to the public's health and already disadvantaged populations (e.g. populations with low income) may be at higher risk of these harms¹⁵.

Lessons Learned from Other Jurisdictions

It is challenging to draw conclusions and lessons learned from other jurisdictions that have legalized cannabis because the regulations in each place are distinctly different from Canada. There is limited research to demonstrate the success, in terms of eliminating an illegal market and decreasing access to youth, of a comprehensive approach to cannabis legalization, including policy development, evidence-based public education and restricted access for youth. Information from Colorado and Uruguay shows that despite having differing retail models, both still experience an illegal cannabis market. In both jurisdictions, factors other than the retail model have contributed to the continuation of the illegal market, making it difficult to apply the findings directly to Ottawa and the Canadian context.

Summary

In the absence of retail cannabis outlets, people in Ottawa are likely to continue to access illegal product. Illegal stores are not subject to practices that ensure product quality, safety, and evidence-based product information and residents may experience increased risks to their health by consuming unregulated product. Therefore, in order to provide people in Ottawa with access to legally-produced, regulated product that is safer in terms of quality and in avoidance of criminal elements, the Medical Officer of Health recommends not opting out of retail cannabis stores in Ottawa. In opting in to retail cannabis stores, the Medical Officer of Health notes it is critical for the City to take all opportunities to address the harms from increasing access to cannabis, such as through the consultation process on specific retail sites and through continued advocacy by the Mayor's Office, drawing on the recommendations adopted by the Board of Health related to density of cannabis retail outlets. Ottawa Public Health will continue to monitor and evaluate the impact of cannabis on the population's health and use that information to inform the public and influence healthy public policy.

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- ¹ Statistics Canada. Canadian community health survey 2015-2016, share file. Ontario Ministry of Health and Long Term Care.
- ² Ottawa Public Health. 2017. Public Health Monitoring of Risk Factors in Ontario – Ontario Student Drug Use and Health Survey, Centre for Addictions and Mental Health.
- ³ Ottawa Public Health. 2017. Public Health Monitoring of Risk Factors in Ontario – Ontario Student Drug Use and Health Survey, Centre for Addictions and Mental Health.
- ⁴ Fischer b, Russell C, Sabioni P, van den Brink W, Le Foll B, Hall W, Rehm J, & Room R Lower-Risk Cannabis Use Guidelines: A Comprehensive Update of Evidence and Recommendations. 2017. *Am J Public Health*;107:e1–e12. doi:10.2105/AJPH.2017.303818
- ⁵ Ibid
- ⁶ Ibid
- ⁷ Riederer AM, Campleman SL, Carlson RG, et al. Acute Poisonings from Synthetic Cannabinoids — 50 U.S. Toxicology Investigators Consortium Registry Sites, 2010–2015. *CDC Morbidity and Mortality Weekly Report*. 2016; 65:692–695
- ⁸ Dryburgh LM, Bolan NS, Grof CPL, Galettis P, Schneider J, Lucas CJ, Martin JH Cannabis contaminants: sources, distribution, human toxicity and pharmacologic effects. *British Journal of Clinical Pharmacology*. 2018; 84 (3): 2468-2476
- ⁹ Deloitte LLP. A society in transition, an industry ready to bloom. 2018. Cannabis Report 2018 Deloitte Design Studio, Canada. Available at: <https://www2.deloitte.com/content/dam/Deloitte/ca/Documents/consulting/ca-cannabis-2018-report-en.PDF>
- ¹⁰ Government of Canada. Canadian cannabis survey 2017. 2017. Available from: <https://www.canada.ca/en/health-canada/services/publications/drugs-health-products/canadian-cannabis-survey-2017-summary.html>
- ¹¹ Popova S, Patra J, Sarnocinska-Hart A, Gnam WH, Giesbrecht N, Rehm J. Cost of privatisation versus government alcohol retailing systems: Canadian example. 2012. *Drug and Alcohol Review*; 31, 4-12.
- ¹² Statistics Canada. Access by Canadians to regulated liquor and cannabis retail outlets. 2018 Available from: <https://www150.statcan.gc.ca/n1/en/catalogue/13-605-X201800154964>
- ¹³ Ibid.
- ¹⁴ Tilson M, Cohen, J., McDonald, K., Giesbrecht, Maga W., Mercedy, G., Chaiton, M. Reducing Tobacco Retail Availability. 2013. Toronto, ON: The Ontario Tobacco Research Unit.
- ¹⁵ Morrison C, Gruenewald PJ, Freisthler B, Ponicki WR, Remer LG. The economic geography of medical cannabis dispensaries in California. *International Journal of Drug Policy*. 2014; 25(3) 508 – 515