TOWARD THE LEGALIZATION, REGULATION AND RESTRICTION OF ACCESS TO MARIJUANA

Discussion paper

Task Force on Marijuana Legalization and Regulation

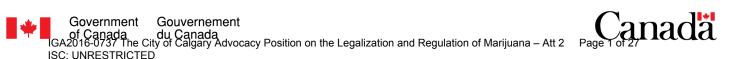


TABLE OF CONTENTS

A.	INTRODUCTION	. 3
	Objectives	. 3
В.	BACKGROUND	4
	A brief overview of marijuana	4
	Prevalence of use	. 5
	The criminal justice system	5
	Health effects	6
	Health Risks.	6
	Perception of Risk.	7
	Comparison with other psychoactive substances	7
	The "gateway" theory	8
	Therapeutic benefits	8
	Global context and International Obligations	9
C.	DISCUSSION ISSUES: ELEMENTS OF A NEW SYSTEM	10
	1. Minimizing harms of use	11
	2. Establishing a safe and responsible production system	.15
	3. Designing an appropriate distribution system	17
	4. Enforcing public safety and protection	19
	5. Accessing marijuana for medical purposes	22
CC	DNCLUSION	24

A. INTRODUCTION

In the 2015 Speech from the Throne, the Government of Canada committed to legalizing, regulating, and restricting access to marijuana.

The current approach to marijuana prohibition is not working:

- Youth continue to use marijuana at rates among the highest in the world.
- Thousands of Canadians end up with criminal records for non-violent drug offences each year.
- Organized crime reaps billions of dollars in profits from its sale.
- Most Canadians no longer believe that simple marijuana possession should be subject to harsh criminal sanctions, and support the Government's commitment to legalize, tax and regulate marijuana.

The Government understands the complexity of this challenge and the need to take the time to get it right.

The Minister of Justice and Attorney General of Canada, supported by the Minister of Public Safety and Emergency Preparedness and the Minister of Health, has created a Task Force on Marijuana Legalization and Regulation ("the Task Force"). The Task Force is mandated to engage with provincial, territorial and municipal governments, Indigenous governments and representative organizations, youth, and experts in relevant fields, including but not limited to: public health, substance abuse, criminal justice, law enforcement, economics, and industry and those groups with expertise in production, distribution and sales. The Task Force will provide advice on the design of a new framework. The Task Force will receive submissions from interested parties, including individual Canadians, consult widely, listen and learn, and commission any necessary focussed research to support its work. It is supported by a federal secretariat and will report back to the three Ministers on behalf of the Government in November 2016, on a date to be determined by the Ministers.

This Discussion Paper is designed to support consultations led by the Task Force. Its goal is to support a focussed dialogue.

Objectives

The Government of Canada believes that the new regime for legal access to marijuana must achieve the following objectives:

- Protect young Canadians by keeping marijuana out of the hands of children and youth.
- Keep profits out of the hands of criminals, particularly organized crime.
- Reduce the burdens on police and the justice system associated with simple possession of marijuana offences.
- Prevent Canadians from entering the criminal justice system and receiving criminal records for simple marijuana possession offences.

- Protect public health and safety by strengthening, where appropriate, laws and enforcement
 measures that deter and punish more serious marijuana offences, particularly selling and
 distributing to children and youth, selling outside of the regulatory framework, and operating
 a motor vehicle while under the influence of marijuana.
- Ensure Canadians are well-informed through sustained and appropriate public health campaigns, and for youth in particular, ensure that risks are understood.
- Establish and enforce a system of strict production, distribution and sales, taking a public health approach, with regulation of quality and safety (e.g., child-proof packaging, warning labels), restriction of access, and application of taxes, with programmatic support for addiction treatment, mental health support and education programs.
- Continue to provide access to quality-controlled marijuana for medical purposes consistent with federal policy and Court decisions.
- Conduct ongoing data collection, including gathering baseline data, to monitor the impact of the new framework.

B. BACKGROUND

A brief overview of marijuana

The cannabis plant is found throughout the world, but has its origins in Asia. It has been used for millennia for its psychoactive effects—euphoria ("the high"), relaxation, a sense of well-being, and intensification of ordinary sensory experiences (i.e., sight, sound, taste, smell). However, it has also historically been used for medical and social purposes.

