

Cannabis Legalization & Regulation: A Jurisdictional Review

Considerations for Children & Youth

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Child Health BC

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EXECUTIVE SUMMARY

In April 2017, the federal government of Canada introduced Bill C-45, the *Cannabis Act*. When it comes into force in July 2018, the *Cannabis Act* will allow for the possession, cultivation and consumption of non-medical cannabis across Canada.

The Cannabis Act sets out a number of areas where the provinces and territories have primary responsibility for developing and implementing appropriate regulation and policies – for example, retail models and distribution/wholesaling systems are left to the provinces, as is determining where public consumption of cannabis may take place. In other areas, the federal government has set requirements that the provinces and territories may adjust based on their context – for example, the minimum age of consumption, requirements for the cultivation of cannabis plants and sanctions available for youth possession of small amounts of cannabis.

Within the last five years, a growing number of jurisdictions have legalized non-medical cannabis and implemented regulatory schemes to administer its purchase, growth, possession and consumption. Uruguay was the first, but the American states of Colorado and Washington provide the most robust and established examples of legalization and regulation. Oregon, Alaska, Nevada, California, Maine and Massachusetts have followed, and have regulatory schemes in varying stages of development, implementation and maturity.

In Canada, Alberta and Ontario have announced their policy frameworks to guide cannabis legalization and regulation. Other countries have also considered non-medical cannabis use in ways that may be instructive to British Columbia: Portugal, Spain, the Netherlands and Iceland.

The policy and regulatory measures that have been put forward by these jurisdictions are examined in this report. Jurisdictions which have regulated the use of medical cannabis are not considered, as the policy issues do not align with non-medical cannabis.

In addition, a number of leading health-focused organizations have considered the policy and regulatory measures that should be adopted for jurisdictions to implement recreational cannabis approaches that promote public health objectives. A number of these organizations' positions are summarized, and the recommendations that they make are identified and collated in this report.

Finally, a consistent message is that a public education approach, with a focused campaign to communicate with youth, should be a cornerstone in the development and implementation of a successful legal cannabis plan. Several examples of such campaigns are summarized, including those from Colorado, Washington, Oregon and California.

Taking into account all of the above, the literature suggests that British Columbia should consider the following measures to improve public health and specifically protect young people from the impacts of legalized and regulated cannabis:

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Minimum Age:

Adopt a minimum age in alignment with BC's alcohol and tobacco minimum age, 19 years, which is also the BC age of majority. While some health agencies have called for a higher minimum age (up to 25), this should be balanced with the risk that young people will simply turn to illegal markets to obtain cannabis, putting themselves at greater risk and encouraging the ill effects that come with criminal activity. (Alignment with alcohol minimum age supported by all jurisdictions reviewed)

Possession - Youth

 Consider making the possession of 5 grams or less of cannabis subject to measures akin to those for underage possession of tobacco or alcohol (seizure of product, informing parents, fines under provincial law, etc.): do not criminalize the behaviour, but take steps to dissuade it. Youth in possession of cannabis greater than 5 grams should continue to face criminal charges (supported by the following jurisdictions – Colorado, Ontario, Alberta)

Public Consumption

- Adopt restrictions that support no public smoking and vaping of cannabis in alignment with tobacco smoking and vaping restrictions. Such restrictions would include prohibiting use in workplaces, enclosed public spaces, on health authority and school board property, transit shelters, common areas of apartment building and community care facilities. In particular, adopt measures that ban consumption in places frequented by children. (supported by the following jurisdictions California, Alberta. Public consumption is not permitted in Colorado, Washington, Alaska, Oregon, Nevada, Maine, Ontario)
- Consider using Canada's Lower Risk Cannabis Use Guidelines to support the public who consume in making choices about how and what they use to modify their own risks. The main objective of Canada's Lower-Risk Cannabis Use Guidelines (LRCUG) is to provide science-based recommendations to enable people to reduce their health risks associated with cannabis use, similar to the intent of health-oriented guidelines for lowrisk drinking, nutrition or sexual behavior. (supported by Ontario & recommended by the Chief Medical Health Officers of Canada, 2016

Drug-impaired Driving

- Consider a zero-tolerance approach for cannabis use among young drivers, regardless of impairment levels for adults (once determined).
- Promote research to develop measures to minimize cannabis impaired driving. (as recommended by the Chief Medical Health Officer of Canada, 2016)

Personal Cultivation

Restrict child and youth access by requiring that the cultivation of cannabis plants by adults (for personal use) occur indoors. (supported by the following jurisdictions - Alberta) If outdoor cultivation is agreed to then require that plants not be visible from outside the property and require that plants be secured against theft (supported by the following jurisdictions - Colorado, Nevada, California, Maine, Massachusetts, Ontario. Washington does not permit personal cultivation)

Distribution Model & Retail

- Adopt and enforce strict rules against selling cannabis to youth under 19. This should include mandatory training for staff regarding the potency of products and the risk associated with cannabis use. (supported by the following jurisdictions – Colorado, Ontario, Alberta)
- Prohibit locations that are close to schools, playgrounds, and other areas that are frequented by children and young people when adopting retail licensing schemes. (supported by the following jurisdictions Colorado, Washington, Nevada, Alberta)
- Prohibit the sale by means of self service or dispensing devices and restrict online sales
 to individuals identified as being older than the legal drinking age of the province where
 they reside. (as recommended by the Canadian Pediatric Society, February 2017)

Other Key Policy Measures

- Packaging & Labeling Requirements: Support and enforce the proposed federal rules regarding packaging not appealing to youth (e.g. plain and standardized packaging), no false or misleading information. (supported by the following jurisdictions Colorado, Oregon, Washington, Nevada, California); Consider requiring that cannabis products that may be deemed attractive to children be sold in tamper resistant containers to prevent accidental harm (supported by the following jurisdictions Nevada, Massachusetts)
- Restrictions on Advertising & Marketing: Support and enforce the proposed federal rules stating that advertising cannot be appealing to youth; no false, misleading or deceptive promotion; no sponsorships or endorsements; no depictions of a person, celebrity, character or animal. Packaging cannot appeal to children or youth, or use cartoon characters. In addition, include outright bans on Internet pop-up advertisements and any type of advertisement that targets minors. (supported by the following jurisdictions Colorado, Oregon, Washington, Nevada, California)
- Public Education: Develop and promote a strong public education campaign, with messaging tailored to young people in language that is relevant to them. Campaigns should be developed in collaboration with youth leaders and should include messages from young opinion-leaders and should include information about cannabis laws, use, risks, and resources for interventions and treatments. (supported by the following jurisdictions – Colorado, Washington, Oregon, Alaska, California, Maine, Massachusetts, Alberta, Ontario)
- Distribution of Tax Revenue: Consider earmarking a defined proportion of revenue from cannabis sales taxes to public education, research, and intervention programs/treatments. (supported by the following jurisdictions – Colorado, Washington, Oregon, California, Ontario)
- Data: Invest in data collection, tracking and analysis to support general research to monitor patterns of cannabis use and the health effects of use. (supported by the following jurisdictions – Colorado, Washington, Maine). In BC, this could include continuing and/or incorporating cannabis-related questions into existing population based surveys (e.g. in BC the McCreary Society Adolescent Health Survey), trauma registries, hospitalizations (DAD) and emergency department surveillance (NACRS).

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Jurisdictional Review: Cannabis Regulation and Youth

A. INTRODUCTION

This document provides a report on research regarding the approaches that other jurisdictions have taken to regulate recreational cannabis use, particularly as that regulation impacts youth and young people.

A regulatory and policy framework for British Columbia (BC) is necessary because of the introduction of the federal government's Bill C-45, the *Cannabis Act*, which legalizes the cultivation, possession and use of cannabis for non-medical purposes. The *Cannabis Act* is anticipated to come into force in July 2018. The federal government will share authority and responsibility with provincial/territorial governments for various parts of the legalization and regulatory system that is developed and implemented by that point.

Key components of the proposed Cannabis Act include:

Possession and use of cannabis

- Individuals must be 18 or older to possess or purchase cannabis, but provinces and territories can set a higher age.
- Adults (default aged 18 and older) may possess up to 30 g of dried legal cannabis in a public place, but provinces and territories can set a lower limit.
- Adults may distribute or share up to 30 g of cannabis with other adults, but may not sell it unless they are licensed to do so.
- Adults may grow up to four plants per household, each to a maximum height of 100 cm.
 Provinces and territories can reduce the number of plants, reduce the maximum height and limit where it may be cultivated.

Illegal activities

- It will not be a criminal offence for a young person (as defined in Bill C-45: aged 12 to 17) to possess or distribute up to 5 g of cannabis. This prevents youth from entering the criminal justice system for smaller possession amounts, but provinces and territories are may further restrict this and make this a provincial offence.
- There will be strict criminal penalties for anyone operating outside of the legal system.
- Law enforcement will have the option of issuing a \$200 ticket for a set or relatively minor offences (e.g., carrying more than 30 g but less than 50 g of cannabis).

Restrictions on advertising, promotions and packaging

- Advertising and promotion of cannabis and accessories, is governed by restrictions akin to those that apply to tobacco:
 - o Cannot be appealing to youth;
 - o No false, misleading or deceptive promotion;
 - No sponsorships or endorsements;
 - No depictions of a person, celebrity, character or animal.
- Packaging and labelling restrictions similar to tobacco (not appealing to youth, no false or misleading information);
- Restrictions on the display of cannabis and cannabis accessories at the point of sale.

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Retail of non-medical cannabis

- Provinces and territories have the authority to determine their own regime for distribution and retail of non-medical cannabis and will have the responsibility of all related regulatory functions
- Cannabis products cannot contain nicotine, caffeine or alcohol.

Protection of public health and safety

 The Non-smokers' Health Act will be amended to prohibit the smoking and vaping of cannabis in federally regulated places, similar to the restrictions in place for tobacco smoking.

As part of its regulatory and policy decision making, the provincial government has embarked on a development phase that includes the soliciting of feedback from stakeholders around the province. The information summarized in this report is intended to supplement Child Health BC's submission to British Columbia's Cannabis Legalization and Regulation Secretariat, which is coordinating the development of the province's regulatory and policy framework for cannabis.

The focus of this report is on how other jurisdictions have implemented their cannabis legalization/regulation plans and, in particular, the policies and measures that have been adopted to address the harmful impacts of youth consumption of cannabis.

Scope

This report is the result of a review of publicly-available information related to the development and implementation of other jurisdictions' approaches to regulating cannabis use among young people. The review was intended to be a high-level scan of the information that is available, rather than an in-depth analysis.

The review had two primary focusses:

- 1. Consideration of how other jurisdictions have developed policies or regulations for cannabis use amongst youth, or are openly discussing how to address issues related to cannabis use amongst youth.
- 2. Consideration of the range of interventions and policies that other jurisdictions have implemented to augment or support the regulation of cannabis use by young people.

In considering these points, this review was also cognizant of two related factors: how other jurisdictions have provided messaging around the implications of cannabis use by young people; and references to medical evidence regarding cannabis use by youth.

This review was time-limited, and focused on identifying and summarizing the information that is likely to be most relevant to the BC context, as the province develops and implements its approach to cannabis legalization and regulation. Accordingly, it focused on:

1. Jurisdictions that have legalized cannabis for recreational use, and implemented plans for legal distribution. These jurisdictions are limited to Uruguay and the eight American states where legalization is in place and, to varying degrees, subject to state regulation:

Colorado Washington Oregon Alaska Nevada Maine

Massachusetts California

2. Jurisdictions where legalization is pending, and which have proposed regulatory schemes (Alberta and Ontario, as of October 15, 2017).

3. Jurisdictions where cannabis has not been legalized, but where possession and use has been decriminalized, or possession/consumption laws are not enforced; or where promising results in reducing cannabis use among youth has been reported:

Portugal Netherlands Spain Iceland

A number of jurisdictions have allowed for medical cannabis use by people who have a prescription or other medical authorization to possess and use the drug. These jurisdictions, which include 23 American States and countries such as Australia, Germany, Israel and Mexico, are not included in this report as the regulation of medical cannabis is based on different policy, regulatory and legal assumptions and restrictions.

Countries where legalization has occurred, but where sufficient information regarding regulation could not be identified, are not included in this report. These countries include Colombia (where possession of up to 22 grams of cannabis and 20 plants for personal use is legal) and South Africa (where bans on personal cultivation and consumption were recently found to be unconstitutional, a case which is working its way through the South African courts).

Along with these jurisdiction-specific summaries, Part C of this report also considers wider studies of interventions that have been undertaken by governments and organizations that focus on drug policy and/or child and youth health (such as the Canadian Pediatric Association and the Canadian Centre for Drug and Addiction). Although the area of legalized cannabis is new, these organizations have considered cannabis use intervention policies for youth more broadly, and those approaches which show the most promise are described in this report.

In addition, a scan was conducted regarding assessments of interventions that have been used in other jurisdictions to address youth use of cannabis. This is summarized in part D of this report.

B. JURISDICTIONAL REVIEW

This section provides an overview of the cannabis legalization and regulation plans put in place by other jurisdictions, with summaries focusing on how regulation potentially impacts young people. In addition, specific policies or programs that the jurisdictions have put in place to address youth use of cannabis are also summarized in this section.

The key components of each jurisdiction's cannabis regulation plan are summarized as Appendix 1.

Whichever regulatory model is instituted, the mechanisms chosen to apply that model can vary widely. For example, while both Uruguay and the American state of Colorado have legalized recreational use, Uruguay's model includes strict government controls on the amount of consumption and the price of cannabis, while Colorado has a much more relaxed free market approach. Accordingly, legalization can put its emphasis on harm reduction or upon revenue generation, depending upon the policy choices of the jurisdiction in question.

United States

The nation with the most experience in legalizing and fully regulating the sale of recreational cannabis is the United States. As of October 2017, eight U.S. states and Washington D.C. have legalized cannabis use for non-medical purposes. Of these, five states have implemented their regulatory schemes for recreational sale, while three have legalized the possession and use of cannabis and are continuing to formalize their sales plans.

American cannabis legalization, while state-specific, has developed with numerous common denominators, such as:

- Legalization mechanism: voter-initiative propositions;
- · Retail pricing structure: commercial;
- Production: licensed commercial products;
- · Marketing: allowed with restrictions;
- Public use: Generally prohibited;
- Maximum THC potency: no cap defined;
- Minimum age of purchase and consumption: 21 years; and
- Taxation: some form of specific taxation added (excise or sales taxes, depending on state).

The main components of each state's cannabis legalization and regulation system are summarized in turn.

Colorado

As a result of popular ballot measure, Colorado legalized the possession and use of recreational cannabis in November 2012. Since then, adults aged 21 and over may:

- Grow up to three immature and three mature marijuana plants privately in a locked space;
- Possess all marijuana from the plants they grow (as long as it stays where it was grown);

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- Possess up to one ounce of marijuana while traveling; and
- Give as a gift up to one ounce to other citizens 21 years of age or older.

Consumption cannot take place in public, so is effectively limited to use in a private residence or, where permitted, a hotel.

On January 1, 2014, Colorado became the first state in the nation to allow sales of recreational cannabis, with a licensing scheme that is overseen by the Department of Revenue, Marijuana Enforcement. Unlike the state of Washington, Colorado did not place caps on production or the number of licensed retail cannabis stores available within the state – as of October 11, 2017, there were about 505 licensees in the state. Any adult aged 21 or over may purchase up to one ounce of cannabis or cannabis products from a licensed retailer.

Legalization has highlighted a broad set of issues resulting from the multiple means of cannabis use (e.g. smoking, edibles, concentrates), the lack of a mature regulatory structure, and the complications of conflicting state and federal cannabis laws. The state has developed a broad, multisector collaboration to address the wide variety of concerns associated with cannabis legalization and for ensuring consistent messaging across the state.

