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REPORT FOR ACTION

Addition of Edibles and Other Products to Federal Cannabis Legislation

Date: February 12, 2019To: Board of HealthFrom: Medical Officer of HealthWards: All

SUMMARY

On October 17, 2018, the *Cannabis Act, 2017*, came into force, legalizing the use of cannabis for non-medical purposes. This federal legislation regulates cannabis cultivation, production, packaging, labelling, and promotion of dried and fresh cannabis, cannabis oil and seeds, and cannabis accessories. The Government of Canada has committed to amending the *Cannabis Act* by October 17, 2019 to include additional cannabis products. In preparation, Health Canada is conducting consultations on proposed amendments to the existing *Cannabis Regulations* to regulate edible cannabis, cannabis extracts and topicals.

Toronto Public Health supports a public health approach to the legalization and regulation of cannabis products. Cannabis is a psychoactive substance with potential harms to health. Drug-impaired driving, early initiation of cannabis use and frequent use are among the main public health concerns related to cannabis. The Board of Health has supported a range of actions directed at the federal and provincial governments to protect health and reduce harms from cannabis use.

This report provides comments based on a review of the proposed amendments to the federal *Cannabis Regulations*. The proposed amendments include the production and sale of cannabis vaping products, edibles and other products such as skin products, prepared with cannabis as an ingredient. The recommendations in this report provide regulatory actions the federal government can take to prevent youth exposure to cannabis products, reduce consumption of use, reduce accidental ingestion of cannabis products, reduce consumption of high potency cannabis products, and highlight the need to collect information on the public health impact of cannabis legalization.

RECOMMENDATIONS

The Medical Officer of Health recommends that:

- 1. The Board of Health urge the Government of Canada to:
 - a) Enhance existing and develop new tools for monitoring, data collection and reporting to better understand cannabis consumption rates and the full range of potential health impacts (negative and positive) of all cannabis products, including information on unintended consequences of the introduction of non-traditional methods of cannabis consumption.
 - b) Prioritize research, in collaboration with public health and other subject matter experts, to establish low-risk consumption limits for cannabis.
 - c) Focus public education efforts on establishing youth-protective, healthy practices related to the consumption of cannabis products as they represent new forms of consumption for many people.
 - d) Prohibit edible cannabis products that are particularly appealing to children due to colour or shape (e.g. gummy bear, lollipop).
 - e) Prohibit youth-friendly flavours of cannabis vaping products, such as desserts, candy or soft drinks.
 - f) Require edible cannabis products in a single package/ container to reflect traditional consumption portions of similar products without cannabis.
 - g) Prohibit the marketing, promotion and display of vaping devices that may be used to consume cannabis, in places where youth have access, regardless of whether or not the product or advertising medium represents an association with cannabis.
 - h) Establish a maximum limit for total available THC amounts in one-time use (i.e. disposable) vaping devices, and require cannabis vape cartridges and vaping devices to include a mechanism to limit the maximum quantity/dosage of THC inhaled in a single "puff" or inhale.
 - i) Require cannabis product labelling to include:
 - a) Dosing information for vape cartridges, vape devices and edible cannabis products;
 - b) Warning on cannabis vape cartridges that the product has high THC content;
 - c) Health warning messages, including avoiding co-consumption of edible cannabis with alcohol and/or highly caffeinated drinks.
 - j) Prohibit cannabis topical products that mimic food or drink, including the appearance of the immediate packaging or container to resemble food packaging.
 - k) Prohibit marketing and promotion of cannabis use in movies, video games and

other media accessible to youth.

FINANCIAL IMPACT

There is no financial impact associated with this report.

DECISION HISTORY

At its meeting on May 30, 2016, the Board of Health urged the federal Minister of Health to use an evidence-based public health approach to develop a regulatory framework for non-medical cannabis.

http://app.toronto.ca/tmmis/viewAgendaltemHistory.do?item=2016.HL12.2

At its meeting on June 12, 2017, the Board of Health endorsed a range of measures related to the proposed federal Cannabis Act 2017 and related amendments to the Criminal Code to further protect health and minimize the harms of cannabis use. http://app.toronto.ca/tmmis/viewAgendaltemHistory.do?item=2017.HL20.3

COMMENTS

Background

Evidence on the health impacts of non-medical cannabis use is still emerging, however, it has been associated with some harms to health. Cannabis also has therapeutic properties. Medical use of cannabis is covered under a separate regulatory system. Delta-9-tetrahydrocannabinol (THC) is the main psychoactive (mind-altering) component in cannabis and determines the potency of the product. Cannabidiol (CBD) is the chemical compound in cannabis that is used therapeutically in medical cannabis products. This staff report focuses on non-medical cannabis, hereafter referred to as cannabis.