A variety of products can be produced or derived from the flower of the cannabis plant including:

- dried herbal material (i.e., "marijuana");
- oil (e.g., "hash oil");

4

- hash (i.e., compressed resin);
- concentrates (e.g., "shatter"); or,
- foods and beverages containing extracts of cannabis.

Cannabis is most often smoked (as a dried herbal product, either alone or as a concentrate mixed with tobacco), but it can also be vaporized, or eaten.

Cannabis contains hundreds of chemical substances, among which are over 100 known as "cannabinoids." Cannabinoids are a class of chemical compounds that act on receptors in cells in the brain and body. The most well-studied cannabinoid is THC (tetrahydrocannabinol), the primary psychoactive compound of cannabis (i.e., the chemical responsible for the "high"). Increasing attention is also being paid to another key cannabinoid—CBD (cannabidiol). Unlike THC, CBD is not psychoactive and may in fact counteract some of the psychoactive effects of THC. There is increasing scientific study into the potential therapeutic uses of CBD.

For the purposes of this discussion paper, the popular term "marijuana" is used throughout, unless a specific reference to a marijuana derivative product is being made.

Prevalence of use

Marijuana is the world's most used illicit psychoactive substance. Estimates from the United Nations Office on Drugs and Crime (UNODC) suggest that around 200 million people globally reported using marijuana at least once in 2012. A UNICEF report published in 2013 ranked Canada highest amongst all nations in terms of rates of marijuana use among youth.

Marijuana has been prohibited in Canada since the 1920s and is listed as a controlled substance in Schedule II of the *Controlled Drugs and Substances Act* (CDSA). As a result, possession, production and trafficking of marijuana are illegal. The *Marihuana for Medical Purposes Regulations* (MMPR) provide a regime allowing for legal access to marijuana for medical purposes.

Despite these prohibitions, marijuana remains the most commonly used illicit substance in Canada. It is the second most used recreational drug in Canada after alcohol, especially among youth. An estimated 22 million Canadians 15 years of age and older, approximately 75% of the population, drank alcohol in 2013. In contrast, eleven per cent of Canadians aged 15 or older reported having used marijuana at least once in 2013. When examined more closely, the data reveals that 8% of adults over the age of 25 reported past-year use of marijuana in 2013, whereas 25% of youth aged 15-24 reported past-year use.

The criminal justice system

Marijuana is the most trafficked drug in the world. In Canada alone the illegal trade of marijuana reaps an estimated \$7 billion in income annually for organized crime. In addition, the administrative burden and social harms associated with the enforcement of marijuana laws, particularly for simple possession, are onerous, and need to be balanced with other safety priorities. Some Canadians argue that these laws are disproportionate to the seriousness of marijuana use as a criminal offence.

The current approach also creates challenges for the criminal justice system and for Canadians. Significant resources are required to prosecute simple possession offences. In 2014, marijuana possession offences accounted for 57,314 police-reported drug offences under the CDSA; this is more than half of police-reported drug offences. Of these, 22,223 resulted in a charge for possession that year.

The criminal records that result from these charges have serious implications for the individuals involved. People with criminal records may have difficulty finding employment and housing, and may be prevented from travelling outside of Canada. On a larger scale, criminal justice system resources are required to address the involvement of organized crime in the illicit marijuana market. In 2015, the Criminal Intelligence Service Canada reported 657 organized crime groups operating in Canada, of which over half are known or suspected to be involved in the illicit marijuana market.

The link between organized crime and the illicit marijuana market is well established. Due to the popularity of the drug among the general public, profitability, and the relative ease of production and cultivation, several significant Canadian-based organized crime groups and networks are involved in the production and distribution of marijuana. The majority of marijuana in the Canadian illicit market is believed to be produced domestically. In 2013, Health Canada reported that Canadian law enforcement sought destruction for over 39 metric tonnes of dried marijuana and more than 800,000 marijuana plants. As well, illicit marijuana grow operations exist in all parts of Canada and in all types of communities. Marijuana also moves across our borders, and according to the Canada Border Services Agency, between 2007 and 2012 marijuana was one of the top three types of drugs involved in drug seizure operations.

Police and the court system must also deal with individuals who drive while impaired by marijuana. In 2013, 97% of police-reported impaired driving incidents involved alcohol and 3% involved drugs (including marijuana), an increase from the reported 2% in 2011.

