

PUBLIC HEALTH PERSPECTIVES ON CANNABIS LEGALIZATION IN ALBERTA

Written Submission to:

Alberta Cannabis Secretariat

Submitted on behalf of AHS by:

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Date: July 31, 2017

PUBLIC HEALTH APPROACH

Alberta Health Services (AHS) supports an evidence-based public health approach to the development and implementation of legislation for the legalization and regulation of cannabis in Alberta. This means promoting and protecting the health of Albertans, and considering the impact on the health of our most vulnerable populations.

A public health approach strives to maximize benefits and minimize harms of substances, promote the health of all individuals of a population, decrease inequities, and ensure harms from interventions and legislation are not disproportionate to harms from the substances themselves. ¹ The outcome of a public health approach (see Figure 1) shows how health/social harms and supply/demand are related. Harms related to substances are at a maximum when governance and control are at the extremes. Lower harms occur when a public health approach is used.

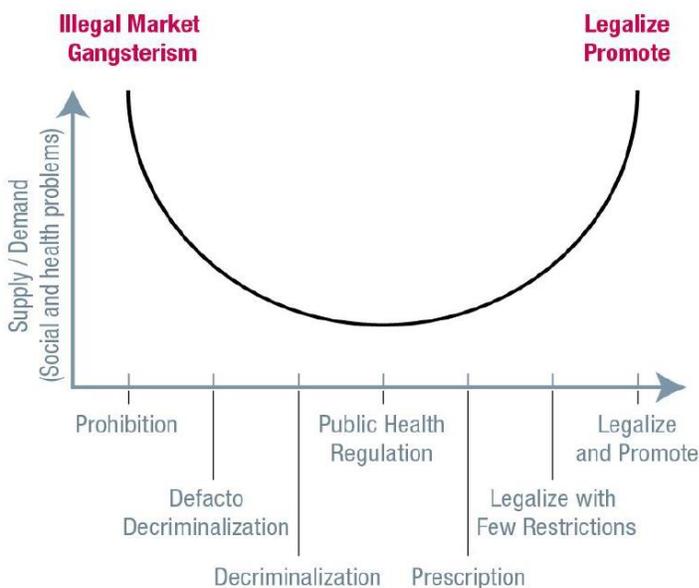


Figure 1. “The Paradox of Prohibition” Marks (1990) ¹

Legalizing cannabis without considering the key elements of a public health approach is likely to result in greater social and health harms. Key considerations when developing policy from a public health lens includes:

- Minimizing harm
 - Consider the risks of cannabis use including the risks of harms to youth, risks associated with patterns of consumption (e.g., frequent use, co-use with alcohol and tobacco, harmful routes of consumption, consumption of concentrated products, increases in proportion of population consuming), and risks to vulnerable populations (e.g., youth, people with mental health problems, pregnant women, socio-economically disadvantaged populations).
- Protecting the health and safety of Albertans
 - Carefully consider evidence related to the public consumption of cannabis, workplace safety, and the scientific and legal issues associated with impaired driving.
- Preventing the likelihood of use and problematic use
 - Ensure early and on-going public education and awareness that seeks to delay use by young people, and prevent normalization.
- Assessing population health outcomes
 - Include baseline understandings of current situation; potential impact of policies and programming; disease, injury and disability surveillance (effects on society).
- Providing services
 - To assist those who are most at risk of developing or have developed substance use issues, expand access to treatment and prevention programs.
 - Consider the ongoing public health costs and ensure that public health programs are adequately resourced to address the risks.
- Addressing the determinants of health and health equity
 - Consider issues of social justice, racism, human rights, spiritual and cultural practices, as well as populations vulnerable to higher risk of cannabis-related harms.
 - Complete a health equity impact assessment to ensure unintended consequences of legalization are minimized.

It is also critical to begin conservatively and establish more restrictive regulations as it is very difficult to tighten regulations once in place. As there is little research on the impact of legalization on health and social outcomes, proceeding cautiously with implementation will help ensure that the promotion and protection of the health and safety of Albertan remains the priority.

As recommended by the Chief Medical Officers of Health of Canada,¹ the overarching goal to this legislation should be to improve and protect health—maximizing benefits, minimizing harms, promoting health, and reducing inequities for individuals, communities and society. This goal needs to be applied at every stage of the policy development process.

HARMS OF USE

While there is evidence that there is less impact on public health than alcohol and tobacco, cannabis still has significant health risks which include increased risk of some cancers, mental health issues, and

functional changes (e.g., memory loss) as well as social effects such as impaired driving.^{2,3,4} These health risks are more prevalent with frequent (daily or near-daily) and early age use. Recent research has reported significant increases in marijuana-related hospitalizations, emergency department visits, and calls to the regional poison center following legalization of marijuana in Colorado.⁵ Many reports also identify cannabis use being associated with an increased risk of motor vehicle collisions.^{6,7,8}

In addition, there are disproportionate impacts among vulnerable populations that need careful consideration. Lower-risk guidelines for cannabis use should be adopted as outlined by Fischer et al. (2011)⁹ focusing on populations that are more vulnerable to poor health outcomes such as youth, those with lower literacy and education, as well as gender specific populations. These lower risk guidelines¹⁰ have been endorsed by the Centre for Addiction and Mental Health, Canadian Public Health Association, Canadian Medical Association, Canadian Society of Addiction Medicine, Council of Chief Medical Officers of Health, and Canadian Centre on Substance Use and Addiction.