Early initiation, frequent use by youth, and cannabis-impaired driving are among the main public health concerns associated with cannabis consumption. Frequent, long-term cannabis smoking is linked to respiratory illness and also linked to higher rates of dependency, albeit lower than that for alcohol or tobacco.¹ Consumption of high potency (high levels of THC) cannabis increases the risk of dependency.² Cannabis use has been associated with a higher risk of mental health issues for people who have a pre-existing genetic vulnerability to mental illness. Cannabis use during pregnancy may increase the risk for poor pregnancy outcomes.³ Cannabis smoke is known to contain carcinogens, however, there is insufficient or limited evidence to support or refute an association between cannabis use and cancer.³

Cannabis Consumption

Cannabis may be consumed by smoking, vaping (inhaling vapour from heated but not burnt cannabis using a vaping device), dabbing (inhaling heated cannabis extracts), ingesting cannabis-infused food and drink, and by applying cannabis products to skin and hair. In 2015/16, 14 percent of adults aged 18 years and older in Toronto had consumed cannabis in the past year.⁴ In a 2014 study, 13 percent of students in Toronto reported using cannabis in the previous year.⁵

In 2018, smoking was the most common method of cannabis consumption among Canadians, followed by eating cannabis-infused food and vaping. Among those who consumed cannabis, the percentage who reported ingesting cannabis-infused foods in the past year increased from 34 percent to 42 percent between 2017 and 2018, and those who reporting vaping (using a vape pen) increased from 20 percent to 26 percent.⁶

Proposed changes to the federal cannabis legislation

As of October 17, 2018, the *Cannabis Act, 2017*, permits the production and sale of dried and fresh cannabis, cannabis oil, cannabis seeds and plants. In December 2018, the Government of Canada announced plans to amend the *Cannabis Act* to allow for the sale of three additional classes of cannabis products, as follows:

- cannabis extract (e.g. vaping liquids, capsules, oil)
- edible cannabis (e.g. food and beverage containing cannabis)
- cannabis topicals (e.g. skin and hair products)

Health Canada is consulting on draft regulations for the above-mentioned classes of cannabis that will come into force by October 17, 2019.⁷ Attachment 1 of this report provides a summary of the proposed regulations for the new classes of cannabis products.

The proposed amendments to the federal legislation, classify cannabis products intended to be consumed in the same manner as food as "edible cannabis." However, Health Canada has indicated that it intends to issue a notice of intent clarifying that edible cannabis would not be treated as "food" and would be regulated exclusively under the *Cannabis Act* and regulations, and therefore be exempt from the *Food and Drugs Act* and regulations unless referred to in the cannabis legislation. Similarly, cannabis vaping products will be regulated by the *Cannabis Act* and regulations and exempt from the *Tobacco and Vaping Products Act* except when referred to in the cannabis legislation. This staff report will focus on measures that can be taken by the federal government to strengthen the proposed amendments to minimize risks from cannabis use.

Regulatory Roles and Responsibilities

The federal government is responsible for regulations related to the production of all cannabis products, including edibles, topicals and extracts, and the cultivation and production of dried cannabis. The federal government is also responsible for the

licensing and inspection of production facilities, setting standards for health and safety, packaging and labelling, and marketing and promotion restrictions.

Currently, provincial and territorial governments are responsible for licensing and overseeing distribution and sale, and for regulating where cannabis may be consumed. The Province of Ontario regulates cannabis smoking and vaping in public places under the Smoke Free Ontario Act, 2017, and also the sale, display and promotion of vapour products. The provincially-operated Ontario Cannabis Store is currently the only legal retailer in Ontario, however, provincially-licensed, private cannabis retail stores are expected to open in April 2019.

Edible Cannabis

Edible cannabis products include food or beverages in which cannabis has been added as an ingredient. Although edible cannabis products are not yet legal for retail in Canada, people may prepare edibles at home using cannabis oil or dried flower. It is challenging to control the total amount of THC and even the distribution of THC in the food prepared (e.g. in a batch of home-made cookies). Moreover, the psychoactive effects of ingested cannabis products are different from smoking because of how it is metabolized in the body.⁸ The psychoactive effects of THC in cannabis is felt within minutes of smoking or vaping compared to a delayed onset of up to 30 minutes to two hours for edible cannabis, with considerable variation among individuals.⁸ This delayed effect can lead to overconsumption.

Regulated production of edible cannabis provides the opportunity to standardize THC levels in products to allow for individuals to manage consumption levels. The proposed regulations set a limit of 10 mg of THC per package/container of edible cannabis regardless of the size of the single serving package/container. Low-risk or safe consumption limits for cannabis have not been established, however, it is known that consumption of high-potency products increases the likelihood of negative health outcomes (both acute and long-term).² It is therefore recommended that Health Canada prioritize research to help establish limits or "dosage" information for cannabis consumption and associated intoxication similar to what has been done for alcohol in Canada's Low-Risk Alcohol Drinking Guidelines.

The proposed regulations require edible cannabis to be shelf-stable (not require refrigeration) and prohibit the addition of alcohol as an ingredient. Research has found that consuming alcohol and cannabis together increases impairment.² It is therefore recommended that the labelling for edible cannabis include a health warning message to avoid consuming alcohol with edible cannabis. Naturally occurring caffeine, for example, in coffee, may be included as an ingredient in edible cannabis products up to an amount of 30 mg. It is recommended that health warning messages be added to cannabis products to avoid consuming highly caffeinated drinks with edible cannabis.