The Canadian Centre on Substance Abuse estimated that, based on 2002 data, public costs associated with the administration of justice for illicit drug use (including police, prosecutors, courts, correctional services) amounted to approximately \$2.3 billion annually.

Health effects

There are both health risks and potential therapeutic benefits from marijuana. Most of the research on marijuana over the past five decades has focused on harms, with much less attention placed on potential therapeutic benefits. The illegal status of marijuana has made it difficult to draw a complete picture of the harms of its use compared to those associated with alcohol or tobacco use, or other psychoactive substances. The following summary is based on the current available evidence.

Health risks

In general, health risks associated with marijuana use can be acute (i.e., immediate and short-lived) or chronic (i.e., delayed and longer-lasting). However, the risks may increase significantly depending on a number of factors, including:

- age at which use begins;
- frequency of use;
- duration of use;
- amount used and potency of the product;
- a user's actions while intoxicated, such as driving or consuming other substances or medications; and,
- a user's health status and medical, personal, and family health history.

More specifically:

- Frequency of use: Daily or near-daily use of marijuana can have serious long-term effects on a user's health, including risk of addiction, earlier onset or worsening of some mental illnesses in vulnerable individuals, and difficulty thinking, learning, remembering, and making decisions. Such effects may take days, weeks, months or years to resolve after use is stopped, depending on how long one has been using and when use began. Regular smoking can also harm the lungs.
- Age at which use begins: Health risks associated with marijuana use during adolescence and young adulthood, when brains are still developing, can have greater long-term harm than use during adulthood. This can include the potential for addiction, long-lasting negative effects on proper cognitive and intellectual development, harms to mental health, poor educational outcomes, and reduced life satisfaction and achievement. There is good evidence that regular marijuana use that begins in early adolescence can harm scholastic achievement, and increase the risk of dropping out of school.
- Individual health status: Besides youth, other people who are more vulnerable to the risks and harms of marijuana include those with a history of drug abuse/addiction, childhood abuse, trauma or neglect, people with certain mental illnesses and mood disorders, and children whose mothers used marijuana during pregnancy. Early and regular marijuana use has been associated with an increased risk of psychosis and schizophrenia, especially in those who have a personal or family history of such mental illnesses. In individuals with a history of psychiatric illness, use of marijuana can worsen the illness and complicate treatment.

Perception of risk

Despite increased risks for adolescents who use marijuana, the 2015 Ontario Student Drug Use and Health Survey reported that, among adolescents, the perceived risk of harm associated with marijuana use is actually decreasing. Others have observed that there is an inverse relationship between perception of risk and actual use (i.e., use of marijuana would go up as more people perceive it to be low risk).

Comparison with other psychoactive substances

The illegal status of marijuana makes it difficult to draw a complete picture of the harms of marijuana use compared to those associated with alcohol, tobacco or other psychoactive substances. The most well-established long term harm of regular marijuana use is addiction. Nevertheless, based on what is currently known, the risk of marijuana addiction is lower than the risk of addiction to alcohol, tobacco or opioids. And, unlike substances such as alcohol or opioids where overdoses may be fatal, a marijuana overdose is not fatal.

The "gateway" theory

Marijuana has often been dubbed the "gateway drug"— a stop on the way to the use of more harmful drugs and more serious drug addiction.

The so-called "gateway hypothesis" was popular in the 1970s/80s and neatly described a specific, progressive and hierarchical sequence of stages of drug use that begins with the use of a "softer drug" (e.g., marijuana) and escalates to use of "harder drugs" (e.g., cocaine).

However, over the years, many exceptions to and problems with the "gateway hypothesis" have surfaced. Because of this, the validity and relevance of this hypothesis have been challenged. There is now evidence that suggests that complex interactions among various individual/ predisposing factors and environmental factors (e.g., peer-pressure, family influence, drug availability, opportunities for drug use) drive drug seeking, drug use/abuse, and drug addiction, and these interactions are not necessarily tied to marijuana use alone.

Therapeutic benefits

With respect to claims of marijuana's therapeutic benefits, aside from clinical studies with marijuana-derived products that have received market authorization in Canada (i.e., dronabinol/Marinol®, nabilone/Cesamet®, nabiximols/Sativex®), only a limited amount of credible clinical evidence exists.