Immediately after the legalization of recreational cannabis, the department was involved in developing policies and regulations to protect the public's health and safety. The department was a member of the initial task force that developed recommendations and regulations that built on the successes of the past 50 years of public health progress to reduce the prevalence of tobacco use, exposure to secondhand smoke, and alcohol-related problems.

To ensure consistent statewide messaging, the department has created a Web portal¹ that coordinates messaging across all state agencies, including:

- the Department of Transportation's impaired driving messages
- the Department of Education's messaging for adolescents and parents
- the Department of Revenue's information on licensing and enforcement
- the public health department's information on health impacts.

The portal also links to all health-related research and public education materials created for the use of parents, community agencies, schools, and health care providers, the *Colorado Education and Prevention Resource Guide.*² It provides links to information about legal use, health effects, responsible use, and tips for parents to talk to their children. A resource section includes links to information and data regarding cannabis use, its impact on Colorado citizens, and options for mitigating use by youth.

Colorado has implemented a number of policy strategies which promote healthy environments and prevent the modeling of substance use for children and adolescents by applying existing smoke-free policies and public consumption bans to cannabis. One interesting link on the government website provides a summary of initiatives aimed at preventing youth use of drugs

¹https://www.colorado.gov/marijuana

² https://www.colorado.gov/pacific/sites/default/files/MJ_RMEP_Resource-Guide.pdf

and alcohol, and their specific application or results for mitigating cannabis use.³ Among many findings, it suggests the following are useful in limiting youth access to and use of recreational cannabis:

- Limit the density of retail locations
- Educate retailers on the cannabis regulations and how to communicate with customers about the product
- Restrict industry from advertising or appealing to youth
- Increase enforcement of laws prohibiting sales to minors
- Use mass-reach campaigns to communicate about health risks and implications
- Monitor changes in drug use patterns and the emerging science and medical information relevant to the health effects associated with cannabis use

Age and other sales restrictions have been used to limit youth use: Colorado's Marijuana Enforcement Division rules:

- Ban the presence of anyone younger than 21 years in the retail store.
- Limit the hours of operation of retail licensees to 8:00 am to midnight.
- Require identification at point of purchase for proof of age.
- Forbid the sale of cannabis to someone younger than 21 years.

Local governments can restrict hours of sales even further and can restrict retail stores to limited locations in their communities far from schools and other youth centers, if local governments choose to allow the sale of cannabis at all.

With stakeholder and community input, Colorado established rules on packaging, labeling, and product safety requirements equal to or exceeding those of tobacco products for recreational cannabis products. For example:

- Packaging cannot appeal to children or youth, or use cartoon characters.
- Strict requirements have been placed on advertising, including outright bans on Internet pop-up advertisements and any type of advertisement that targets minors.
- Advertising is only allowed via television, radio, print, Internet, or event sponsorship
 when it can be documented that less than 30% of the audience is younger than 21
 years.
- Outdoor advertising is prohibited other than signs that identify the location of a licensed retail cannabis store.

A key component of Colorado's scheme is its public awareness campaign. Pursuant to Colorado law, the Colorado Department of Public Health and Environment (CDPHE) is funded to provide education, public awareness and prevention messages about retail cannabis.

Prevention messaging campaigns are one of the few evidence-based interventions shown to increase awareness of harms and reduce cannabis use at the population level.⁴ Through its public health department, Colorado utilizes a mass-reach public awareness and education

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³ https://docs.google.com/document/d/1LsVfodSKeHo1HBUugIf7iDH8rSHuBRIfM6izaV0z160/edit

⁴ Substance Abuse and Mental Health Services Administration. Strategies/interventions for reducing marijuana use. Available at: https://captus.samhsa.gov/sites/default/files/LitReview Marijuana Strategies NE.pdf.

campaign called <u>GoodToKnowColorado.com</u>, which was launched January 2015. *Good to Know* has been accessed more than 170 million times and includes:

- Targeted messages to educate residents and visitors about safe, legal, and responsible use of cannabis.
- Education about the health effects of cannabis and key laws that aim to prevent youth use.
- Information about safety concerns with eating or smoking cannabis products, reducing secondhand cannabis smoke exposure, and the harms of combining cannabis with other substances.

Colorado has tried to monitor teen cannabis usage as part of its biennial *Healthy Kids Colorado* survey, an anonymous, voluntary survey that received 17,000 responses in 2015.⁵ The survey found that teen use has remained nearly unchanged and has been trending down since 2009. In 2015, 21 percent of Colorado teens reported using cannabis in the past 30 days, which was slightly below the national average. In the 2009 survey, that number was 25 percent.

Although Colorado has the longest experience with legalized cannabis, assessment of the success of intervention approaches is challenging. One challenge in Colorado is the lack of robust baseline data on adult cannabis use and attitudes before the implementation of legal recreational cannabis in 2014. Another major challenge has been the lack of validated survey questions and widely accepted definitions to capture prevalence, frequency, and type of cannabis use.⁶

However, it is a common view that a major success of the Colorado experience was the close involvement of public health officials during the development of cannabis regulations, allowing a proactive approach to implementing important public health policy interventions such as advertising and sales restrictions, child-resistant packaging, and protections to prevent secondhand smoke exposure.⁷

Washington

Non-medical cannabis use was legalized in Washington state in 2012 through a statewide initiative (Initiative 502), which permitted adults aged 21 and mover to possess of a combined maximum of:

- 1 oz. dried cannabis product
- 16 oz. infused solid cannabis product
- 72 oz. infused liquid cannabis product
- 7 g concentrated cannabis.

Unlike other states, Washington does not permit the cultivation of cannabis plants on private property for personal use.

⁷ Ghosh et al.

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⁵ https://www.colorado.gov/pacific/cdphe/hkcs

⁶ Ghosh et al.

After two years of rules development, the first retail store opened in Washington in July 2014. The Washington State Liquor and Cannabis Board (WSLCB) is the agency responsible for licensing and regulating cannabis businesses. Since July 2016, both medical and non-medical cannabis can only be purchased in stores licensed by WSLCB.

Washington caps the maximum number of retail outlets that may exist in the state at 556, with the number of retail locations per county/city determined by distributing the number of locations proportionate to the most populous cities within each county. As of May 2017, there were 505 retail stores in the state.

Retail outlets cannot be located within 1000 feet of any elementary or secondary school, playground, recreation center or facility, child care center, public park, public transit center, library, or game arcade that allows minors to enter. Recent legislation allows local governments to pass an ordinance to allow for a reduction in the 1000-foot buffer requirements to 100 feet around all entities except elementary and secondary schools and public playgrounds. Local authorities are notified when an application is made, and have an opportunity to object.

Washington State legislation gives communities the right to adopt local zoning ordinances that limit or modify cannabis availability. As of June 2016, 125 municipalities and 30 counties in Washington had passed ordinances restricting sales at some level. Five counties completely prohibited all cannabis businesses as of August 2017: Clark, Franklin, Klickitat, Walla Walla, Yakima.

The WSLCB is the agency responsible for licensing and regulating cannabis businesses, as well as regulating advertising, packaging, and labeling. Every Wednesday, WSLCB releases updates to its *Marijuana Dashboard*⁸ which provides an overview of the market in Washington, including licensing, production, sales per product, and compliance figures.

In the 2017 fiscal year, excise taxes generated \$260 million, and 27% of these funds went to voter-mandated cannabis-related programs, such as prevention and treatment, education, research, and other public health projects. Many of these Initiative 502-mandated programs and projects are centralized and co-located on a website administered by the University of Washington's Alcohol & Drug Abuse Institute.⁹

In addition, the Washington State Department of Health is responsible for working with patients, caregivers, database, identification cards, and authorizations. As directed by Initiative 502, the Department of Health provides the following services as its main forms of outreach and public education:

- A public health hotline: http://www.warecoveryhelpline.org.
- Community grants that support the prevention and reduction of cannabis use by youth.
- Media-based education campaign, Listen2YourSelfie, which targets youth ages 12-17.

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⁸ https://data.lcb.wa.gov/stories/s/WSLCB-Marijuana-Dashboard/hbnp-ia6v/

⁹ http://learnaboutmarijuanawa.org/

The indications are that legalization has not resulted in an increase in cannabis use among Washington youth. According to the 2016 Healthy Youth Survey, 10 cannabis use has remained steady at levels similar to national rates since 2010, despite the changing landscape of legalization in the state. However, youth attitudes have moved toward greater acceptance of cannabis use, both nationally and in Washington.

Alaska

Following a successful November 2014 ballot initiative, possession of up to 1 ounce of cannabis by persons aged 21 years or more became legal in Alaska in February 2015. Alaska allows individuals to grow up to 6 plants each, to a maximum of 12 per household. Consumption is not permitted in public places, which has been clarified to include highways, transportation facilities (bus stations, etc.), schools, parks, playgrounds, prisons, businesses, hallways, lobbies, and other communal areas in hotels or apartments. Possession and consumption of concentrated cannabis is not permitted at all.

The Alaska Legislature created the Marijuana Control Board in May 2015, with a mandate to adopt regulations governing commercial cannabis establishments and regulate the newly formed industry. The Marijuana Control Board adopted regulations at the end of 2015, and those regulations became effective February 21, 2016, making Alaska the third state to allow retail sales of recreational cannabis.

Cities and counties can vote to completely ban recreational cannabis facilities, and may restrict where a business can be located. Local municipalities are also allowed to "reasonably regulate" the growing, possession and use of plants. Alaska does not appear to have state-wide restrictions regarding retail locations' proximity to schools, playgrounds, or other places frequented by young people.

Public education and awareness is coordinated by the Alaska Department of Health and Social Services' (DHSS) Division of Public Health, which hosts a coordinating "Get the Facts" website¹¹.

DHSS worked with Colorado, which had gone through a rigorous literature review, to integrate its materials for the website, which also provides specific Alaskan context where appropriate.

Alaska's chief medical officer and DHSS staff also reviewed and approved all DHSS content. The site includes information about the health impacts of cannabis on youth, how parents can communicate with their children about the risks of using cannabis, 12 and ideas for reducing children's access to cannabis. The site also links to a youth-focused fact sheet on cannabis. 13

The DHSS has run two public campaigns, coordinated with the roll-out of Alaska's legalization and regulation scheme. The 2015 campaign included a public service announcement with messages about the basic scope of legalization. 14 The 2016 campaign was more focused on

¹⁰ http://learnaboutmarijuanawa.org/factsheets/HYSmarijuana2016.pdf

¹¹ http://dhss.alaska.gov/dph/Director/Pages/marijuana/law.aspx

¹² http://dhss.alaska.gov/dph/Director/Documents/marijuana/ParentsGuide TalkingToTeensAboutMJ.pdf

¹³ http://dhss.alaska.gov/dph/Director/Documents/marijuana/MJFactSheet Adolescents.pdf

¹⁴ https://www.youtube.com/watch?v=D7yRlxxlLnk

public health, with messaging about the potency of today's cannabis, pregnancy and breastfeeding, accidental consumption by children and animals, and risks associated with using edible cannabis products.

Oregon

The voters of Oregon approved ballot initiative Measure 91 in 2014, which legalized the possession and use of cannabis for adults aged 21 or older effective July 1, 2015. In Oregon, possession laws are different for cannabis use at home versus away from home.

Adults may possess the following in a public place:

- 1 ounce of usable cannabis (i.e. dried flower)
- 1 ounce of cannabis concentrates or extracts (cannot be homemade)
- 16 ounces of cannabis edibles in solid form
- 72 ounces of cannabis products in liquid form
- 10 cannabis seeds
- 4 immature cannabis plants

In a private residence or property, adults may possess up to 8 ounces of usable cannabis (i.e. dried flower). All other possession limits remain the same as public possession. An additional restriction is that plants may not be grown on property that is less than 1000 feet away from a school.

Consumption of cannabis in public in Oregon is not permitted, and may only occur on private property.

In 2015, Oregon's Governor signed an emergency bill declaring cannabis sales legal to recreational users from medical cannabis dispensaries starting October 1, 2015. State officials began working on establishing a regulatory and taxation structure for recreational sales, with the Oregon Liquor Control Commission (OLCC) to oversee it.

Effective January 1, 2017, dispensaries were no longer permitted to sell cannabis for recreational use unless they applied for, and received, an OLCC license for such sales. During the one-month span from early December 2016 to early January 2017, the number of retailers licensed to sell recreational cannabis grew from 99 to 260, and hundreds more applications had been received and were being processed.

In Oregon, individuals who are 21 years of age or older and possess a valid government-issued ID, are able to purchase cannabis flower, seeds, clones, edibles, concentrates and several other products containing cannabinoids. Individuals are limited to purchasing a maximum of:

- 1 ounce of usable cannabis (i.e. dried flower) (4 oz. if registered as a medical cannabis cardholder)
- 5 grams of cannabis concentrates or extracts
- 16 ounces of cannabis edibles in solid form
- 72 ounces of cannabis products in liquid form
- 10 cannabis seeds
- 4 immature cannabis plants

Gifting of recreational cannabis between two adults 21 years of age or older is permitted, but only if the gifted amount does not exceed possession limits and the gift-giver does not accept any financial consideration. Oregon goes on to define financial consideration as including money, goods or services, tips, cover charges, admission fees, donations, raffles, fundraisers and sales.

Oregon has adopted a similar policy as Colorado, which allows for local cities and counties to decide for themselves if they will allow recreational cannabis stores. Personal possession is allowed regardless if a city/county allows recreational stores or not.

The government of Oregon has developed central government website with information about recreational cannabis use in the state¹⁵. It is a comprehensive source of relevant information for the public, including factors to protect young people such as step taken on enforcing childresistant packaging regulations to keep cannabis out of the hands of children.

In March 2016 the Oregon Legislature passed House Bill 4014, tasking the Oregon Health Authority's Public Health Division (OHA-PHD) with the design, implementation, and evaluation of a pilot health education campaign to increase awareness of the possible negative health effects of cannabis use by youth and young adults.

In response OHA-PHD created and implemented the pilot *Stay True to You*, a mass media health education campaign directed at youth and young adults. ¹⁶ The campaign aims to protect the public's health by providing motivating, factual, and believable information to help prevent or delay underage cannabis use.

A final report on the pilot phase of *Stay True to You* was released in June 2017.¹⁷ In recommended the following policies as ways to more fully address youth prevention:

- 1. Extend *Stay True to You*, as preventing youth from using cannabis requires a comprehensive public health response that includes support in every community for all families and for youth, whether or not they already use cannabis.
- 2. Require cannabis businesses to disclose their expenditure on marketing and promotion.
- 3. Establish a maximum size and number for signs at retail cannabis stores.
- 4. Prohibit the sale of flavored cannabis products. These are recognized as being a "gateway" tactic to encourage young people to use tobacco, and should be similarly discouraged in the context of cannabis.
- 5. Protect local control over decisions about cannabis businesses, youth, families, and communities.

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¹⁵ http://www.oregon.gov/olcc/marijuana/pages/default.aspx

¹⁶ http://www.staytruetoyou.org/

¹⁷ http://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/MARIJUANA/Documents/Stay%20True%20to%20You% 20Final%20Campaign%20Results%202017.pdf

Nevada

Nevada's *Initiative to Regulate and Tax Marijuana*¹⁸ was approved as a ballot initiative in November 2016, making both recreational and medical cannabis legal in the state. As a result, since January 1, 2017, people aged 21 years and older are permitted to:

- Possess up to 1 oz of dried cannabis or 1/8 oz of concentrated cannabis; and
- Possess, cultivate and transport up to 6 plants for personal use (12 per residence), as long as the cultivation occurs in an enclosed, locked area.

Public consumption of cannabis is not permitted in Nevada. Neither is home cultivation within 25 miles of any dispensary, effectively blocking most of the population of Nevada from growing their own cannabis.