The proposed federal regulations for edible cannabis and extracts require the packaging or container to be child-resistant. Lessons learned from the United States underscore the importance of preventing accidental consumption of edibles by children. Following cannabis legalization in Colorado, there was an increase in the hospitalization of children due to accidental consumption of edible cannabis prior to the introduction of

more health protective regulations.⁹ In addition to the proposed safety requirements for packaging and labelling (as summarized Attachment 1 of this report), it is recommended edible cannabis products that are particularly appealing to children due to their colour or shape (e.g. gummy bear, lollipop), should be prohibited. Also, to prevent overconsumption, standards for edible cannabis products in a single package/container should be established to reflect traditional consumption portions of similar products without cannabis.

With the introduction of new cannabis products to the legal market, the regulatory framework must also be flexible and adapt policies based on emerging evidence. To this end, it is recommended that the Government of Canada monitor and report on the full range of health impacts (negative and positive), consumption rates and unintended consequences of the new classes of cannabis products. Moreover, given that edible cannabis may be an unfamiliar method of consuming cannabis for many people, it is recommended that public education also focus on establishing youth-protective, healthy social norms for the consumption of cannabis products.

Cannabis Extracts (Vaping Products)

Proposed amendments to the Cannabis Act and regulations will allow the manufacture and sale of cannabis extracts for use in vaping devices. Canada's Lower-Risk Cannabis Use Guidelines recommends vaping and ingesting cannabis products to lower health harms to the lungs from smoking. ¹⁰ Although vaping devices produce less toxic chemicals at lower levels, the long-term health effects of vaping is not known. ^{11,12}

Vaping devices were introduced in the market for use with flavoured substances (liquids) with or without nicotine/tobacco. These devices are known by many names, including vape pens and e-cigarettes. They may be purchased for one-time use (disposable) or refilled with vape cartridges. Vaping is associated with an increased risk for youth initiation of smoking. ^{11,12} In 2017, 22 percent of Ontario students in grades 7 to12 reported ever using an e-cigarette (a higher percentage of students than had used regular tobacco cigarettes), and 11 percent reported using e-cigarettes in the past year.4 In the United States, youth initiation of vaping has increased so dramatically that the Surgeon General has declared e-cigarette use among youth an epidemic. ¹³ Most recent data from Canada indicates that vaping among youth has increased substantially in the past 12 months. ^{14,15}

The proposed regulations for cannabis extracts allow flavouring, including flavours that are appealing to youth such as candy and confectionary. Representation of the flavours on the labelling will be prohibited. In light of the concerning rise in vaping among youth, it is imperative that vaping substances do not entice youth to initiate vaping or create a dependency on cannabis products. It is therefore recommended that the Cannabis Act and regulations prohibit the addition of flavours that are appealing to youth.

Cannabis Topicals

Cannabis topicals cover products that include cannabis as an ingredient and that are intended to be used on external body surfaces such as on skin, hair, and nails.

Evidence related to potential harms associated with topical cannabis products is even more limited than it is for cannabis edibles. The proposed amendments to the Cannabis Regulations allow for up to 1,000 milligrams (or 1 gram) of THC in a single package. The maximum package size and public possession limit of 7.5 grams (equivalent to 30 grams of dried cannabis), which is a provision in the Cannabis Act, would also apply to cannabis topicals.

The cannabis topical classification is expected to include a variety of products that will need to be monitored for adverse effects. To reduce risks associated with the use of topicals that contain high levels of THC, both intentional and accidental, restrictions on the appearance of topical cannabis products, including the container, should be put in place. ¹⁸ It is recommended that cannabis topical products that mimic food or drink, including the appearance of the immediate packaging or container to resemble food packaging, be prohibited.

Marketing and Promotion

Current restrictions in the Cannabis Act, which prohibit the promotion of cannabis accessories (e.g. vaping devices) "in a manner that there are reasonable grounds to believe could be appealing to young persons," need to be strengthened to curtail youth exposure to the "vape culture." The e-cigarette (vaping) industry is evolving with the introduction of new devices many of which target youth with online promotion and social media.^{11,16} It is therefore also recommended that the Cannabis Act be amended to prohibit the marketing, promotion and display of vaping devices that may be used to consume cannabis, in places where youth have access (e.g. convenience stores, public electronic billboards), regardless of whether or not the labelling/packaging/display content represent an association with cannabis. Implementing restrictions through federal legislation will be most effective in preventing youth access to cannabis vaping products.

In addition to product advertisement, the impact of marketing practices and social norms related to the use of tobacco, alcohol and other drugs in media such as television, music and movies is associated with increased youth initiation of use.¹⁷ It is therefore recommended that the restrictions for marketing and promotion of cannabis in general be strengthened by including restrictions on advertising in movies, video games and other media, including on-line marketing and advertising, accessible to youth.

CONTACT

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SIGNATURE

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ATTACHMENTS

Attachment 1: Summary of the proposed amendments to the Cannabis Regulations under the Cannabis Act, 2017

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