Some clinical studies suggest that strains containing mainly THC have potential therapeutic benefits for some medical conditions, including:

- severe nausea and vomiting associated with chemotherapy;
- poor appetite and significant weight loss as a result of serious long-term or terminal disease (e.g., cancer, HIV/AIDS);
- certain types of severe chronic pain (e.g., neuropathic);
- symptoms associated with inflammatory bowel disease;
- insomnia and anxiety/depression associated with serious long-term disease;
- muscle spasms associated with multiple sclerosis; and,
- symptoms encountered in palliative care settings.

Emerging evidence also suggests that marijuana strains containing mainly CBD may be useful in treating treatment-resistant epilepsy in children and adults.

Global context and international obligations

Canada is party to the three major United Nations (UN) Conventions on narcotic drugs. In the context of the Convention, Canada is obliged to criminalize the production, sale and possession of cannabis for non-medical and non-scientific purposes. Legalization of marijuana is not in keeping with the expressed purposes of the drug conventions.

While illegal in most countries, the approach to marijuana is shifting in some jurisdictions. Twenty-two countries have adopted some form of decriminalization (Decriminalizing marijuana means that it is still illegal but criminal sanctions have been replaced by fines or other types of penalties. This is a separate concept from legalization.) This decriminalization has taken effect either in law or through policies, guidelines and/or enforcement discretion. Decriminalization is viewed, by most observers, as consistent with the drug conventions, particularly where it involves personal consumption of small amounts of "soft drugs".

Despite this emerging shift globally in approaches to controlling and minimizing harms associated with marijuana use, Uruguay remains the only country that has fully legalized marijuana to date.

At a federal level, the United States' government continues to express opposition to the legalization of marijuana and it remains illegal in federal law. However, the question of legalizing marijuana use is increasingly being posed by State legislators, despite the fact that it remains illegal under federal law. Currently, four States as well as the District of Columbia have legalized access to marijuana, and several more States will vote on similar propositions in 2016 and 2017. Lessons learned from the recent experiences of the states of Colorado and Washington, and from Uruguay, can be useful when considering the new system for Canada.

Some of the key lessons learned that have been reported from the Colorado and Washington State experiences include:

- Identify clear and measurable objectives;
- Develop a comprehensive regulatory system that controls product formats; that prevents commercialization through advertising controls; and that prevents use by youth;
- Allow for effective implementation by:
 - taking the time needed for an effective launch;
 - o developing clear and comprehensive public communications;
 - establishing a strong evidence base and data collection strategy to enable long-term monitoring and adjustments to meet policy objectives; and,
 - o undertaking public health education before legalization begins.

When contemplating changes to the illegal status of marijuana, countries must also give due consideration to the rule of law and to their obligations under the UN conventions.

This dynamic international environment requires that consultations occur with the global community as Canada moves toward the legalization of marijuana, including with the International Narcotics Control Board (INCB) and the United States. While Canada's proposal to legalize marijuana may differ from drug control policy in other countries, it shares the objectives of protecting citizens, particularly youth; implementing evidence-based policy; and putting health and welfare at the centre of a balanced approach to treaty implementation. Canada is committed to respecting international partners and to seeking common ground in pursuit of these objectives.

C. DISCUSSION ISSUES: ELEMENTS OF A NEW SYSTEM

In establishing a new regime for the legalization, regulation and restriction of access to marijuana, several of the regime's elements are largely self-evident:

- Legalization of the possession of a certain quantity of marijuana obtained within a regulated legal framework, thereby addressing concerns about criminal records and burdens on the justice system for simple possession offences.
- Establishment of a strict, well-regulated system for the production and distribution
 of marijuana, thereby addressing concerns about the quality, safety and potency of
 marijuana legally available, and the control of access for those eligible to possess it.
- Continued enforcement of laws and sanctions against possession, production, and distribution of marijuana outside the regulated legal framework.
- Support for prevention and education activities, addictions treatment, counselling, law enforcement and other services to deal with the negative aspects of marijuana use and abuse.
- Education and awareness activities to ensure the risks of marijuana are known, particularly to youth.
- Baseline data and ongoing surveillance and research activities to monitor and evaluate the impact of the new framework.