Research and evidence related to cannabis-impaired driving, brain development, dependence, mental health, chronic diseases (respiratory and cardiovascular), co-disease, co-occurring other drug use, passive exposure to smoke, among other issues, should also be considered in the development of cannabis legislation and regulation. Some specific evidence includes:

- Brain development – evidence suggests using cannabis in early adolescence can cause adverse effects to the developing brain and are at greater risk for long term cognitive impairments.^{11,12,13} While more research is needed in this area, there are reports that early, regular use is associated with higher risk of dependency, higher risk of health harms, and low levels of educational attainment.^{14,15,16,17}
- Dependence – The risk of dependency is a concern. It is reported that the global burden of cannabis dependence was 13.1 million people in 2010 (0.20%), and that dependence is greater among males and more common in high-income areas (compared to low-income areas).¹⁸ In addition, researchers in the U.S. indicate that the prevalence of lifetime dependence is approximately 9% among people that had used cannabis at least once.¹⁹
- Chronic Disease – Consumption of combusted cannabis is associated with respiratory disease such as a chronic cough. Other significant concerns that require further research include chronic obstructive pulmonary disease, asthma and lung cancer. Cannabis consumption, both inhaled and ingested affects the circulatory system, and there is some evidence associating cannabis with heart attacks and strokes.²⁰
- Mental health – Research suggests that cannabis users (mostly frequent and high potency use) are at greater risk of developing mental health problems such as psychosis, mania, suicide, depression, psychosis or schizophrenia.^{21,22} For example, it is reported that there is a 40-50% higher risk of psychosis for people with a pre-existing vulnerability than non-users.²³
- Passive exposure – Second-hand cannabis smoke is more mutagenic and cytotoxic than tobacco smoke, and therefore second-hand inhalation of cannabis should be considered a health risk.^{24,25,26}
- Driving -- Substantial evidence shows a link between cannabis use and increased risk of motor vehicle collisions.^{27,28} More research is needed to understand the association between THC levels and impairment, thus any limits set should be re-evaluated as evidence becomes available. In

addition, concerns about the reliability of current roadside testing technology has been expressed by many organizations and researchers. As such, investment for research related to impairment testing technology should be included in the implementation plan. A public education campaign about the risk of driving after consuming or smoking any cannabis or while impaired will be critical throughout the implementation of this legislation. This will be particularly important for youth, as the Canadian Paediatric Society reports that cannabis-impaired driving is more common than alcohol-impaired driving and youth are less likely to recognize driving after consuming cannabis as a risk.²⁹

HEALTH PROTECTION AND PREVENTION

Age of use. Researchers and public health organizations are in agreement—there is no safe age for using cannabis. Delaying use is one of the best ways to reduce the risk of harm to the developing brain. Scientifically-based minimum age recommendations are generally early-to-mid-20's but also recognize that a public health approach includes consideration for balancing many variables related to enforcement, the illicit market and public acceptance. Some public health organizations recommend the minimum age be set at 21 and others recommend bringing alcohol, tobacco and cannabis in alignment. Experience with tobacco has shown that there is a higher impact on initiation by persons under 15 and age 15-17 when setting the minimum age of purchase and possession at 21 versus 19 (Institute of Medicine in US). With the U.S. states who have legalized cannabis, all have chosen age 21 for cannabis minimum age and three states and over 230 cities/counties have implemented age 21 for tobacco. Cannabis legalization represents an opportunity for Alberta to consider raising the tobacco and alcohol minimum age.

Packaging/labelling. Plain, standardized and child-proof packaging is recommended to decrease the appeal to young people and avoid marketing tactics that make cannabis use attractive. Labelling should include health warnings and clearly defined single serving/dose information.

Marketing and promotion. Evidence has shown that advertising has a significant impact on youth health risk behaviours,³⁰ therefore promotion of cannabis use should be banned. Restrictions for marketing and promotion should follow the Alberta Tobacco and Smoking Reduction Act, with further consideration added such as movies, video games, online market, social marketing and other media accessible to and popular with youth. It is also important to note that language to describe cannabis can have a marketing affect. Therefore, as noted by the Chief Medical Officers of Health of Canada, the term “recreational” should not be used as this infers that cannabis use is fun. A more appropriate term is “non-medical.”

Distribution and retail. A government controlled system of distribution and retail would be most effective to ensure that public health goals (not profit) are the primary consideration for policy development. Taxation and other price controls should be appropriate to limit consumption and offset the illegal market. Tax revenues should be directed to support services impacted by legalizations including health, public safety, addictions and mental health services, prevention, and public

education. Co-location with alcohol or tobacco is not recommended and retail outlets should be non-promoting. Limits to density and location of retail stores is essential, including proximity to schools, community centres, residential neighbourhoods, youth facilities and childcare centres. While online and home delivery may be suitable for medical cannabis, there are many regulatory challenges and risks to public health for non-medical cannabis. Finally, training and education programs should be developed to ensure well-trained and knowledgeable staff. AHS is a key partner to help lead the development of this training.