The initiative did not include provisions for regulation beyond taxation, such as licensing retailers. In addition, unlike initiatives in Oregon and Washington for example, the ballot measure did not include earmarking money earmarked for public health regulation and public health agencies were not mentioned in the measure.

The initiative required that the Nevada Department of Taxation begin receiving license applications for recreational sales no later than January 1, 2018. The state brought its recreational sales scheme into effect early, with sales starting July 1, 2017.

Recreational dispensaries are determined by county size, with 80 being allocated to Clark County, 20 to Washoe County, four to Carson County and two to the additional 14 counties. Most dispensaries can be found in highly populated areas like Las Vegas and Reno, with the remaining ones sprinkled throughout the rest of the state. Customers purchasing retail cannabis will have to show proper identification proving they are 21 or older, as with alcohol purchases.

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¹⁸ http://nvsos.gov/sos/home/showdocument?id=4434 and http://nvsos.gov/sos/home/showdocument?id=4434

The Nevada government website¹⁹ emphasizes its efforts to protect children from the harmful effects of cannabis use, summarized below:

Packaging and labeling requirements

The following packaging and labeling requirements are required, to protect children:

- All marijuana and marijuana products must be sold in child-proof packaging
- Marijuana products like brownies must be sold in a sealed, opaque container
- "Keep out of reach of children" must be clearly marked on labels of marijuana products
- Packaging can't contain images of: cartoon character, mascot, action figure, balloon, toy
- Packaging/labeling can't be modeled on products aimed at children

Restrictions on advertising and marketing

The following restrictions on advertising, marketing, and products apply:

Marijuana products cannot be made in a form that:

- · Is or looks like a lollipop or ice cream
- Looks like a real or fictional person, animal, or fruit
- · Is modeled after a brand of products primarily consumed by or marketed to children
- · Is made with candy or snack food items

Marijuana advertising cannot:

- · Depict marijuana being consumed
- Be in any publication or on radio or TV if 30 percent or more of the audience of that medium is reasonably expected to be younger than 21
- Be placed within 1,000 feet of a school, playground, public park, or library
- Be placed on or inside of a motor vehicle used for public transportation or any shelter for public transportation
- Be placed at sports/entertainment events that allow people in who are younger than 21

In addition, the licensing of retail sales outlets is restricted by the following requirements:

- No cannabis establishment may be located within 1,000 feet of an existing public or private preschool or K-12 school.
- No cannabis establishment may be located within 300 feet of any existing community facility, such as day cares, public parks and playgrounds, public swimming pools, recreational centers for children and teens, and churches, synagogues, or other places of religious worship.

Those caught distributing cannabis-related products to minors are punishable with a minimum one-year sentence for first time offenses and up to life in prison (with potential parole after five years) for subsequent offenses.

The lack of a clear role for public health, and the focus on the revenue generation, is a striking difference in the Nevada approach, versus those in states like Colorado, Washington, Oregon and Alaska.

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¹⁹ http://marijuana.nv.gov/

California

In California, recreational usage of cannabis became legal with the passage of Proposition 64, also known as the *Adult Use of Marijuana Act*.²⁰ As of November 9, 2016, adults aged 21 or older were allowed to:

- Possess, transport, process, purchase, obtain, or give away (to another adult) up to one ounce of dry cannabis or eight grams concentrated cannabis.
- Possess, plant, cultivate, harvest, dry, or process no more than six live plants and the produce of those plants in a private residence, in a locked area not seen from normal view, in compliance with all local ordinances.
- Smoke or ingest cannabis.

A number of restrictions were included, and users may not:

- Smoke cannabis where tobacco is prohibited.
- Possess, ingest or smoke within 1,000 feet of a day care, school, or youth center while children are present (except within a private residence and if the smoke is not detectable to said children).
- Smoke or ingest cannabis while operating or riding in a vehicle.

Under the measure, cities and counties may place "reasonable" restrictions on the cultivation of cannabis for personal use (such as by prohibiting outdoor cultivation) but could not prohibit cultivation within a fully enclosed and secure private residence.

Proposition 64 requires that revenue paid into the new California Marijuana Tax Fund will allocate 60% of outflows to youth programs, 20% to environmental damage cleanup, and 20% to public safety.

Proposition 64 further required that the state implement regulations for production and sale of cannabis by January 1, 2018. The state is currently developing and finalizing its regulatory scheme. Three agencies are leading the process:

- The Bureau of Cannabis Control (BCC) is the lead agency in developing regulations for medical and adult-use cannabis in California. BCC is responsible for licensing retailers, distributors, testing labs and microbusinesses.
- The Manufactured Cannabis Safety Branch, a division of the California Department of Public Health (CDPH), is responsible for regulating the manufacturers of cannabisinfused edibles for both medical and nonmedical use.
- CalCannabis Cultivation Licensing, a division of the California Department of Food and Agriculture (CDFA), is developing regulations to license cultivators of medicinal and adult-use (recreational) cannabis and implementing a track-and-trace system to record the movement of cannabis through the distribution chain.

Although the state was working towards two separate systems for medical and recreational cannabis, in late June the legislature passed and the governor signed into law the *Medicinal and*

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²⁰ https://ballotpedia.org/California Proposition 64, Marijuana Legalization (2016)

Adult-Use Cannabis Regulation and Safety Act (MAUCRSA),²¹ which creates one regulatory system for both medicinal and adult-use cannabis. The three cannabis licensing authorities are in the process of drafting emergency regulations based on the new law for the commercial medicinal and adult-use cannabis industries.

California's medical cannabis ballot measure did not require a public education campaign, but this broader law does. The CDPH received funding to develop a campaign, as detailed in *MAUCRSA*, describing:

- The scientific basis for restricting access of cannabis and cannabis products for persons under the age of 21 years;
- The penalties for providing access to cannabis and cannabis products to persons under the age of 21 years;
- · The potential harms of using cannabis while pregnant or breastfeeding; and
- The potential harms of overusing cannabis or cannabis products.

CDPH engaged in extensive conversations with stakeholders in California and partners in other states with legalized cannabis to target the most vulnerable populations and apply their lessons learned. In September 2017, the CDPH launched a health information and education campaign focusing on what is legal in California and the potential health impacts of cannabis use: campaign, Let's Talk Cannabis.

Let's Talk Cannabis includes information about legal, safe and responsible use, and health information for youth, pregnant and breastfeeding women, parents and mentors, and health care providers. An educational digital toolkit for local governments and community organizations will be available in the future.

In terms of the protection of youth, one scholarly review²² summarizes that the California legislation has a number of well-crafted provisions, including:

- · maintaining illegality of possession by minors;
- dedicating 60% of cannabis tax revenue (after regulatory expenses) for youth prevention and remediation;
- designating funding for Student Assistance Programs (SAPs);
- specifying educational and supportive sanctions for underage cannabis use; and
- requiring semi-annual reports of youth infractions, misdemeanors, and felonies to help to assess the efficacy of legal sanctions.

This review makes a number of recommendations to further improve the protection of youth, including:

- 1. Labeling and Advertising: the legislation prohibits packaging and advertising that is attractive to youth, but a public review request process is needed
- 2. Prevention Frameworks: The Institute of Medicine and SAMHSA frameworks for preventive care should be incorporated into all prevention and intervention services for

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²¹http://leginfo.legislature.ca.gov/faces/codes displayexpandedbranch.xhtml?tocCode=BPC&division=10.&title=& part=&chapter=&article

²² Banys and Cermak

youth. Programs should emphasize evidence-based education, effective prevention, early intervention, school retention, and timely treatment services for youth and their families.

- 3. Community-Based Treatment Programs: stable funding is required for clinical programs for affected youth.
- 4. Proportional Sanctions: Youthful, peer-based sharing or group purchases should not be legally conflated with criminal intent to distribute or trafficking.

As recently as October 9, 2017 the Governor vetoed three bills that would have put restrictions on, among other things, consumption of cannabis on beaches and parks, and the production of edibles that might appeal to children.²³ Public debate is underway, with institutions like the Los Angeles Times editorializing that California should not follow the example of other states in fully restricting public use.²⁴

Maine

Maine approved a ballot initiative on November 8, 2016 and recreational cannabis use was legalized effective January 30, 2017²⁵. Adults over the age of 21 may now possess up to 2.5 ounces of cannabis (greater than the 1 oz generally permitted in American states), and grow up to six plants for their personal use. Consumption in public is not permitted.

Maine is currently developing its recreational cannabis sales scheme, with implementation expected February 2018. A special legislative committee has been formed to address the complex issues surrounding full implementation of the law. According to recent reports, draft regulations include co-locating medical and recreational cannabis sales, and allowing for drive-through and internet sales. As with alcohol sales, municipalities can vote on whether or not to be a "dry town" regarding cannabis retail establishments and social clubs.

The Maine legislation provides the Department of Agriculture, Conservation and Forestry with the authority and responsibility to oversee the regulation of legalized recreational cannabis, and includes the following provisions that are relevant to the protection of youth:

107. Collection and analysis of public health and safety data

The department shall develop programs or initiatives to facilitate the collection and analysis of data regarding the impacts and effects of the use of marijuana in the State, including, but not limited to, youth and adult marijuana use; school suspension and discipline relating to the use of marijuana...

108. Awareness and education on public health and safety matters

The department shall develop and implement, or facilitate the development and implementation by a public or private entity of, programs, initiatives and campaigns focused on increasing the awareness of and educating the public on health and safety matters relating to the use of marijuana and marijuana products, including, but not limited to,

https://merryjane.com/news/california-governor-jerry-brown-vetoes-marijuana-related-bills-butane-edibles-public-consumption

²⁴ http://www.latimes.com/opinion/editorials/la-ed-marijuana-smoke-20171009-story.html

²⁵ IB 2015, c. 5, "An Act to Legalize Marijuana"

²⁶ Thistle

programs, initiatives and campaigns focused on preventing and deterring the use of marijuana and marijuana products by persons under 21 years of age.

Maine has developed a website that contains some basic information for parents,²⁷ but is not very robust compared to similar sites in states like Colorado, Washington and Oregon.

Massachusetts

In the November 8, 2016 election, Massachusetts voters passed a ballot initiative making recreational cannabis legal in the state. Under its *Regulation of the Use and Distribution of Marijuana Not Medically Prescribed*²⁸ law, adults aged 21 and more may:

- Possess, use, purchase, process or manufacture 1 ounce or less of marijuana, except that not more than 5 grams of marijuana may be in the form of marijuana concentrate;
- Possess up to 6 marijuana plants per person, for personal use so long as not more than 12 plants are cultivated on the premises at once; and
- Possess up to 10 ounces of product from plants cultivated on the premises.

The law includes packaging and labeling rules, and requires that cannabis products be sold in child-resistant packaging. Massachusetts' law is also explicit in stating that possession or use of cannabis alone is not a justification for removing a child into care or altering terms of custody or other parental rights.

In December 2016 the governor signed legislation extending the start date for recreational cannabis sales by six months (from that set out in the ballot initiative) - after required licensing procedures, retail cannabis stores will be permitted to open beginning in July 2018.

Massachusetts has not yet coordinated its government approach. A central website provides basic information about the progress of legalization and regulation²⁹ under a newly appointed Cannabis Control Commission. The state's Department of Health and Human Services also hosts a site,³⁰ with information for parents about the risks associated with cannabis use, and possible actions to prevent its use among young people.³¹ It is also quite basic at this point.

In addition, the Massachusetts Health Promotion Clearinghouse³² funded by the Massachusetts Department of Public Health offers useful information about ways to prevent substance misuse and abuse among children. The department also supports a helpline with free and confidential information about substance abuse, education and counselling services.³³

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²⁷ http://maineparents.net/TeensandMarijuana/

https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXV/Chapter94G

http://www.mass.gov/treasury/marijuana/

 $[\]frac{^{30}}{\text{http://www.mass.gov/eohhs/gov/departments/dph/programs/substance-abuse/prevention/marijuana-and-your-kids.html}}$

³¹ Prevention Tips for Your Middle School-Aged Child; Prevention Tips for Your High School-Aged Adolescent

³² http://massclearinghouse.ehs.state.ma.us/category/ALCH.html

³³ www.helpline-online.com

Canada

In Canada, provinces have begun to release the details of their plans for regulating the use and sale of cannabis in their jurisdictions. Canada has a shared-responsibility model, with the provinces solely responsible for workplace safety, distribution and wholesaling, retail models, retail locations, and public consumption restrictions. The provinces share responsibility with the federal government with respect to impaired driving, public health, education, taxation, and regulatory compliance,³⁴ as summarized in the framework recently released by Alberta:

The key components of other Canadian jurisdictions' approaches are summarized below. As of October 16, 2017, only Alberta and Ontario have released their plans.

Ontario

On September 8, 2017, the Ontario government announced its proposed framework to regulate recreational cannabis, including its proposed retail and distribution model for sales of cannabis in Ontario.³⁵ In developing its framework, the Ontario government met with at least 50 organizations with an interest in the issue. This past summer, the Ontario government also conducted an online survey requesting feedback and perspectives from the public, although it is unclear the extent to which this public consultation was relied upon in developing the framework.

Key components of the Ontario regulation framework include:

Minimum Age

Ontario will set the minimum age to purchase recreational cannabis at 19 years old, the same as alcohol and tobacco. This minimum age would also apply to possession and use. The province explicitly recognized the need to balance protecting youth with an understanding that setting the age too high would risk driving young people to the illegal market.

Youth Possession

The federal government also proposed possession limits for adults and youth. Under the federal proposal, adults would be allowed to have up to 30 grams of dried legal cannabis, while people under 18 years old could have up to five grams.

To protect young people in Ontario, the province will prohibit individuals under the age of 19 from possessing or consuming recreational cannabis, which will allow police to confiscate small amounts of cannabis from young people. The province's approach to protecting youth will focus on prevention, diversion, and harm reduction without unnecessarily bringing them into contact with the justice system.

Cannabis consumption

Ontario will only permit the use of recreational cannabis in private residences. People would not be allowed to consume any form of recreational cannabis in public places, workplaces or when inside a motor vehicle.

³⁴ See summary at Appendix 2

³⁵ https://www.ontario.ca/page/cannabis-legalization

Over the coming months, Ontario will consult with municipal partners, the Alcohol and Gaming Commission of Ontario and other organizations to explore the feasibility and implications of introducing designated establishments where recreational cannabis could be consumed.

Ontario also announced that it will support youth, young adults and other vulnerable populations through the development of a comprehensive prevention and harm reduction approach which promotes awareness of cannabis related health harms and helps people make informed decisions about use. The approach will also include education, health and social service providers that work with, and educate, youth and young adults. As part of this approach, Ontario is:

- Endorsing *Canada's Lower Risk Cannabis Use Guidelines*, ³⁶ and will work with health care partners to share that information and promote their uptake; and
- Exploring training and other supports needed to increase capacity among education, health care, youth justice and social service providers to improve prevention and harm reduction efforts.

In the lead-up to federal legalization, to help ensure public awareness of this transition and the new measures that will take effect, the province will undertake a public information campaign. Ontario will also work to support the federal government's planned national public awareness campaign to promote prevention and harm reduction.

Ontario's approach has received some criticism. The Ottawa Citizen recently ran an editorial³⁷ that stated:

The provision to "allow police to confiscate small amounts of cannabis from young people," while pledging that the approach will protect youth and "focus on prevention, diversion, and harm reduction without unnecessarily bringing them into contact with the justice system" is neither sufficiently clear nor reassuring. Under prohibition, too many young lives have been harmed by the criminal consequences of trivial cannabis-related behaviours. Relying mainly on police inevitably will leave legal marks, and too easily extend young people's entanglement in the criminal justice system because of some weed. To truly protect the health and welfare of young Ontarians, we must find better ways to deal with this issue outside of the heavy hands of law enforcement.