However, the design and implementation of a new regime will also require careful attention to a number of particularly challenging issues which can be grouped into five themes. The Government is seeking advice and input from experts and stakeholders as well as individual Canadians in these areas:

- 1) Minimizing harms of use.
- 2) Establishing a safe and responsible production system.
- 3) Designing an appropriate distribution system.
- 4) Enforcing public safety and protection.
- 5) Accessing marijuana for medical purposes.

The discussion below sets out for each of these five themes:

- **Considerations:** A synopsis of pertinent facts, concepts and factors that will shape and influence the new regime.
- Possible Options: Key potential elements and provisions of the new regime to achieve the desired objectives.
- Questions: Specific issues and concerns on which the Task Force is seeking ideas and input from provinces, territories, experts, stakeholder groups and the broader public.

1. MINIMIZING HARMS OF USE

Considerations

One of the central issues to consider in the design of a legal and regulatory framework for legal access to marijuana is to identify those system features that will best reduce the risks of health and social harms associated with use.

When considering how best to minimize harms associated with marijuana use, it is helpful to consider the two different approaches taken in controlling tobacco and alcohol use.

In the case of tobacco, the overall objective is to reduce or even eliminate use for all Canadians.

In contrast, the overall objective with respect to alcohol is to promote responsible use amongst adults, and to prohibit use amongst youth. These objectives are achieved largely through actions such as setting a minimum age for purchase, educational tools aimed at promoting responsible use, and taxation measures.

Given that the majority of harms related to marijuana use appear to occur in select high-risk users (e.g., youth) or in conjunction with high-risk use practices (e.g., frequent use; highly potent products; impaired driving), an approach that draws lessons from both tobacco and alcohol control should be examined. Both approaches rely on a comprehensive suite of actions aimed at those users at highest risk for harms through active prevention, education and treatment, as well as policy and legislative interventions.

Few other countries have been as successful as Canada in lowering smoking rates and shifting public attitudes about tobacco. Canadian smoking rates are among the lowest in the world, dropping from 22% in 2001 to 15% in 2013. Since 2001, actions taken under the Government of Canada's Federal Tobacco Control Strategy have helped lay the foundation for continued success in tobacco control. Such actions include:

- restrictions on tobacco advertising;
- mandatory health warning messages on tobacco packaging;
- minimum age for legal purchase of tobacco;
- public health education campaigns against smoking; and,
- excise tax changes to make tobacco less affordable and accessible.

In addition, all provinces and territories have tobacco legislation of their own. Many municipalities have also taken action in their sphere. This collective action has helped drive the rate of tobacco use among Canadian youth aged 15–17 to its current low of 7%. Another key measure underpinning the success of Canada's tobacco control efforts has been the way smoking has become socially unacceptable, or "denormalized", particularly among youth.

In contrast, alcohol consumption is highly normalized in Canadian society, with nearly 75% of adult Canadians reporting that they have used alcohol in the previous year. In part this may be explained by the different regulatory and other control measures that have been implemented. For example, alcohol remains heavily marketed and promoted to adults.

When examining the current frameworks for tobacco and alcohol control, it is also worth noting the different approaches to regulating taken at the federal level. In the case of tobacco, the *Tobacco Act* protects the health of Canadians by imposing certain minimum standards, such as quantities to be sold in packages, prohibitions on flavours that appeal to youth, and restricting the age of purchase. In contrast, with alcohol, there are no comparable national minimum standards set and federal regulatory oversight is mainly focused on labelling requirements.

These two examples highlight different regulatory approaches and point to the potential for regulation of the same product by different orders of government.

The early experiences of Colorado and Washington State suggest very strongly that the Government should take steps to avoid the commercialization of legalized marijuana, including the active promoting and marketing of marijuana, leading to widespread use. Preventing widespread use—or "normalization"—is especially important when considering the need to decrease rates of use amongst Canadian youth. Marijuana is not a benign substance and the scientific evidence clearly demonstrates that young people are at a higher level of risk for experiencing negative impacts. Protecting youth and children from the negative consequences of marijuana use is central to the Government's interest in legalizing, regulating and restricting access.

As with the experience in tobacco and alcohol control, the need for a comprehensive approach to prevention, education, and treatment is clear, including public education strategies aimed at better informing youth and families of the risks and harms, in tandem with a range of other safeguards that are described below.