Public consumption. The research regarding negative harms due to passive exposure of smoke is clear.^{31,32,33} Passive exposure to cannabis smoke can result in a positive test for cannabis and sometimes causes intoxication. Therefore, public smoking and vaping should not be permitted.³⁴ It is recommended that regulations similar to the Tobacco and Smoking Reduction Act, which includes a ban on water pipe smoking in establishments and e-cigarette use in public areas. This also suggests banning cannabis lounges/cafes as these facilities would expose people to second-hand smoke, promote renormalizing smoking, present occupational health issues, and reverse some of the progress made with public smoking bans. Additional considerations to protect public health include exploring policy options to address smoke-free multi-unit housing.

Public education. Evidence-informed public education is critical to promoting and protecting the health and wellbeing of Albertans. The potential, particularly for youth, to hear “mixed messages” about cannabis use requires the development, implementation and evaluation of a more nuanced set of health promotion and harm prevention messages and interventions to support people in their decision-making around cannabis use.³⁵ Alberta Health Services can play a major role in public education, applying its significant experience in developing and implementing education and awareness campaigns. It will be critical to work with partner organizations and audiences particularly youth and those who are current users of cannabis to implement evidence-informed health promotion messaging that includes (but not limited to): delay of use, effects of use/co-use, long-term impact, reliable information sources, harm reduction, edible versus smoking effects, pregnancy and effects on fetus, medical and non-medical cannabis differences, workplace safety, impaired driving, culturally appropriate messaging, health impacts and youth-focused messaging.

Addiction and treatment services. Strengthening treatment services for people with substance use issues and mental health disorders will be necessary as these treatment systems are already under resourced which in turn have significant health and social consequences. For example, the Alberta Mental Health Review in 2015 reported that almost half of Albertans said that at least one of their needs was not met when they attempted to get assistance for addiction and mental health issues.³⁶ It is anticipated that there will be an increase in demand to address problematic cannabis use and for that reason investments in evidence-based interventions will be needed.^{37,38} It will also be necessary for those who use cannabis for medical purposes to have access to accurate, reliable information such as indicators, adverse effects, methods of use and risk reduction.

ASSESSMENT, SURVEILLANCE AND RESEARCH

Currently, reliable cannabis-related research and evidence is limited. Therefore, dedicated funding and resources will be needed to ensure proper monitoring and surveillance, and improve the body of research and evidence related to cannabis use and the impact of legalization.³⁹

While there have been several other jurisdictions who have recently implemented legislation to legalize cannabis, many have faced significant challenges in implementing effective evaluation programs. Lessons learned from these jurisdictions will be critical to determining baseline measures and selecting indicators for ongoing surveillance.⁴⁰ A consistent approach, working across all provinces and territories, is central to measuring impact and providing comparable data.^{41,42} In Canada, there have already been some efforts to establish this coordinated approach including Health Canada's Annual Cannabis Use survey and Canadian Institutes for Health Research's (CIHR) catalysts grants. Not only is this national view important, but a provincial collaborative approach is needed. This would require a coordinating body to ensure municipal, provincial and federal research and evaluation efforts are well-coordinated.

OTHER RECOMMENDED REPORTS/POSITIONS

It is highly recommended that the Alberta government considers the information and recommendations from the following:

- Chief Medical Officers of Health of Canada & Urban Public Health Network (2016)
<http://uphn.ca/wp-content/uploads/2016/10/Chief-MOH-UPHN-Cannabis-Perspectives-Final-Sept-26-2016.pdf>
- Toronto Medical Officer of Health (2017)
<http://www.toronto.ca/legdocs/mmis/2017/hl/bgrd/backgroundfile-104495.pdf>
- Canadian Public Health Association (2016)
https://www.cpha.ca/sites/default/files/assets/policy/cannabis_submission_e.pdf
- Centre for Addiction and Mental Health (2014)
https://www.camh.ca/en/hospital/about_camh/influencing_public_policy/documents/camhcanabispolicyframework.pdf
- Canadian Centre for Substance Use and Addiction
 - <http://www.ccsa.ca/Resource%20Library/CCSA-Non-Therapeutic-Marijuana-Policy-Brief-2014-en.pdf>
 - <http://www.ccsa.ca/Resource%20Library/CCSA-Cannabis-Regulation-Lessons-Learned-Report-2015-en.pdf>
 - <http://www.ccsa.ca/Resource%20Library/CCSA-National-Research-Agenda-Non-Medical-Cannabis-Use-Summary-2017-en.pdf>
- Ontario Public Health Association
<http://www.opha.on.ca/getmedia/6b05a6bc-bac2-4c92-af18-62b91a003b1b/The-Public-Health-Implications-of-the-Legalization-of-Recreational-Cannabis.pdf.aspx?ext=.pdf>
- Canadian Paediatric Society
<http://www.cps.ca/en/documents/position/cannabis-children-and-youth>

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