With respect to its sales scheme, Ontario plans to manage the use and sales of recreational cannabis in very similar fashion to how it regulates alcohol and tobacco; to be overseen by the Liquor Control Board of Ontario. The rollout will be intentionally restrictive, at least initially. The government has also committed that "revenues associated with cannabis legalization will be reinvested to ensure we meet our priorities of protecting young people, focusing on public health and community safety, promoting prevention and harm reduction and eliminating the illegal market."

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³⁶http://www.camh.ca/en/research/news_and_publications/reports_and_books/Documents/LRCUG.KT.Profession_al.15June2017.pdf

³⁷ <u>http://ottawacitizen.com/opinion/columnists/fischer-ontarios-cannabis-regulations-a-good-start-but-with-a-few-wrinkles-to-fix</u>

The Ontario government plans to introduce legislation in fall 2017 following further consultations across the province.

Alberta

Alberta's Cannabis Framework³⁸ was released on October 4, 2017 and is based on four stated goals:

- 1. Keeping cannabis out of hands of children
- 2. Protecting public health
- 3. Promoting safety on roads, in workplaces and public spaces
- 4. Limiting the illegal market

The Alberta Framework was developed and released following a two-month consultation process which included:

- A cannabis website for feedback, through with more than 45,000 people aged 17 and over were able to participate in a survey.
- A downloadable toolkit to guide discussions.
- The encouragement of written submissions
- Public opinion research sponsored by the province
- Meetings with more than 100 organizations including Indigenous groups, private industry, municipalities, the Alberta Gaming and Liquor Commission, health care providers, law enforcement, and members of the transportation and labour sectors.

Under its framework, Alberta will set its minimum age for possession and consumption of cannabis at 18. It will adopt the federal maximum of 30 grams of cannabis (equivalent to about 1 ounce). Alberta is also adopting the federal maximums for people under 18, allowing them to possess up to 5 grams.

Alberta will adopt a number of measures aimed at protecting young people from the impacts of cannabis, consistent with the stated goals of its framework. These measures include:

- A strong focus on public education, targeting both youth and parents regarding the health effects of cannabis and the risks of buying from illegal market, using appropriate messaging and lessons learned from alcohol awareness campaigns as a model;
- Banning public consumption of cannabis in areas frequented by children; and
- Restricting the cultivation of cannabis plants to indoor locations (while adopting the federal maximums of 4 plants per household).

Alberta's retail scheme will also include a number of measures specifically aimed at limiting youth access to cannabis, including:

- Requiring that retail sites are located away from schools, daycares and community centers;
- Requiring that retail staff be 18 or older, and be trained to sell cannabis and check for ID;

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³⁸ https://www.alberta.ca/assets/documents/alberta-cannabis-framework.pdf

- Conducing further investigation and adopting appropriate measures to ensure that online and home delivery of cannabis is restricted to people aged 18 and older; and
- Working with other governments and external partners to develop public education and awareness targeted at youth and parents.

In setting the minimum age for purchase and consumption of cannabis at 18, Alberta explicitly acknowledged that youth are already accessing cannabis (e.g. nearly half of Canadians in Grade 12 say they have used cannabis), and that research suggests that people under 25 who use cannabis face a greater risk of health impacts, including a negative effect on brain development. Alberta's view is that a minimum age of 18 will help balance the health risks to youth with the need to eliminate their interaction with a sophisticated and potentially dangerous illicit market.

A minimum age of 18 is also consistent with the legal age for alcohol and tobacco in Alberta, making it easier for police officers to enforce.

In an effort to protect children and limit second-hand exposure, public smoking or vaping of cannabis in Alberta will be restricted from areas frequented by children, from hospitals and school properties, from vehicles and from any place where tobacco is restricted. There will also be no consumption of cannabis at any cannabis retail outlet.

The restriction requiring that cannabis plants be grown indoors was put forward by Alberta as a measure to help protect young people, although Alberta's conclusion that "Albertans will not be allowed to grow cannabis plants outdoors, where children and youth would have easier access to them" is debatable.

Finally, Alberta is adopting a zero-tolerance approach for people under 18, who will not be able to possess or purchase and cannabis. Youth in possession of more than 5 grams will continue to face criminal charges. Possession of less than 5 grams will not result in criminal charges, but the cannabis will be seized, parents/guardians will be notified, and the youth will face penalties similar to those for underage possession of alcohol or tobacco.

Alberta will undertake further consultations before announcing its sales scheme. It is considering two models:

- 1. Government-owned and operated stores (as Ontario has announced, consistent with the way alcohol is sold in Ontario); and
- 2. Licensed and regulated private sales (consistent with how alcohol is sold in Alberta).

Albertans have just over three weeks to give feedback to the Framework, and legislation will be introduced in the months ahead.

Uruguay

On 20 December 2013, the president of Uruguay signed Act No. 19.172, establishing a nationalized market for the cultivation, sale and use of cannabis and its derivatives. In May 2014, the regulatory provisions for the application of the law were adopted and Uruguay

became the first state to legalize the production, distribution, sale and consumption of cannabis and its derivatives for purposes other than medical and scientific uses.

Under Uruguay's law, the cannabis market is regulated by an agency of the Uruguayan government, known as the Institute for the Regulation and Control of Cannabis. There are three legal means of acquiring non-medicinal cannabis – all of which are restricted to residents of Uruguay who are aged 18 or older (aligned with the minimum age for alcohol in the country):

- Individuals may grow as many as six plants at home;
- Individuals may purchase cannabis from a registered "cannabis club," which can grow up to 99 plants; or
- Individuals may buy as much as 40 g of cannabis per month at state-licensed pharmacies.

Those who purchase or grow cannabis are registered and fingerprinted to prevent anyone from buying more than 480 g per year. This is seen as one reason that far fewer people than the 160,000 that were estimated have actually sign on as consumers (about 6,000 had registered to grown at home, before the sales phase of the roll-out was completed in July 2017).

Uruguay's law gives a significant role to the state on matters of drug regulation and commercialization, and authorities in the country have vowed to make cannabis available in pharmacies at a price equal to the black-market rate. The state Institute for the Regulation and Control of Cannabis (IRCC) has authorized the sale of two types of cannabis, to be sold in five-gram packets

Sales are restricted to licensed pharmacies – to date, 16 pharmacies have been authorized to sell cannabis under state controls, far from sufficient for a country of 3.5 million people. Many pharmacies have been unwilling to become points of sale for the drug, because of concerns about security and doubts that the small market of registered users is worth the trouble. No major pharmacy chain has agreed to sell cannabis.

Uruguay has also banned all promotion of cannabis products as a means of improving public health outcomes. The revenues generated by its tax on cannabis will fund the Institute for the Regulation and Control of Cannabis as well as a public health campaign.

Uruguay's efforts to legalize cannabis have not run smoothly, with a majority of the population opposed to the idea, delays in introducing a workable distribution system, and an election that threatened to derail the entire process. The law only came into full effect in July 2017 with sales from pharmacies getting underway.

After legalization passed in Uruguay, there was an increase in the prevalence of secondary school students' use of with the drug. In 2003, 8.4% of students had consumed cannabis during the previous twelve months, and in 2014, 17% had.³⁹ The typical user at this age was much more likely to be male than female. As a result, Uruguay is putting more emphasis on public awareness, such as drug education courses.

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³⁹ Boidi et al.

In addition to those jurisdictions above, which have legalized the use of cannabis and are regulating its sale and distribution, other jurisdictions have adopted approaches to cannabis that may offer some lessons for British Columbia. Although cannabis is not fully legal, these jurisdictions have approaches are worth considering.

Portugal

In 1998, the Portuguese government appointed the Commission for the National Strategy to Fight Against Drugs, with a mandate to produce a report on topics such as prevention, treatment, social reintegration, training, research, risk reduction and supply control. The Commission's report that same year recommended the decriminalization of personal drug use.

The Portuguese legal framework on drugs changed in November 2000 with the adoption of *Law 30/2000*, which has been in place since July 2001. The law did not legalize drugs as is often loosely suggested: it did not alter the criminal penalty prohibiting the production, distribution, and sale of drugs, nor did it permit and regulate use. Rather, Portugal decriminalized drug use, removing all criminal penalties from acts relating to drug demand: acts of acquisition, possession, and consumption.

Under the 2001 law, a person caught using or possessing a small quantity of drugs for personal use is evaluated by a local Commission for the Dissuasion of Drug Addiction, composed of a lawyer, a doctor and a social worker. Punitive sanctions can be applied, but the main objective is to explore the need for treatment and to promote healthy recovery. The reform changed the nature of the sanctions imposed for personal possession and consumption of drugs from criminal to administrative.

To obtain drugs, however, the user must still depend on illicit markets. Drug trafficking remains an offence in Portugal, with punishment based upon six lists of controlled substances. The punishment for trafficking in cannabis and derivatives is a prison sentence of four to 12 years, unless users sell drugs to finance their own consumption, in which case the maximum penalty is reduced to up to three years.

In Portugal, use of illicit substances among the adult general population seems to have been on the decline over the past decade. Cannabis remains the most frequently used illicit drug, followed by MDMA/ecstasy and cocaine. Use of illicit substances is more common among young adults (aged 15-34 years) -5.8% of this group had used cannabis at least once in the last year⁴⁰ - although prevalence rates are below the European average (and far below the Canadian rate of about 22%).

According to a 2010 review, 41 the following changes occurred following decriminalization in Portugal:

- small increases in reported illicit drug use amongst adults;
- reduced illicit drug use among problematic drug users and adolescents;
- reduced burden of drug offenders on the criminal justice system;
- increased uptake of drug treatment;

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⁴⁰ ECMDDA Portugal Report 2017

⁴¹ Hughes and Stevens

- reduction in opiate-related deaths and infectious diseases;
- increases in the amounts of drugs seized by the authorities;
- reductions in the retail prices of drugs.

The Portuguese *National Plan for the Reduction of Addictive Behaviours and Dependencies* 2013-20⁴² recognizes a need for age-specific prevention in the context of family, school, recreational and sports settings, community, workplaces, road safety and prisons. The *National Plan* includes an Operational Plan of Integrated Responses (PORI) - an intervention framework targeted at drug demand reduction, organized at the local/regional level. In each specific geographical area, an intervention may address specific local needs by bringing together relevant partners working in different settings.

Within PORI, the most vulnerable geographical areas have been mapped in order to prioritize them for resource and intervention allocation. In continental Portugal, 163 geographical areas were identified for the development of integrated intervention responses at various levels (prevention, treatment, harm and risk reduction, and reintegration). In 2015, 18 integrated response projects were implemented in the framework of the Operational Plan.

Spain

Spanish law does not criminalize the possession of cannabis, but it does criminalize its sale. This has resulted in the formation of cannabis "social clubs," which are non-commercial entities with the goal of providing their members with enough cannabis to meet their personal needs. The social clubs were first established in 2002 and can provide quality cannabis to members. Members are not allowed to sell cannabis or distribute it to minors. In Spain, possession of large quantities of cannabis does not constitute an offence unless this is done for the purpose of trafficking. Consumption of cannabis in public is not permitted.

In Spain, the *National Drug Strategy (2009-16)* primarily focused on illicit drugs but also considered licit substances. Its objectives included reducing the use of licit and illicit substances; delaying the age at first contact with drugs; and reducing or limiting the harm caused to drug users' health; and facilitating the social integration of drug users. The strategy was built around five fields of action:

- Demand reduction (prevention, risk and harm reduction, treatment and social reintegration);
- Supply reduction;
- Improvement of basic and applied scientific knowledge;
- Training; and
- International cooperation.

Prevention interventions encompass a wide range of approaches, which are complementary: Universal strategies target entire populations, while selective prevention targets vulnerable groups, and indicated prevention focuses on at-risk individuals.

⁴² http://www.sicad.pt/BK/Publicacoes/Lists/SICAD PUBLICACOES/Attachments/97/NPRABD 2013 2020 executive summary.pdf

Universal prevention in Spain is mainly implemented in the educational sector, and it is focused on the development of personal and family competences and skills. Few of these have been evaluated. In addition, community-based prevention programs organized by health centres are becoming increasingly available in schools, as are and prevention programs in universities, which focus mainly on information provision and awareness raising, using peer education methods or online delivery.

Universal community-based prevention programs are also provided through alternative leisure programs in youth clubs, sports centres, schools and community centres; activities are recreational and sports related. Programs conducted in places where drug use is common, such as bars, nightclubs and music concerts, are carried out by peer mediators, who work to identify problematic cases and provide information and advice about drugs and their various forms of use, although these approaches are rare.

Selective prevention activities focus on young people in disadvantaged neighbourhoods and those in specific educational or residential centres. Selective prevention programs for families at risk, female former drug users with children and specific programs for ethnic minorities and for young people with drug use problems and families affected by drug use are available.

Indicated prevention activities in Spain are frequently associated with selective prevention activities and address both vulnerable young people and families, aiming to alleviate risk and promote protective factors at an individual level. For example, *Empecemos* (*Let's Begin*) is a well-researched indicated prevention program with promising long-term outcomes for disruptive children in Galicia. Several autonomous communities have reported prevention activities focusing on under-age offenders with drug use problems.

The ECMDDA has a good summary of is conclusions on best practices related to cannabis interventions: http://www.emcdda.europa.eu/best-practice/treatment/cannabis-users.

Netherlands

The best-known example of de facto decriminalization of cannabis is the Dutch coffee-shop model, introduced in 1976. In that year, the *Opium Act* was changed to distinguish between drugs presenting unacceptable risks and commonly referred to as "hard drugs" (Schedule I) and drugs like cannabis, referred to as "soft drugs" (Schedule II). The main argument for allowing coffee shops was the wish to separate the market of hard drugs from the market of cannabis, to combat the marginalization and criminalization of the cannabis user, and to minimize the likelihood that he/she will start experimenting with hard drugs and becoming an addict.

Dutch law prohibits the possession, commercial distribution, production, import and export of all illicit drugs, but penalties have been removed for the possession of small quantities of cannabis. Currently, possession of a maximum of 5 g of cannabis or five plants will not lead to prosecution. Possession is not legal, but it is tolerated.

With the understanding that soft drugs are less damaging to health than hard drugs, the Netherlands permits coffee shops to sell small amounts of cannabis to adults aged 18 and over, with certain restrictions. Proprietors are not permitted to:

- Cause any nuisance;
- Sell hard drugs;
- Sell cannabis to minors;
- Advertise drugs; and
- Sell quantities over 5 g in a single transaction.

Municipalities can determine whether to allow coffee shops to operate within their boundaries, and if so, how many. They may also impose additional rules.

While this policy of tolerance exists towards consumers, it is illegal for growers to produce or sell cannabis to the coffee shops, creating a tension between the need to supply the coffee shops and the illegality of doing so. This tension may serve a public health purpose, by creating a "broken system" with limited ability to expand.

Dutch cannabis policy has been elaborated in a series of policy letters. The government's "Letter outlining the new Dutch policy" (2009) placed an increased emphasis on prevention and use reduction, and amended the coffee shop policy with the availability of more restrictions on the location of shops and expectations for appropriate use. 43

In the Netherlands, prevention is carried out in secondary schools through the *Healthy School* and *Drugs* program. Following an evaluation in 2014, the program was revised to increase the skill-focused components and to provide more intensive interventions on social norms, self-regulation and impulse control, and professional training for educational staff. Outside school settings, the project *Alcohol* and *Drug Prevention* at *Clubs* and *Pubs* aims to create a healthy and safe nightlife environment using a healthy settings approach. The focus is on reducing the high-risk use of substances among young people and its related problems.