Possible Options

It is proposed that establishing a national minimum standard for protecting Canadians is critical, and as such it is proposed that federal legislation and regulation be developed to create an overall framework for legal access to marijuana. This framework would address the following issues:

- Minimum age for legal purchase: Health protection—particularly for children and youth—demands that marijuana purchase and possession be subject to age restrictions. The science indicates that risks from marijuana usage are elevated until the brain fully matures (i.e., when someone reaches about age 25). For context, age limits for alcohol and tobacco purchases in Canada vary across provinces and territories—either 18 or 19 years of age. In Colorado and Washington, the state governments have chosen to align the minimum age for purchasing marijuana with the minimum age for purchasing alcohol, 21 years.
- 2) Advertising and marketing restrictions to minimize the profile and attractiveness of products: Since marketing, advertising and promotion of marijuana would only serve to "normalize" it in society and encourage and increase usage, it has been proposed that these should be strictly limited so as to dampen widespread use and reduce associated harms. This is particularly the case for promotional materials that would otherwise be targeted to impressionable youth. As in the case of tobacco, there may be limitations to possible restrictions on marketing, advertising and promotion of marijuana; however within those limits these restrictions should be as tight as possible. Moreover, other limitations could include products being sold in plain packaging with appropriate health warning messages.
- 3) Taxation and pricing: When used appropriately, effective taxation and price controls can discourage the use of marijuana and provide the government with revenues to offset related costs (such as substance abuse services, law enforcement, and regulatory oversight). As such, the design of any regulatory framework should allow accommodation for an appropriate taxation regime in which there is sufficient flexibility in controlling the final price to the consumer. However, the use of taxation and pricing measures to discourage consumption must be properly balanced against the need to minimize the attractiveness of the black market and dissuade illegal production and trafficking.
- 4) Restrictions on marijuana products: THC is the main psychoactive component of marijuana. Current research shows average THC levels of between 12-15%. In contrast, marijuana from the 1980s had average THC levels of 3%. In addition, various higher potency marijuana products such as "shatter" are available with THC concentrations reaching levels as high as 80-90%. As outlined in section 1, higher concentration products have added risks and unknown long term impacts, and those risks are exacerbated for young people, including children. Given the significant health risks, maximum THC limits could be set and high-potency products strictly prohibited.

- 5) Restrictions on marijuana products: Marijuana can be consumed in many ways, including a wide range of products like foods, candies, salves or creams. Some people may choose these methods of consumption, rather than choosing to smoke dried marijuana. However, certain products present increased risks, notably when considering the increased potency of some of these derivative products and the increased harms associated with their use. They also represent an increased risk of accidental or unintentional ingestion, particularly by children. This view is supported by the experience in Colorado, where the availability of edible products led to a rise in the number of accidental or unintentional overdoses (non-fatal). As a result, the state government amended their regulatory framework to enact limits on dosing and potency. It is understood that individuals may choose to create marijuana products, such as baked goods, for personal consumption. However, consideration should be given to how edibles are treated in the new regime in light of the significant health risks, particularly to children and to youth, including whether and how to limit the potency of marijuana and types of products sold.
- 6) Limitations on quantities for personal possession: Most jurisdictions have set limits on the quantities of marijuana that an individual may possess, which has the obvious advantages of helping to dampen demand and to minimize opportunities for resale of legally purchased marijuana on the illicit market (particularly to children and youth).
- 7) Limitation on where marijuana can be sold: The availability of marijuana via retail distribution is also an important issue when considering means to minimize harms of use. This issue is further explored in Section 3.

Questions

- Do you believe that these measures are appropriate to achieve the overarching objectives to minimize harms, and in particular to protect children and youth? Are there other actions which the Government should consider enacting alongside these measures?
- What are your views on the minimum age for purchasing and possessing marijuana? Should the minimum age be consistent across Canada, or is it acceptable that there be variation amongst provinces and territories?

2. ESTABLISHING A SAFE AND RESPONSIBLE PRODUCTION SYSTEM

Considerations

Important lessons can be learned from Canada's experience with the production of marijuana for medical purposes in terms of establishing a safe and responsible production system. Legal access to marijuana for those with a medical need began in the late 1990s in response to an Ontario court decision. This and a series of subsequent decisions confirmed Canadians' constitutional right to reasonable access to a legal source of supply of marijuana for medical purposes. The program and regulatory framework evolved based on these court decisions.