In recent years, more attention has been given to a shift towards selective prevention interventions, although their availability largely depends on the local policies. These interventions, carried out by non-governmental organizations (NGOs) in cooperation with government services, are mostly targeted at the children of parents with drug use problems, young people with a slight intellectual disability and young people on the streets, from socio-economically deprived neighbourhoods or in special institutional settings (such as child residential care or custodial institutions), and in recreational settings.

Summarizing the approach of the Netherlands, the American Public Health Association has noted: "evidence indicates that the Dutch use cannabis at lower rates than some other European countries, do not escalate early use relative to other countries in Europe and the United States, and do not use cannabis as a gateway drug." 44

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⁴³ Koopmans

⁴⁴ APHA Policy Statement (November 2014)

Iceland

In Iceland, the possession, cultivation, sale, and consumption of cannabis are all illegal. However, a bill was recently introduced in the Icelandic parliament⁴⁵ that would allow adults aged 20 and older to grow and produce cannabis for personal use. Permission to grow must be obtained through a government permit, but would not require a doctor's prescription. The bill would also permit retail outlets to sell cannabis products and paraphernalia, and while the consumption of cannabis in these stores will not be permitted, the bill contemplates government licensing of cannabis lounges and restaurants.

Outside of legal means, Iceland has implemented an approach that has resulted in a dramatic decrease in adolescent drug and alcohol abuse over the last 20 years. This is credited in large part to federal government making a concerted effort to offer teens more options, including state-sponsored recreational activities and after-school programs meant to enhance family ties and community bonds.

From 1992 to 1997, teens aged 14 to 16 in every school in Iceland filled in a questionnaire about drug and alcohol use, among other things. This process was then repeated in 1995 and 1997. Analysis revealed clear differences between the lives of kids who took up drinking, smoking and other drugs, and those who did not. A few factors emerged as strongly protective: participation in organized activities—especially sport—three or four times a week, total time spent with parents during the week, feeling cared about at school, and not being outdoors in the late evenings.

Using the survey data and insights from research, a new national plan was gradually introduced, including a prevention intervention program called *Youth in Iceland* (now being expanded as *Youth in Europe*⁴⁶). The program was based on the approach that users are more concerned with reducing stress that with using drugs *per se*, with each drug providing a particular form of relief aligned to the user's personality.

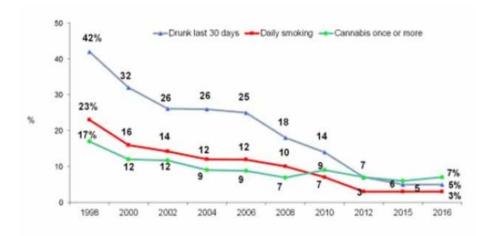
Additional laws and measures included:

- Minimum age of 18 to purchase tobacco;
- Minimum age of 20 to purchase alcohol;
- Tobacco and alcohol advertising banned;
- National curfew for those aged 13 to 16 (10 pm in winter; midnight in summer);
- Links between parents and school were strengthened through parental organizations which by law had to be established in every school, along with school councils with parent representatives; and
- Parents were encouraged to attend talks on the importance of spending a quantity of time with their children rather than occasional "quality time", on talking to their kids about their lives, on knowing who their kids were friends with, and on keeping their children home in the evenings.
- The government offers vouchers that enable parents to freely enroll their children in sports.

⁴⁵ Arvaldsson

⁴⁶ http://vouthineurope.org/

Between 1997 and 2012, the percentage of 15 and 16-year-olds who had been drunk in the previous month fell from 42% in 1998 to 5% in 2016. The percentage who have ever used cannabis was down from 17% to 7%. Those smoking cigarettes every day fell from 23% to 3%. In addition, the percentage who reported often or almost always spending time with their parents on weekdays doubled from 23% to 46%, and the percentage who participated in organized sports at least four times a week increased from 24% to 42%.



C. CANNABIS POLICY: POSITIONS OF KEY ORGANIZATIONS

A number of leading health professional associations and non-governmental organizations have released policy positions regarding the legalization/regulation of cannabis, and many of these are either focused on youth or take youth into specific consideration with the specific measures that they put forward. The positions of some of these key organizations are summarized in this section. A table setting out the main points of each organization is included as Appendix 3.

The Centre for Addiction and Mental Health (CAMH), Canada's largest mental health and addiction teaching hospital and a world leading research centre, released a proposed cannabis policy framework in 2014.⁴⁷ The basis of the framework was the CAMH's conclusion that "legalization, combined with strict health-focused regulation, provides an opportunity to reduce the harms associated with cannabis use." The CAMH also recognized that, while cannabis use carries significant health risks, especially for people who use it frequently and/or begin to use it at an early age, a public health approach focused on high-risk users and practices – similar to the approach favoured with alcohol and tobacco – allows for more control over the risk factors associated with cannabis-related harm.

It set out 10 principles for a public health approach to regulation, including the following which are relevant to youth use of cannabis:

- 2) Set a minimum age for cannabis purchase and consumption. Sales or supply of cannabis products to underage individuals should be penalized.
- 3) Limit availability. Place caps on retail density and limits on hours of sale.
- 5) Curtail higher-risk products and formulations. This would include higher-potency formulations and products designed to appeal to youth.
- 6) Prohibit marketing, advertising, and sponsorship. Products should be sold in plain packaging with warnings about risks of use.
- 10) Invest in education and prevention. Both general (e.g. to promote lower-risk cannabis use guidelines) and targeted (e.g. to raise awareness of the risks to specific groups, such as adolescents or people with a personal or family history of mental illness) initiatives are needed

The Canadian Paediatric Society's position statement, ⁴⁸ released in February 2017, considered the regulation of cannabis as it relates to youth and young people and recommended that governments should:

- Prohibit sales of all cannabis products to children and youth under the legal age for buying tobacco products and alcohol (18 or 19 years, depending on location).
- Consider limiting the concentration of THC in cannabis that 18- to 25-year-olds can purchase legally.

⁴⁷https://www.camh.ca/en/hospital/about_camh/influencing_public_policy/documents/camhcannabispolicyframework.pdf

⁴⁸ https://www.cps.ca/en/documents/position/cannabis-children-and-youth

- Enact and rigorously enforce regulations on the cannabis industry to limit the availability and marketing of cannabis to minors. These regulations must:
 - Prohibit storefronts from being located close to schools, licensed child care centres, community centres, residential neighbourhoods and youth facilities.
 - o Prohibit the sales by means of self-service displays or dispensing devices.
 - Restrict online sales to individuals identified as being older than the legal drinking age in the province or territory where they reside.
 - Mandate strict labelling standards for all cannabis products, including a complete and accurate list of ingredients and an exact measure of cannabis concentration.
 - Mandate package warnings for all cannabis products, including known and potential harmful effects of exposure.
 - Mandate and enforce strict marketing and promotional standards, including a ban on advertising and event sponsorship.
 - Mandate and enforce a ban on the marketing of cannabis-related products using strategies or venues that attract children and youth.
- Extend and align existing anti-tobacco legislation at all government levels to include cannabis (i.e., smoking in public venues and in cars where a child is present).
- Fund public education campaigns to reinforce that cannabis is not safe for children and youth. Campaigns should be developed in collaboration with youth leaders and should include messages from young opinion-leaders.
- Invest in the development and implementation of programs for routine roadside detection of cannabinoids, with suitable consequences for youth driving over limits.
- Increase funding for the research, prevention and treatment of substance use in adolescents and young adults.
- Increase funding for mental health promotion treatments for youth.
- Consult with Indigenous communities on adapting legislation, preventative measures and/or interventions to meet local conditions and cultural requirements.
- Actively monitor the impacts on youth of changes to cannabis legislation.

The Canadian Psychiatric Association released a position statement in early 2017, regarding the implications of legalized cannabis for youth. ⁴⁹ It focused on the need for support for public health education and resources targeting youth and young adults, and recommended an expansion of prevention, early identification and cessation treatments. It also recommended strong guidelines for advertising and marketing and, citing an association between regular cannabis use and disorders related to brain maturation, recommended a minimum age of 21 to access cannabis.

The City of Toronto's Medical Officer of Health offered one of the first policy option documents in response to the federal government's announcement of the legalization of cannabis. On May

⁴⁹ Tibbo et al.

29, 2017, it released its *Report for Action*⁵⁰ and made the following recommendations relevant to youth:

- Require comprehensive "plain packaging" rules for all cannabis product packaging and labelling;
- Strengthen regulations on marketing and promotion of cannabis with more comprehensive prohibitions that address advertising in movies, video games and other media accessible to youth;
- Regulate edible forms of cannabis as per the recommendations made by the federal Task Force on Cannabis Legalization and Regulation; and
- Set the minimum age of purchase for cannabis at 19 years of age to align with the minimum age for legal purchase of alcohol in Ontario.

On August 14, 2017, the Ontario division of the Canadian Mental Health Association (CMHA) released a report⁵¹ offering its recommendations to the government of Ontario, as that province also contemplates its regulatory and policy framework for legalized cannabis. It too said that the province should base its approach on public health priorities, and made a number of recommendations relevant to reducing cannabis use among young people, including:

- The Government of Ontario should consult and partner with CMHAs and other community based mental health and addictions service providers to develop and immediately implement a comprehensive public awareness campaign regarding cannabis-associated health risks;
- Cannabis revenues should be divided and allocated on safeguarding public health 25% Public awareness campaigns on the potential impacts of cannabis use, particularly youth and heavy users;
- The legal age to purchase cannabis, at a minimum, should align with the legal age for purchasing alcohol in Ontario: age 19;
- Provide funding for extensive research examining the relationship between early onset use of cannabis on brain development, particularly with mental health and addictions issues;
- Allocate funding for the development of more widespread community resources for youth in order to ensure mental health and addictions supports are accessible when they are needed; and
- Remove criminalization for simple possession of cannabis, especially for youth. Criminal sanctions should be replaced with alternatives such as mandatory education, fines, community service, mental health and addictions services and supports, and/or education.

⁵⁰ de Villa

⁵¹ http://ontario.cmha.ca/wp-content/uploads/2017/08/Cannabis-Submission-to-MAG.pdf

Although the Chief Medical Officers of Health of Canada noted in 2016 that "there is little direct evidence on the impact of legalization and regulation of cannabis on which to provide cannabis specific evidence-informed advice," 52 its policy suggestions are based on adapting evidence from measures designed to reduce harms associated with alcohol and tobacco. They recommended a public health-oriented approach to cannabis that includes:

- *Health protection*, including:
 - Allowing limited amounts of growing cannabis for personal use only;
 - Clearly informing users of the constituent concentrations and warning about proper use and adverse effects, through labelling and other mechanisms.
 - Setting a minimum age of sale/purchase.
 - Not allowing public smoking.
 - Promoting research to develop measures to minimize cannabis impaired driving.
 - Not permitting practices that promote cannabis use e.g. advertising, sponsorship, product placement.
- Health promotion, paying particular attention to the determinants of child and youth health.
- Harm-reduction: developing and disseminating lower risk cannabis use guidelines.
- Treatment services: strengthening treatment systems for people with mental health issues/disorders and problematic substance use and expect an increase in demand for these services.
- Health assessment, surveillance and research: adequately resourcing monitoring and research, and implement a national surveillance system, so that there can be early detection of problems and opportunity for timely correction.

In the United States, the American Academy of Pediatrics (AAP) has reaffirmed its lack of support for the legalization of recreational cannabis, 53 but says "...legalization with strong regulation potentially provides greater scope for protecting children than decriminalization policies, which on their own reduce criminal penalties without controlling cannabis supply and price."54

The AAP suggests that experiences with tobacco and alcohol provide context for building a strong regulatory environment and offers four priorities for recreational cannabis regulation that could help advance the goal of protecting child and adolescent health. These are:

- 1. Taxes should be used to keep cannabis prices high
- 2. Retail availability of cannabis should be tightly regulated
- 3. Regulations should be aimed at reducing the likelihood of children accidentally ingesting cannabis.
- 4. Youth exposure to cannabis marketing should be minimized.

⁵² http://uphn.ca/wp-content/uploads/2016/10/Chief-MOH-UPHN-Can<u>nabis-Perspectives-Final-Sept-26-2016.pdf</u>

⁵³ Ammerman

⁵⁴ Saloner et al.

The AAP's suggestions for potential approaches, mechanisms, enforcement considerations and research evidence associated with these four priorities are summarized on the table below:

TABLE 1 Examples of Strategies to Regulate Legal Marijuana to Prevent Use Among Youth

Regulatory Priority and Approach	Mechanism to Reduce Youth Access	Enforcement Considerations	Research Evidence
Use tax policy to keep the price high			
Taxation	Taxes in the legal market should reduce use among youth by increasing the illegal resale price	Possible tax evasion and continued sale in illegal markets	Taxes on cigarettes and alcohol reduce underage use of those products
Tightly regulate retail availability			
Licensing of retailers	Licensing combined with enforcement should reduce retailers' willingness to sell to minors	Requires auditing to ensure compliance with laws; systems are needed to track inventory along the production and sale continuum	Licensing alcohol retailers is effective at preventing sales to minors, owing to retailers' fear of license revocation
Location restrictions	Prohibiting retailers from locating near schools, playgrounds, or other places frequented by youth should limit youth access	Could increase the presence of illegal markets in areas without a legal retailer; requires supportive zoning policy and ongoing monitoring	Proximity to retail establishments that sell cigarettes and alcohol increases risk of underage use of these products
Prevent accidental ingestion among children	·		
Regulate appearance of edibles that appeal to children	Regulating the appearance of edibles most likely to be appealing to youth can be used to make them less visually appealing	Home growing and small-scale markets for edibles are difficult to regulate; defining types of allowed edibles entails regulatory complexity	Tobacco products that feature candy or fruit flavors encourage experimentation, regular use, and addiction among youth
Require childproof packaging and clear labeling	Childproof packaging can prevent accidental ingestion by children	Home growing and small-scale markets for edibles are difficult to regulate	Childproof packaging for prescription drugs reduces accidental ingestion; clear labeling enhances adults' ability to identify harmful products
Minimize youth advertisement exposure			
Restrict marketing	Minimizing youth exposure to advertising should reduce initiation and use	Retail displays, branded merchandise, and online advertising can be difficult to regulate	Exposure to alcohol and tobacco advertising is associated with increases in use by youth

The American Public Health Association's position is that, where cannabis is legalized, the preponderance of evidence supports regulating cannabis as an important public health policy. Jurisdictions considering the legalization of commercial cannabis should develop regulatory schemes based on public health priorities, and focused on:

- access to and availability of the drug among adolescents;
- informing and protecting consumers; and
- protecting third parties and vulnerable populations from potential consequences.

The APHA proposes a number of regulatory interventions, based on successes in limiting the use of alcohol and tobacco, the following of which are related to reducing cannabis use among young people:

Age restrictions

Age restrictions and enhanced enforcement of age restrictions can be used to limit the use of marijuana by adolescents, just as they are used to control tobacco use and alcohol use among adolescents, which have declined significantly over the past several years. Maintaining retailer compliance with age restrictions through enhanced enforcement of these laws against retailers and underage purchasers also reduces access to alcohol among minors.

Taxation

Increasing the price of cigarettes through taxes can cause adolescents to stop smoking, and according to a meta-analysis of 112 studies on alcohol, higher taxes tend to reduce alcohol consumption among adult and teenage social drinkers as well as problem drinkers. Taxing commercial marijuana to price adolescents out of the market may also prevent many adolescents from using marijuana [although there is also a risk that young people may simply turn to the illicit market].

Advertising restrictions

Advertising restrictions can also be used to control marijuana use and protect consumers, just as they are used for alcohol and tobacco. Restricting advertisements can have profound health effects. Consideration should be given to the impact advertising may have on children and youth, communities of color and/or groups of low socioeconomic status.

In addition to positions put forward by the above organizations, a review of lessons to be drawn from alcohol and tobacco published in the American Journal of Public Health⁵⁵ made a number of recommendations regarding regulation and youth:

State monopoly on sales: Research on state alcohol monopolies, and monopolies more generally, have shown that monopolies help keep the price of a good higher through reduced competition, reduce access to alcohol by youths and reduce overall levels of use.

Restrict sales licenses and monitor licensees: Currently, there is no strong evidence about the impact of licensing tobacco retailers on tobacco use, partly because tobacco outlets are so pervasive and policies in this area are just beginning to take shape. The density of tobacco outlets is positively associated with smoking rates, particularly among youth.

Limit the type of product sold: Both the alcohol and tobacco industry have developed products that are particularly appealing to youths. Examples include candy and gum cigarettes, alcohol pops, and wine coolers. It seems valuable to impose restrictions on marijuana products targeting youths similar to those imposed on the alcohol and tobacco industry. Although it may be impossible to think in advance of every possible product that could appeal to youths, examining current products would be a useful place to start.

Limit marketing to youth: The alcohol and tobacco literature have demonstrated positive relationships between tobacco and alcohol advertising, promotion and sponsorship, and youths' use, including product placements in movies and on television and radio.

Restrict public consumption: One justification for limiting marijuana consumption in public places is the beneficial effect on youths' initiation. The tobacco literature shows that clean indoor air laws targeting public places that youths tend to congregate (e.g. concerts, sporting events, malls, and public transportation) are associated with reduced initiation and self-reported use of cigarettes among children and adolescents. By limiting where marijuana can be consumed, regulators can reduce the exposure youths have to marijuana, perhaps making it less normative and more likely that youths delay initiation or never start at all.

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⁵⁵ Pacula et al.

D. INTERVENTIONS TO REDUCE USAGE AMONG YOUTH

Cannabis is the world's most widely used illicit drug. Canadian youth are the top users of cannabis in the developed world according to a 2013 UNICEF Office of Research report. Despite a decrease in cannabis use among youth in recent years, cannabis remains the most commonly used illegal drug among Canadian youth, 15 to 24 years of age. The number of youth (22%) and young adults (26%) who used cannabis in 2013 was more than two and a half times that of adults 25 and older (8%) according to Statistics Canada's Canadian Tobacco, Alcohol and Drug Survey. Alcohol and Drug Survey.

Regional variations in the frequency of cannabis use exist, with Atlantic and Western provinces in Canada reporting higher use than other regions. Indigenous youth are particularly at risk; nearly two thirds of 15 to 19-year-old Inuit participants from an earlier study in Nunavik, Quebec, self-reported past year use.

The Canadian Paediatric Society⁵⁸ has summarized the following about the implications of cannabis use amongst young people:

- Youth should not use cannabis recreationally because its many potentially harmful effects are serious. These effects are present in the entire population; however, the developing brain is especially sensitive to the negative consequences of cannabis use.
- Scientific research over the last 15 years has established that the human brain continues
 to develop into a person's early 20s. Concern is rising that exposure to cannabis during
 this important developmental period causes greater adverse effects in adolescents
 compared with older adults, whose brains are fully developed
- It is estimated that one in six adolescents who use cannabis during their adolescence will meet criteria for dependence.
- Research suggests a strong association between daily cannabis use and depression in adolescents and young adults. However, a causal relationship has not been established.
- Cannabis can produce an acute/transient psychosis in adolescents, even without a history of prior mental illness. Although the absolute risk for developing psychosis is low, the risk for developing a psychotic outcome of any nature is increased by 40% in individuals who have used cannabis during their lifetime
- Cannabis use is closely tied to the use of other substances, particularly alcohol and tobacco.
- The relationship between cannabis use and academic performance is complex. While
 direct causation between use and level of performance is uncertain, there are
 undeniable associations between cannabis use in youth and lower educational
 attainment

⁵⁸ https://www.cps.ca/en/documents/position/cannabis-children-and-youth

⁵⁶ https://www.unicef-irc.org/publications/pdf/rc11 eng.pdf

⁵⁷ https://www.canada.ca/en/health-canada/services/canadian-tobacco-alcohol-drugs-survey/2013-summary.html

Drawing conclusions about the efficacy of other jurisdictions' approaches to legalization and regulation is challenging, due to the short time that legalization has been in place, and the small number of jurisdictions that have so far opted for this approach. Nevertheless, as one study summarizes, ⁵⁹ a few overall conclusions can be drawn:

- The rescheduling of marijuana and provision of it through typical highly regulated medical channels is not likely to lead to widespread increases in its use or harms.
- Legalization will generate savings in terms of reduced criminal justice costs and improve social welfare by eliminating criminal sanctions for minor marijuana offenses
- Marijuana use will likely rise under legalization, in large part because legally sanctioned production and competition will drive down prices.
- Whether reforming marijuana laws will lead to more or less use of alcohol and other intoxicating substances is undetermined.

As another study⁶⁰ concludes: "policies that prohibit cannabis cause harm. They funnel money into the illegal market and drive criminal activity. They harm individuals through imprisonment, marginalization and the creation of barriers to treatment. This burden falls disproportionately on vulnerable groups.

Policymakers can take steps to mitigate some of the potential health harms of liberalization policies if public health objectives are put at the centre of change, and if public health advocates become engaged. Otherwise, Canada may experience the same health and social harms that resulted from the commercialization of alcohol and tobacco.

The substance use prevention field does not have a lack of evidence-based interventions.

McMaster University⁶¹ recently conducted a review of interventions that can be taken to mitigate the impacts of cannabis legalization on youth. It summarized key findings from 14 systematic reviews, three single studies focused on interventions for preventing, reducing or managing substance use (of which seven of the reviews focused specifically on addressing cannabis use), and eight program and system descriptions/analyses regarding. Its findings include:

- several high-quality reviews support the use of cognitive behavioural therapy and motivational interventions, combined with contingency management to reduce cannabis use;
- psychological and/or psychosocial interventions delivered via digital platforms have a small effect in reducing cannabis use, with the largest effect being found for a web-based online chat with a trained psychotherapist, personal diary and written feedback;
- mass-media campaigns to reduce drug use had mixed results, with successful campaigns
 using messaging on autonomy and achievement of competence, but with others resulting
 in increased drug use (pointing to the need for careful monitoring and evaluation to
 mitigate this risk); and

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⁵⁹ Pacula and Sevigny

⁶⁰ Spithoff

⁶¹ Hartman et al.

• school-based interventions targeting general drug use were most effective when multiple sessions or booster programs are incorporated.

The American Department of Health and Human Service's (DHSS) Substance Abuse and Mental Health Services Administration (SAMHSA) has collected promising practices in its National Registry of Evidence Based Programs and Practices. SAMSHA also administers the Center for the Application of Prevention Technologies, which offers help in evaluating the effectiveness of prevention and treatment programs. It has released a number of assessments of interventions, and its 2017 version includes consideration of 31 separate programs, with summaries of target audiences, settings, and outcomes.

The SAMHSA summary of programs is meant to be used as part of a decision-support approach for organizations or jurisdictions considering intervention programs. And a modified version focusing more on marching risk factors with program approaches (rather than specific programs or interventions) has been adopted by Colorado. ⁶⁵

DHSS's National Institute on Drug Abuse has also produced a research-based guide for parents, educator and community leaders, *Preventing Drug Use Among Children and Adolescents*. While it includes sample assessments of interventions, these may be somewhat out of date, and its value lies in setting out a sixteen principles that are intended to help parents, educators, and community leaders think about, plan for, and deliver research-based drug abuse prevention programs at the community level. ⁶⁷

In support of California's legalization and regulation efforts, the Ventura County Behavioral Health Drug and Addictions program published a summary of lessons⁶⁸ that could be drawn from alcohol policy, as the state developed its regulation scheme. It tested the proposed California approach against the following best practices that it identified as being the basis of an approach that would protect public health and safety generally, and reduce potential risks to children and youth in particular:

Policy Category	Policy	AUMA Policy
Social Availability	1. Establish a 21-year age limit for furnishing, possessing or purchasing	Yes
	2. Prohibit hosting parties where marijuana is used by minors	No
	3. Hold social hosts civilly liable for providing marijuana to minors in home settings	No
Commercial	4. Prohibit commercial furnishing or sale to those under 21 years of age	Yes

⁶² https://www.samhsa.gov/nrepp

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⁶³ https://www.samhsa.gov/capt/CAPT/

⁶⁴ https://www.samhsa.gov/capt/sites/default/files/resources/preventing-youth-marijuana-use-programs-strategies-2017.pdf

⁶⁵ https://www.colorado.gov/pacific/sites/default/files/MJ_RMEP_SAMHSA-Marijuana-Strategies-Interventions.pdf

⁶⁶ Robertson et al.

⁶⁷ Appendix 4

⁶⁸ Mosher

Policy Category	Policy	AUMA Policy		
Availability	5. Provide strict enforcement of the 21-year age limit as it applies to commercial marijuana providers	Part		
	6. Impose strict license sanctions on retail marijuana businesses that provide marijuana to underage youth without regard to retailer intent	Part		
	7. Prohibit use of false identification to obtain marijuana, with incentives for retailers			
	8. Mandate server-seller training			
	9. Restrict retail outlet density			
	10. Institute commercial civil liability			
	11. Impose home delivery restrictions	No		
	12. Impose high tax rates that increase over time	Part		
Pricing	13. Prohibit price promotions			
Motor Vehicl	es 14. Adopt zero tolerance laws for youth driving	No		
Marketing	15. Restrict advertising on electronic media to programming with 15% or less youth audiences	No		

The Washington State Institute for Public Policy⁶⁹ recently reported on the research evidence for 51 specific youth cannabis prevention or treatment programs currently available in that state. Findings are presents in two ways: 1) expected benefit-cost results and 2) the odds that the policy will have benefits greater than costs. Three values of evidence are also used to assess the programs. The study identifies 11 programs that are determined as being effective in demonstrating reduced cannabis use (7 prevention programs and 4 treatment programs).

The main prevention challenges are about dissemination, implementation, sustainability and the capacity to be dynamic and responsive to fast changing societies.

In examining the roll-out of legalization in Washington and Colorado, the Canadian Centre on Substance Abuse has made the following observations relevant to youth:

Prevent use by youth

- Stakeholders in both Washington and Colorado agreed that reducing the negative impacts on youth should be a priority for any policy model. The state must invest proactively in health promotion and prevention, and awareness and education for both youth and parents.
- Stakeholders in Colorado expressed particular concern about products allowed on the markets that are formatted to mimic popular brand-name snacks and candies.
- Washington state regulations have not permitted edibles in "candy" form for retail sale, although they do exist in the unregulated medical market.

Invest proactively in a public health approach

 A portion of sales revenue in both Colorado and Washington has been designated to support prevention and education initiatives. Stakeholders in Colorado in particular remarked on the importance of ensuring that resources are in place to address

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⁶⁹ Darnell et al.

- potential impacts on the health sector from emergency hospital admissions, poison control incidents and demand for treatment.
- However, revenue-based funding by nature means a delay between the initiation of sales and the availability of funding, which results in limited resources prior to and early in the implementation stage — the period during which these initiatives are most needed.
- Taxation revenue in Washington that was initially earmarked for cannabis-related prevention, education, treatment, regulation and research has been reallocated to the general revenue stream, which reduces the funding available for public health.
- Lobbying by the cannabis industry can influence political decision making in favour of retail profit over public health. These concerns were more prominent in Colorado, where an established and coordinated industry presence has been part of the collaborative development process.

The CCSA made the following recommendations about developing a regulatory framework:

- Be prepared to respond to the unexpected, such as the overconsumption of edibles in Colorado and an unmanageable volume of licensing applications within a limited timeframe in Washington state;
- Control product formats and concentrations to ensure there are no unanticipated consequences from unregulated formats and concentrations;
- Prevent commercialization through taxation, rigorous state regulation and monitoring, and controls on advertising and promotion; and
- Prevent use by youth by controlling access and investing in effective health promotion, prevention, awareness and education for both youth and parents.

E. CONCLUSION

With the impending passage of Bill C-45, the *Cannabis Act*, and the coming into force of retail sales of non-medical cannabis in July 2018, British Columbia has the opportunity to develop a regulatory scheme that is based on clear principles and objectives. Bill C-45 is clear on its policy objectives, which are stated in the bill as follows:

- 1. Protect the health of young persons by restricting their access to cannabis;
- 2. Protect young persons and others from inducements to use cannabis;
- 3. Provide for the licit production of cannabis to reduce illicit activities in relation to cannabis;
- 4. Deter illicit activities in relation to cannabis through appropriate sanctions and enforcement measures;
- 5. Reduce the burden on the criminal justice system in relation to cannabis;
- 6. Provide access to a quality-controlled supply of cannabis; and
- 7. Enhance public awareness of the health risks associated with cannabis use.

British Columbia would do well to further clarify its policy objectives and base its approach on those principles, as Alberta has explicitly done in its cannabis policy framework. Alberta's four policy priorities are:

- 1. Keeping cannabis out of the hands of children.
- 2. Protecting public health.
- 3. Promoting safety on roads, in workplaces and in public spaces.
- 4. Limiting the illegal market for cannabis.

Taking into account the measures that have been adopted (or proposed), particularly in jurisdictions that have based their approaches on a strong public health impetus, the literature suggests the following best practices should be considered for the British Columbia context:

Minimum Age:

Adopt a minimum age in alignment with BC's alcohol and tobacco minimum age, 19 years, which is also the BC age of majority. While some health agencies have called for a higher minimum age (up to 25), this should be balanced with the risk that young people will simply turn to illegal markets to obtain cannabis, putting themselves at greater risk and encouraging the ill effects that come with criminal activity. (Alignment with alcohol minimum age supported by all jurisdictions reviewed)

Possession - Youth

 Consider making the possession of 5 grams or less of cannabis subject to measures akin to those for underage possession of tobacco or alcohol (seizure of product, informing parents, fines under provincial law, etc.): do not criminalize the behaviour, but take steps to dissuade it. Youth in possession of cannabis greater than 5 grams should continue to face criminal charges (supported by the following jurisdictions – Colorado, Ontario, Alberta)

Public Consumption

- Adopt restrictions that support no public smoking and vaping of cannabis in alignment with tobacco smoking and vaping restrictions. Such restrictions would include prohibiting use in workplaces, enclosed public spaces, on health authority and school board property, transit shelters, common areas of apartment building and community care facilities. In particular, adopt measures that ban consumption in places frequented by children. (supported by the following jurisdictions California, Alberta. Public consumption is not permitted in Colorado, Washington, Alaska, Oregon, Nevada, Maine, Ontario)
- Consider using Canada's Lower Risk Cannabis Use Guidelines to support the public
 who consume in making choices about how and what they use to modify their own risks.
 The main objective of Canada's Lower-Risk Cannabis Use Guidelines (LRCUG) is to
 provide science-based recommendations to enable people to reduce their health risks
 associated with cannabis use, similar to the intent of health-oriented guidelines for lowrisk drinking, nutrition or sexual behavior. (supported by Ontario & recommended by the
 Chief Medical Health Officers of Canada, 2016

Drug-impaired Driving

- Consider a zero-tolerance approach for cannabis use among young drivers, regardless of impairment levels for adults (once determined).
- Promote research to develop measures to minimize cannabis impaired driving. (as recommended by the Chief Medical Health Officer of Canada, 2016)

Personal Cultivation

Restrict child and youth access by requiring that the cultivation of cannabis plants by adults (for personal use) occur indoors. (supported by the following jurisdictions - Alberta) If outdoor cultivation is agreed to then require that plants not be visible from outside the property and require that plants be secured against theft (supported by the following jurisdictions - Colorado, Nevada, California, Maine, Massachusetts, Ontario. Washington does not permit personal cultivation)