Three main production models have been used either alone or in combination: home cultivation, government-contracted production, and a competitive market model of licensed producers.

Under the former home cultivation regime, the number of Canadians authorized to consume marijuana rose exponentially to approximately 40,000 from less than 500 over the period 2002 to 2014. As the amount of marijuana authorized grew to an average of 18 grams per day, translating into an average of nearly 90 plants, problems with the regime emerged. Issues included increased risks to the occupants from mould, pesticides, fire and increased risk of home invasion. Neighbours and landlords were also affected, as were local services called upon to deal with issues arising from home grow. It was also virtually impossible for Health Canada inspectors to provide effective oversight of home grow operations for two main reasons: the large number of locations spread across the country, and the inability of inspectors to enter a private residence without either permission from the occupant or a warrant.

Likewise, government-contracted production had significant limitations. Health Canada contracted for the production of a certain amount of marijuana grown to specified quality standards, which was then made available for purchase to medically authorized individuals. Fewer than 10% chose to buy this product. Issues included: a lack of variety of choice of type and strain; and concerns by some about price. In addition, the price paid for the marijuana did not fully cover the cost, resulting in significant taxpayer subsidization.

The current model, the *Marihuana for Medical Purposes Regulations* (MMPR), is exclusively a regulated competitive model. Under the MMPR, as of June 28, 2016, there were 33 licensed producers, 416 applications in the queue, and approximately 20 new applications being received each month. Moving forward, this type of regime with competitive market forces could be one model for production of marijuana. It has a variety of potential advantages including making available a wide variety of strains at different prices.

In addition to this regulated but largely market-driven competitive model, there are other options that could be explored, some of which would involve greater government management of the market. For example, a competitive auction system where qualified applicants pay for the right to operate could be considered. This approach is similar to how the Government of Canada sells government securities. Another model would require the Government to estimate the size of the market, determine how many producers can serve that market, and issue licenses accordingly (similar to the approach used in Washington State).

Several jurisdictions have legalized marijuana for recreational purposes – including Uruguay and, in the U.S., Colorado, Alaska, Oregon, Washington and the District of Columbia. With the exception of the District of Columbia, these jurisdictions allow for the production of marijuana through licensed commercial growers. In addition, all except for Washington permit individuals to grow their own marijuana. All of these jurisdictions place restrictions on the number of plants that individuals can grow. In the U.S., Colorado, Alaska and the District of Columbia allow their citizens to grow a maximum of six plants. Uruguay also permits the cultivation of up to six plants. Oregon allows its residents to grow four plants.

A key principle for consideration common to all models is whether those growing marijuana should have to pay a licensing fee so that taxpayers are not required to subsidize the full cost of government oversight of the program.

Regardless of the production model selected, a new regulatory framework for legal marijuana could contain features designed to ensure good manufacturing practices in a safe and secure environment. This could help to address both the potential health risks from marijuana as well as the need to ensure that marijuana produced in the legal framework stays in the legal framework. The marijuana could be subject to appropriate testing, packaging and labelling requirements both to protect children and to ensure adult users have the necessary information to make informed choices. The MMPR contain these features and could serve as a reference point for consideration of the nature and extent of the safeguards required in the legal marijuana regime.

Possible Options

- 1) Production Model: Experience with both home cultivation and government-controlled production in the context of relatively small numbers of medical users suggests neither approach would be in the public interest in the context of the larger numbers of users expected in a legalized market. Therefore, some form of private sector production with appropriate government licensing and oversight could allow for safe and secure production of legal marijuana with adequate choice (both price and strain) for consumers.
- 2) Good production practices: In general, ingestible products must meet certain quality standards. In the medical marijuana regime, Health Canada has established product content and production controls that have proven effective in minimizing risks to clients. Similarly, safeguards could be put in place to ensure that marijuana is produced and stored in sanitary and secure conditions. There could be strict security requirements to minimize the possibility of diversion. Controls could be placed on pesticides that can be used, and on microbial and chemical contaminants. Marijuana could also be subject to analytical testing so that those consuming can be reliably advised of its contents, particularly amounts of THC and CBD.