Distribution Model & Retail

- Adopt and enforce strict rules against selling cannabis to youth under 19. This should include mandatory training for staff regarding the potency of products and the risk associated with cannabis use. (supported by the following jurisdictions – Colorado, Ontario, Alberta)
- Prohibit locations that are close to schools, playgrounds, and other areas that are frequented by children and young people when adopting retail licensing schemes. (supported by the following jurisdictions Colorado, Washington, Nevada, Alberta)
- Prohibit the sale by means of self service or dispensing devices and restrict online sales
 to individuals identified as being older than the legal drinking age of the province where
 they reside. (as recommended by the Canadian Pediatric Society, February 2017)

Other Key Policy Measures

 Packaging & Labeling Requirements: Support and enforce the proposed federal rules regarding packaging – not appealing to youth (e.g. plain and standardized packaging), no false or misleading information. (supported by the following jurisdictions – Colorado, Oregon, Washington, Nevada, California); Consider requiring that cannabis products

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- that may be deemed attractive to children be sold in tamper resistant containers to prevent accidental harm (supported by the following jurisdictions Nevada, Massachusetts)
- Restrictions on Advertising & Marketing: Support and enforce the proposed federal rules stating that advertising cannot be appealing to youth; no false, misleading or deceptive promotion; no sponsorships or endorsements; no depictions of a person, celebrity, character or animal. Packaging cannot appeal to children or youth, or use cartoon characters. In addition, include outright bans on Internet pop-up advertisements and any type of advertisement that targets minors. (supported by the following jurisdictions Colorado, Oregon, Washington, Nevada, California)
- Public Education: Develop and promote a strong public education campaign, with messaging tailored to young people in language that is relevant to them. Campaigns should be developed in collaboration with youth leaders and should include messages from young opinion-leaders and should include information about cannabis laws, use, risks, and resources for interventions and treatments. (supported by the following jurisdictions – Colorado, Washington, Oregon, Alaska, California, Maine, Massachusetts, Alberta, Ontario)
- Distribution of Tax Revenue: Consider earmarking a defined proportion of revenue from cannabis sales taxes to public education, research, and intervention programs/treatments. (supported by the following jurisdictions Colorado, Washington, Oregon, California, Ontario)
- Data: Invest in data collection, tracking and analysis to support general research to monitor patterns of cannabis use and the health effects of use. (supported by the following jurisdictions – Colorado, Washington, Maine). In BC, this could include continuing and/or incorporating cannabis-related questions into existing population based surveys (e.g. in BC the McCreary Society Adolescent Health Survey), trauma registries, hospitalizations (DAD) and emergency department surveillance (NACRS).

Foundational to the legalization and regulation of non-medical cannabis in BC is the overarching approach underpinning all of the key policy measures. The Centre for Addiction and Mental Health (CAMH), Canada's largest mental health and addiction teaching hospital and a world leading research centre, released a proposed cannabis policy framework in 2014. The basis of the framework was the CAMH's conclusion that "legalization, combined with strict health-focused regulation, provides an opportunity to reduce the harms associated with cannabis use." This public health approach to the regulation of cannabis is further supported in the report A Framework for the Legalization and Regulation of Cannabis in Canada: The Final Report of the Task Force on Cannabis Legalization and Regulation. The Task Force proposes that a public health approach aims to: delay the age of the initiation of cannabis use; reduce the frequency of use; reduce higher-risk use; reduce problematic use and dependence; expand access to treatment and prevention programs; and ensure early and sustained public education and awareness.

With respect to messaging, other jurisdictions' experience suggests the value of investing in a strong public education, anchored by a central website with information about cannabis laws, use, risks, and resources for interventions and treatments. Colorado's site Colorado Marijuana,

Oregon's central website⁷⁰ are good models and sources of information. Washington's <u>Retail Marijuana</u> site is a basic portal that provides links to a number of helpful sites. The California Department of Public Health also hosts a good site, <u>Let's Talk Marijuana</u> which is already up, in anticipation of recreational cannabis sales commencing in early 2018.

Public education campaigns have been an important part of legalization in the United States. Colorado's <u>GoodtoKnowColorado</u> is a foundational site, with specific messaging that is relevant for young people. Oregon's public education campaign aimed at youth, <u>Stay True to You</u> is also a good example of a campaign that balances providing information with avoiding condescension. Washington's <u>Listen2YourSelfie</u> provides another example.

Supporting the health and wellbeing of children and youth is paramount to our nation and to BC. Policymakers can take steps to minimize the harms associated with cannabis use if public health objectives are put at the centre of change by investing in a public health approach to the legalization and regulation of non-medical cannabis. This approach is vital for maintaining and protecting children's health, especially given the importance of but relatively small size of the child and youth population in proportion to that of adults.

⁷⁰ http://www.oregon.gov/olcc/marijuana/pages/default.aspx

APPENDICES

Appendix 1: Summary of cannabis regulation in jurisdictions with legalization

Area of Regulation	Uruguay	Colorado	Washington	Alaska	Oregon	Nevada	California	Maine	Mass	Alberta (prop)	Ontario (prop)
Legal since	2013, sales 2017	2012, rec sales 2014	2012, rec sales 2014	2015, rec sales Nov 2016	2015, rec sales Jan 2 2017	2016, rec sales July 1 2017	2016 [sales Jan 2018]	2016 [sales Feb 2018]	2016 [sales July 2018]	[2018]	[2018]
Age restrictions	18+	21+ (drinking age)	21+	21+	21+	21+	21+ (18+ medical)	21+	21+	18+ (drinking/ smoking age)	19+ (drinking/ smoking age)
Personal possession and/or sales limits	40 g	1 oz. or its equivalent	A combined maximum of: 1 oz. dried 16 oz. inf. solid 72 oz. inf. liquid 7 g conc.	1 oz	Public: 1 oz dried 1 oz extract/ concen. 16 oz solid 72 oz liquid 10 seeds AND 4 immature plants. Private: 8 oz dried 1 oz extract/ concen. 16 oz solid 72 oz liquid 10 seeds; AND 4 plants	1 oz dried 3.5 oz concen.	28.5 g (1 oz) dried 8 g concen.	2.5 oz including 5 g concen.	1 oz including 5 g concen. 10 oz. in home	30 g 5 g if under 18	30 g 5 g if under 18 ⁷¹
Retail distribution	Yes, licensed pharmacies	Yes, independent	Yes, licensed and capped	Under dev.; anticipated for 2016 but not yet operational	OLCC- licensed retail est., [plus share or give away]	Licensed by Nevada Tax Commission.	Jan 1, 2018	Must be licensed by Dept. Agriculture, Conservation and Forestry [no	Must be licensed by the state Cannabis Control Commission	Yes, overseen by province. No co-location with alcohol, tobacco, pharma	LCBO to establish a "CCBO") to oversee distribution and sale. Stand-alone

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⁷¹ Unclear what happens to someone 18 but less than 19.

Area of Regulation	Uruguay	Colorado	Washington	Alaska	Oregon	Nevada	California	Maine	Mass	Alberta (prop)	Ontario (prop)
								share/giving]			and online.
Public use	Not permitted	Not permitted in public places	Not permitted in public places – only on private property	Not permitted in public places	Not permitted in public places — only permitted on private property	Not permitted (\$600 fine)	Not permitted – where smoking prohibited and areas frequented by children	Only in private residence or property. Tobacco restrictions apply. Sanction: \$100 fine. Social clubs delayed to 2019.	Not permitted	Not permitted where smoking prohibited and area frequented by children	Not permitted – private residence only. Will consider introducing designated places.
Personal production	12 plants on private property	Max 6 plants (3 mature) that must be in an enclosed, locked space	Not permitted	6 per person (3 mature) – 12 per household (6 mature)	4 plants per household, out of public view	6 per person; 12 per household IF 25 miles from nearest store	6 plants per residence	6 plants per person, 12 per property. Out of public view	6 per person, 2 per household (locked and secured, away from public view)	4 per household, max 100 cm	Not spec; fed Cannabis Act = 4 per house, max 100 cm each
Mandated or centralized programs		Good to Know campaign; good central information site	As directed by Initiative 502 (I-502), the Dept. of Health provides: Health hotline Listen2Your Selfie targets youth ages 12-17.		Law requires OR Health Authority to work with Edu, Drug/Alc Comm to prevent youth use. Also mandated to recommend legislation.	None identified	Let's Talk (Public Health)	12% of tax revenue to public awareness (nothing specific to young people)			

Appendix 2: Jurisdictional Responsibilities

Summary of federal, provincial and municipal responsibilities related to the regulation of non-medical cannabis in Canada. From the *Alberta Cannabis Framework*:

Jurisdictional Responsibilities

A marin	Responsible					
Activity	Federal	Provincial	Municipal			
Possession limits **	~	la.				
Trafficking	~					
Advertisement & packaging **	~					
Impaired driving	~	4				
Medical cannabis	~					
Seed-to-sale tracking system	~					
Production (cultivation and processing)	~					
Age limit (federal minimum) **	~					
Public health	~	¥ .				
Education	~	V	~			
Taxation	~	×	~			
Home cultivation (growing plants at home) **	~					
Workplace safety		V.				
Distribution and wholesaling		4				
Retail model		~				
Retail location and rules		~	1			
Regulatory compliance	¥	~				
Public consumption		4	-			
Land use/zoning			~			

Appendix 3: Summary of proposed regulatory/policy elements

	Centre for	Canadian	Canadian	Toronto	Canadian	Chief	American	American
	Addition	Paediatric	Psychiatric	Medical	Mental Health	Medical	Academy	Public
	and Mental Health	Society	Association	Officer of Health	Association (ON)	Officers of Canada	of Pediatrics	Health Association
	ricaitii	√			(OII) ✓	Or Carrada	1 calatiles	Association
Minimum age for sales to individuals	✓	(align to alcohol)	√ (21)	√ (19)	(19 – align to alcohol)	✓		✓
Regulate location of sales outlets	✓	∡ aiconoi)			alconol)		✓	✓
Limit hours of sale	✓							
Prohibit self-serve/ dispensing devices		✓						
Restrict online sale – proof of age		✓						
Gov. sales only						✓		✓
Strict labelling standards including warnings	✓	✓	✓			✓	✓	
Sell in plain packages	✓			✓			✓	
Prohibit sale of products that appeal to youth	✓			√			√	
Limit THC levels, esp. for <25	✓	✓	✓					
Restrict/prohibit advertising, sponsorship, etc.	✓	✓	✓	✓		✓	✓	✓
Align with tobacco locations for consumption		✓		✓				
Ban public consumption					✓			✓
Invest in data collection, assess impacts		✓				✓		
Invest in general public education	✓	✓	✓		✓			
Invest in targeted prevention	✓		✓					
Increase funding: research, prevention, etc.		✓	✓		✓	✓		
Adopt and disseminate lower use guidelines					✓			
Increase funding: youth treatment and supports		✓	✓		✓	✓		
Consult with indigenous people: priorities?		✓						
Earmark tax funds to research, education				✓				
Use taxation/ pricing to reduce use						✓	✓	✓

Appendix 4: Prevention program principles

From the National Institute on Drug Abuse's *Preventing Drug Use Among Children and Adolescents* (Department of Health and Human Services).

Youth/adolesc	ent cannabis prevention program planning principles
	nd Protective Factors
PRINCIPLE 1	Prevention programs should enhance protective factors and reverse or reduce risk
PININCIPLE 1	factors.
PRINCIPLE 2	Prevention programs should address all forms of drug abuse, alone or in combination,
PRINCIPLE 2	including the underage use of legal drugs (e.g., tobacco or alcohol); the use of illegal
	drugs (e.g., marijuana or heroin); and the inappropriate use of legally obtained
DDINGIDI E 3	substances (e.g., inhalants), prescription medications, or over-the-counter drugs.
PRINCIPLE 3	Prevention programs should address the type of drug abuse problem in the local
	community, target modifiable risk factors, and strengthen identified protective factors.
PRINCIPLE 4	Prevention programs should be tailored to address risks specific to population or
	audience characteristics, such as age, gender, and ethnicity, to improve program
	effectiveness.
	nning: Family Programs
PRINCIPLE 5	Family-based prevention programs should enhance family bonding and relationships
	and include parenting skills; practice in developing, discussing, and enforcing family
	policies on substance abuse; and training in drug education and information
	Family bonding is the bedrock of the relationship between parents and children.
	Bonding can be strengthened through skills training on parent supportiveness of
	children, parent-child communication, and parental involvement.
Prevention Pla	nning: School Programs
PRINCIPLE 6	Prevention programs can be designed to intervene as early as preschool to address risk
	factors for drug abuse, such as aggressive behavior, poor social skills, and academic
	difficulties.
PRINCIPLE 7	Prevention programs for elementary school children should target improving academic
	and social-emotional learning to address risk factors for drug abuse, such as early
	aggression, academic failure, and school dropout. Education should focus on the
	following skills:
	self-control;
	emotional awareness;
	communication;
	social problem-solving; and
	academic support, especially in reading.
PRINCIPLE 8	Prevention programs for middle or junior high and high school students should
	increase academic and social competence with the following skills:
	study habits and academic support;
	communication;
	peer relationships;
	self-efficacy and assertiveness;
	drug resistance skills;
	reinforcement of anti-drug attitudes; and
	 strengthening of personal commitments against drug abuse.

Youth/adolesc	ent cannabis prevention program planning principles							
	Community Programs							
PRINCIPLE 9	Prevention programs aimed at general populations at key transition points, such as the transition to middle school, can produce beneficial effects even among high-risk families and children. Such interventions do not single out risk populations and, therefore, reduce labeling and promote bonding to school and community.							
PRINCIPLE 10	Community prevention programs that combine two or more effective programs, such as family-based and school-based programs, can be more effective than a single program alone.							
PRINCIPLE 11	Community prevention programs reaching populations in multiple settings—for example, schools, clubs, faith-based organizations, and the media—are most effective when they present consistent, community-wide messages in each setting.							
Prevention Pro	,							
PRINCIPLE 12	When communities adapt programs to match their needs, community norms, or differing cultural requirements, they should retain core elements of the original research-based intervention which include: • Structure (how the program is organized and constructed); • Content (the information, skills, and strategies of the program); and • Delivery (how the program is adapted, implemented, and evaluated)							
PRINCIPLE 13	Prevention programs should be long-term with repeated interventions (i.e., booster programs) to reinforce the original prevention goals. Research shows that the benefits from middle school prevention programs diminish without follow-up programs in high school.							
PRINCIPLE 14	Prevention programs should include teacher training on good classroom management practices, such as rewarding appropriate student behavior. Such techniques help to foster students' positive behavior, achievement, academic motivation, and school bonding.							
PRINCIPLE 15	Prevention programs are most effective when they employ interactive techniques, such as peer discussion groups and parent role-playing, that allow for active involvement in learning about drug abuse and reinforcing skills.							
PRINCIPLE 16	Research-based prevention programs can be cost-effective. Similar to earlier research, recent research shows that for each dollar invested in prevention, a savings of up to \$10 in treatment for alcohol or other substance abuse can be seen.							

BIBLIOGRAPHY

The following sources were reviewed and considered, although not all are reported on in this review report.

Alberta Minister of Justice and Solicitor General, *Alberta's Cannabis Framework*, Government of Alberta (2017). Available at: https://www.alberta.ca/cannabis-legalization.aspx

America Public Health Association, "Regulating Commercially Legalized Marijuana as a Public Health Priority," APHA Policy Statement (November 2014). Available at: https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2015/01/23/10/17/regulating-commercially-legalized-marijuana-as-a-public-health-priority

Ammerman, S., S. Ryan and W.P. Adelman, "The Impact of Marijuana Policies on Youth: Clinical, Research and Legal Update," *Pediatrics* vol 135 no. 3 (March 2105). Available at: http://pediatrics.aappublications.org/content/135/3/e769

Astvaldsson, J.P., "Legalization of Cannabis Proposed," *Iceland Review* (September 20, 2017). Available at: http://icelandreview.com/news/2017/09/20/legalization-cannabis-proposed?language=en

Banys, P., and T. Cermak, "Marijuana Legalization in California: Rational Implementation of the Adult Use of Marijuana Act (AUMA)," *Journal of Psychoactive Drugs*, vol. 48, no. 1, 63–65 (February 2016).

Banys, P., and T. Cermak, "Youth First: Reconstructing Drug Policy, Regulating Marijuana, and Increasing Access to Treatment in California," a Report to the California Society of Addiction Medicine (2011). Available at: https://www.csam-asam.org/sites/default/files/csam_youth_first_final_edits8.pdf

M.F. Boidi, M.J Crus, R. Queiroloe, E. Bello-Pardo, "Marijuana Legalization in Uruguay and Beyond," Available at:

https://www.wilsoncenter.org/sites/default/files/Marijuana%20Legalization%20in%20Uruguay%20and%20Beyond_brief%20report_v3%20(2).pdf

California, *Comprehensive Adult Use of Marijuana Act* – 2016 (Proposition 64), available at: https://static.cdfa.ca.gov/MCCP/document/Comprehensive%20Adult%20Use%20of%20Marijuana%20Act.pdf

California, *Medicinal and Adult-Use Cannabis Regulation and Safety Act*, available at: <a href="http://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=BPC&division=10.&title=&part=&chapter=&article="http://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=BPC&division=10.&title=&part=&chapter=&article=

Canadian Centre on Substance Abuse, "Cannabis Regulation: Lessons Learned in Colorado and Washington State" (November 2015). Available at: http://www.ccsa.ca/Resource%20Library/CCSA-Cannabis-Regulation-Lessons-Learned-Report-2015-en.pdf

Canadian Mental Health Association Ontario, *Cannabis Legalization and Regulation*, August 14, 2017. Available at: http://ontario.cmha.ca/wp-content/uploads/2017/08/Cannabis-Submission-to-MAG.pdf

Centre for Addiction and Mental Health, *Cannabis Policy Framework* (October 2014). Available at:

 $\underline{\text{https://www.camh.ca/en/hospital/about_camh/influencing_public_policy/documents/camhcannabispolicyframework.pd} \underline{f}$

Cerdá, M. and B. Kilmer, "Uruguay's middle-ground approach to cannabis legalization," International Journal of Drug Policy 42, 118–120 (2017). Available at: http://www.ijdp.org/article/S0955-3959(17)30055-5/pdf

Chief Medical Officers of Health of Canada & Urban Public Health Network, *Public Health Perspectives on Cannabis Policy and Regulation*, September 26, 2016. Available at: http://uphn.ca/wp-content/uploads/2016/10/Chief-MOH-UPHN-Cannabis-Perspectives-Final-Sept-26-2016.pdf

Colorado Department of Public Health and Environment, *Colorado Retail Marijuana Education and Prevention Resource Guide* Available at:

https://www.colorado.gov/pacific/sites/default/files/MJ_RMEP_Resource-Guide.pdf

Crépeau, J.F., *Cannabis Policy Framework*, Centre for Addiction & Mental Health (Oct. 2014). https://www.camh.ca/en/hospital/about_camh/influencing_public_policy/documents/camhcannabispolicyframework.pdf

Crombie, N., "Legal pot in Oregon: One year later," *Portland Oregonian* (February 23, 2017). Available at: http://www.oregonlive.com/marijuana/index.ssf/2016/06/oregon_marks_1_year_anniversar.html

Darnell, A.J., R. Goodvin, M. Lemon, and M. Miller, M., Updated inventory of programs for the prevention and treatment of youth cannabis use, Washington State Institute for Public Policy (2016). Available at: http://www.wsipp.wa.gov/ReportFile/1662/Wsipp_Updated-Inventory-of-Programs-for-the-Prevention-and-Treatment-of-Youth-Cannabis-Use Report.pdf

de Villa, E., "Legal Access to Non-Medical Cannabis: Approaches to Protect Health and Minimize Harms of Use," City of Toronto Medical Officer of Health (May 29, 2018). Available at: http://www.toronto.ca/legdocs/mmis/2017/hl/bgrd/backgroundfile-104495.pdf

European Monitoring Centre for Drugs and Drug Addiction, *Netherlands Country Drug Report* 2017, Luxembourg: Publications Office of the European Union. Available at: http://www.emcdda.europa.eu/system/files/publications/4512/TD0616155ENN.pdf en

European Monitoring Centre for Drugs and Drug Addiction, *Portugal Country Drug Report 2017*, Luxembourg: Publications Office of the European Union. Available at: http://www.emcdda.europa.eu/system/files/publications/4508/TD0116918ENN.pdf_en

European Monitoring Centre for Drugs and Drug Addiction, *Spain Country Drug Report 2017*, Luxembourg: Publications Office of the European Union. Available at: http://www.emcdda.europa.eu/system/files/publications/4525/TD0116922ENN.pdf en

Fischer, B., "Ontario's cannabis regulations a good start, but with a few wrinkles to fix," Ottawa Citizen (September 15, 2017). Available at: http://ottawacitizen.com/opinion/columnists/fischer-ontarios-cannabis-regulations-a-good-start-but-with-a-few-wrinkles-to-fix

Fischer, B., C. Russell, P. Sabioni, W. van den Brink, B. Le Foll, W. Hall, J. Rehm, J. and R. Room, "Lower-Risk Cannabis Use Guidelines (LRCUG): An evidence-based update," American Journal of Public Health, 107(8) (2017). Available at:

 $\underline{http://www.camh.ca/en/research/news_and_publications/reports_and_books/Documents/LRCUG.KT.Prof\underline{essional.15June2017.pdf}$

Fulstone, L. and J. Wadham, "Nevada Marijuana Legalization Initiative, Question 2," Nevada Lawyer (October 2016). Available at: https://www.nvbar.org/wp-content/uploads/NevadaLawyer Oct2016 MarijuanaLegalization.pdf

Ghosh, T., M. Van Dyke, A.Maffey, E. Whitley, L. Gillim-Ross, and L. Wolk, "The Public Health Framework of Legalized Marijuana in Colorado," Am J Public Health 106(1): 21–27 (January 2016). Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4695936/

Global Legal Research Center, *Decriminalization of Narcotics*, Law Library of Congress (July 2016). Available at: https://www.loc.gov/law/help/decriminalization-of-narcotics/decriminalization-of-narcotics.pdf

Grant, C.N., and R.E. Bélanger, "Cannabis and Canada's children and youth," *Paediatr Child Health* 22(2), 98-102 (2017). Available at: http://www.cps.ca/en/documents/position/cannabis-children-and-youth

Hartman, M., P. Sreeram, and M.G. Wilson, "Identifying the Impacts of Cannabis Legalization on Youth, and the Responses that can be Taken by Public Institutions," McMaster University Health Forum Rapid Synthesis document (April 11, 2017). Available at: <a href="https://www.mcmasterforum.org/docs/default-source/Product-Documents/rapid-responses/identifying-the-impacts-of-cannabis-legalization-on-youth-and-the-responses-that-can-be-taken-by-public-institutions.pdf?sfvrsn=6

Hiltz, J., "The Bill to Legalize Recreational Cannabis in Iceland," *Marijuana.com* (September 21, 2017). Available at: https://www.marijuana.com/news/2017/09/the-bill-to-legalize-recreational-cannabis-in-iceland/

Hughes, C., and A. Stevens, "What Can We Learn From The Portuguese Decriminalization of Illicit Drugs?", *British Journal of Criminology* 50, 999–1022 (2010). Available at: https://www.beckleyfoundation.org/bib/doc/bf/2010_Caitlin_211621_1.pdf

Koopmans, K.L., "Going Dutch: Recent drug policy developments in the Netherlands," Journal of Global Drug Policy and Practice, vol. 5, issue 3 (Fall 2011). Available at: http://www.globaldrugpolicy.org/lssues/Vol%205%20Issue%203/Going%20Dutch.pdf

Laqueur, H., "Uses and Abuses of Drug Decriminalization in Portugal," *Law and Social Policy*, vol. 40, issue 3, 746-781 (2015. Available at: https://www.law.berkeley.edu/files/Laqueur %282014%29 - Uses and Abuses of Drug Decriminalization in Portugal - LSI.pdf

MacKay, R. and K. Phillips, "The Legal Regulation of Marijuana in Canada and Selected Other Countries," Library of Parliament (2016). Available at: https://lop.parl.ca/Content/LOP/ResearchPublications/2016-94-e.html

Maine, *Marijuana Legalization Act*, available at: http://lldc.mainelegislature.org/Open/Laws/2015/2015 IB c005.pdf

Maine, Act to Amend the Marijuana Legalization Act, available at: https://cloudup.com/iMSWYPkBBlf

Marsiglia, F., "Youth Substance use prevention interventions: opportunities and challenges," *Revista internacional de investigación en adicciones* 2016.2(2), 1-2. Available at: http://www.riiad.cij.gob.mx/pdf/V2N2/V2N2.pdf

Massachusetts General Law, Chapter 94G: Regulation of the Use and Distribution of Marijuana not Legally Prescribed, available at: https://malegislature.gov/Laws/GeneralLaws/Partl/TitleXV/Chapter94G

Mosher, J.F., *The 2016 California Marijuana Initiative and Youth: Lessons from Alcohol Policy*, County of Ventura: Ventura County Behavioral Health (2016). Available at: http://venturacountylimits.org/resource_documents/VC-MJ-AUMA-FNL-REV-web.pdf

National Academies of Sciences, Engineering and Medicine, "Cannabis: Prevalence of Use, Regulation, and Current Policy Landscape (Chapter 3)", *Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research,* Washington DC, (2017). Available at: https://www.nap.edu/read/24625/chapter/5

National Institutes of Health, "Preventing Drug Use among Children and Adolescents (In Brief)." *National Institute on Drug Abuse* (October 2003). Available at: https://www.drugabuse.gov/publications/preventing-drug-use-among-children-adolescents-in-brief

Nevada Secretary of State, *Initiative to Regulate and Tax Marijuana* (filed 2014), available at: http://nvsos.gov/sos/home/showdocument?id=3294

Nevada Secretary of State, *Statewide Ballot Questions To Appear on the November 8, 2016 General Election Ballot*, available at: http://nvsos.gov/sos/home/showdocument?id=4434

Ontario Ministry of the Attorney General, "Ontario's Plan to Regulate Cannabis," Government of Ontario (September 8, 2017). Available at: https://www.ontario.ca/page/cannabis-legalization

Oregon Health Authority, *Oregon Youth Marijuana Prevention Pilot Campaign; Stay True to You 12-month Pilot Campaign Evaluation Results* (June 2017). Available at: http://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/MARIJUANA/Documents/Stay%20True%20to%20You%2 OFinal%20Campaign%20Results%202017.pdf

Oregon Public Health Division, *Oregon Health Authority's Approach to Youth Marijuana Prevention: HB 3400 Legislative Report*, Portland OR (January 2017). Available at: http://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/MARIJUANA/Documents/HB3400-Legislative-Report-Youth-Prevention-2017.pdf

Oregon Public Health Division, *Oregon Youth Marijuana Prevention Pilot Campaign - Stay True to You, mid-campaign results* (November 2016). Available at: http://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/MARIJUANA/Documents/marijuana-mid-campaign-results-2016.pdf

Oregon Public Health Division, *Oregon Youth Marijuana Prevention Pilot Campaign - Stay True to You, mid-campaign results* (November 2016). Available at: http://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/MARIJUANA/Documents/marijuana-mid-campaign-results-2016.pdf

Overton, P., "Draft bill would allow Maine dispensaries, caregivers to sell recreational marijuana," Portland Press Herald (September 13, 2017). Available at: http://www.pressherald.com/2017/09/13/draft-bill-would-let-maine-dispensaries-sell-recreational-pot/

Pacula, R.L, B.Kilmer, A.C. Wagenaar, F.J. Chaloupka, and J.P. Caulkins, "Developing Public Health Regulations for Marijuana: Lessons from Alcohol and Tobacco," American Journal of Public Health vol.104, no.6 (June 2014). Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4062005/pdf/AJPH.2013.301766.pdf

Pacula, R.L. and E.L. Sevigny, "Marijuana Liberalization Policies: Why We Can't Learn Much form Policy Still in Motion," *J. Policy Anal Manage*, 33(1), 212-221 (2014). Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4051884/

Portugal Ministry of Health, *National Plan for Reducing Addictive Behaviours and Dependencies* 2013-2020, General-Directorate for Intervention on Addictive Behaviours and Dependencies (June 2014). Available at:

http://www.sicad.pt/BK/Publicacoes/Lists/SICAD_PUBLICACOES/Attachments/97/NPRABD_2013_2020_executive_summary.pdf

Robertson, E.B., S.L. David, S.A. Rao, *Preventing Drug Use Among Children and Adolescents* – *A Research Based Guide for Parents, Educators and Community Leaders*, National Institute on Drug Abuse (National Institutes of Health)

Saloner, B., E.E. McGinty, and C.L. Barry, "Policy Strategies to Reduce Youth Recreational Marijuana Use," *Pediatrics*, vol 135, no.6, 955-957 (May 2015). Available at: http://pediatrics.aappublications.org/content/pediatrics/135/6/955.full.pdf

Spain Ministry of Health and Social Policy, *National Drug Strategy 2009-2016*. Available at: http://www.pnsd.msssi.gob.es/pnsd/estrategiaNacional/docs/StrategyPNSD2009-2016.pdf

Spithoff, S., B. Emerson and A. Spithoff, "Cannabis legalization: adhering to public health best practice," *Canadian Medical Association Journal*, 21 September 2015. Available at: http://www.cmaj.ca/content/early/2015/09/21/cmaj.150657

State of Oregon, What's Legal Oregon - website: http://whatslegaloregon.com/#!

Substance Abuse and Mental Health Association, *Strategies/Interventions for Reducing Marijuana Use* (2010?). Available at:

https://www.colorado.gov/pacific/sites/default/files/MJ_RMEP_SAMHSA-Marijuana-Strategies-Interventions.pdf

Substance Abuse and Mental Health Association, *Preventing Youth Marijuana Use: Using Prevention Research to Guide Prevention Practice*, SAMHSA's Center for the Application of Prevention Technologies (October 2017). Available at:

https://www.samhsa.gov/capt/sites/default/files/resources/preventing-youth-marijuana-use-programs-strategies-2017.pdf

Thistle, S., "Draft bill would tax Maine recreational pot sales at 20%," *Portland Press-Herald* (September 12, 2017). Available at: http://www.pressherald.com/2017/09/12/draft-bill-would-levy-20-tax-on-recreational-pot-sales/

Tibbo, P., C.E. Crocker, R.W. Lam, J. Meyer, J. Sareen, and K.J. Aitchson, "Implications of Cannabis Legalization on Youth and Young Adults," Canadian Psychiatric Association, Position Statement (February 17, 2017). Available at: http://www.cpa-apc.org/wp-content/uploads/Cannabis-Academy-Position-Statement-ENG-FINAL-no-footers-web.pdf

Walsh, J. and G. Ramsey, "Uruguay's Drug Policy: Major Innovations, Major Challenges," Foreign Policy at Brookings (2016). Available at: https://www.brookings.edu/wp-content/uploads/2016/07/Walsh-Uruguay-final.pdf

Young, E., "How Iceland Got Teens To Say No To Drugs," *The Atlantic* (January 13, 2017). Available at: https://www.theatlantic.com/health/archive/2017/01/teens-drugs-iceland/513668/