3) **Product packaging and labelling:** The way in which products are packaged and labelled offers an opportunity to minimize the harms of marijuana, particularly for children and youth. Measures to consider implementing include: child-proof packaging to prevent accidental ingestion by children; and, labels on packages to contain both important information about the product (e.g., THC and CBD content) as well as appropriate health warning messages.

Questions

- What are your views on the most appropriate production model? Which production model would best meet consumer demand while ensuring that public health and safety objectives are achievable? What level and type of regulation is needed for producers?
- To what extent, if any, should home cultivation be allowed in a legalized system? What, if any, government oversight should be put in place?
- Should a system of licensing or other fees be introduced?
- The MMPR set out rigorous requirements over the production, packaging, storage and distribution of marijuana. Are these types of requirements appropriate for the new system? Are there features that you would add, or remove?
- What role, if any, should existing licensed producers under the MMPR have in the new system (either in the interim or the long-term)?

3. DESIGNING AN APPROPRIATE DISTRIBUTION SYSTEM

Considerations

In Canada the only legal marijuana sales take place by licensed producers and they are restricted to using the mail. This provides reliable, low cost delivery to all parts of the country in a discrete manner that does not encourage increased usage. It also helps keep prices low as no overhead is required to maintain a retail distribution system. However, illegal sales in Canada also occur in a variety of ways including through store-fronts ("dispensaries") and over the internet.

Legal sales in other jurisdictions occur through a variety of means. For instance, in Colorado, the law allows for cities and counties to decide if they will permit recreational stores. To date, over 300 stores have been established, selling dried marijuana and a range of edible and other products. In Washington, the state is issuing a specified number of licenses for the legal operations of dispensaries.

In both Colorado and Washington, public consumption is not allowed. To address consumption in public, some jurisdictions, such as Uruguay and Holland, allow venues for the legal consumption of marijuana, such as "coffee shops" or clubs.

As discussed in Section 1, perceptions around the risk of a substance and its "normalcy" in society can affect levels of usage. The choice of a distribution system can impact these perceptions and thus may ultimately have an effect on usage rates. The distribution model could also have more direct consequences for health and safety. For example, in recognition of the more serious impairment that results when alcohol and marijuana use are combined, both Washington and Colorado do not allow marijuana to be sold in stores that also sell alcohol. Finally, different delivery models carry different considerations e.g., ability to prevent sales to minors, access in remote locations, local tax base, ability to distinguish between sales of legally produced marijuana from illicit product, and so on.

Possible Options

- 1) **Phased-in approach to distribution:** In the initial stages of legalizing marijuana, only allowing a proven system of distribution (e.g., through the mail, as is currently done in the medical marijuana regime) could minimize the risks of uncontrolled/illegal retail sales outlined above. This system could enable access for adults while using caution in taking a step that may inadvertently put youth at increased risk.
- 2) **Storefronts:** On the other hand, allowing for some ability for the sale of marijuana to occur in a legal, regulated retail environment may be required in order to provide an alternative to the current illegal sellers that exist in certain Canadian cities. Ensuring that the marijuana sold in such establishments comes from a legal source would be critical.
- 3) **Local choice:** Alternatively, decisions on appropriate distribution mechanisms could be left to provincial and territorial governments to determine the best approach based on their unique circumstances. This scenario could result in different models being adopted across the country.

Regardless of the distribution model ultimately chosen, significant efforts by all orders of government and by law enforcement will need to be put into shutting down illegal operations, be they store-fronts or internet operators. See section 4 for more discussion on this point.

Questions

- Which distribution model makes the most sense and why?
- To what extent is variation across provinces and territories in terms of distribution models acceptable?
- Are there other models worthy of consideration?

4. ENFORCING PUBLIC SAFETY AND PROTECTION

Considerations

Establishing a successful legalization regime will require a clear and robust legislative and regulatory framework. Law enforcement will also need to explore their role, and develop policy, training and practices. This will need to be coupled with appropriate actions to enforce measures outlined in the new regime and to deal with those who operate outside of it if the objectives detailed earlier in this paper are to be achieved.

As the experiences of other jurisdictions and of the regulation of alcohol and tobacco in Canada have shown, regulating a substance does not automatically remove it from illicit markets (e.g., contraband tobacco). In fact, experiences to date in Colorado confirm the need for consistent enforcement of regulations, and investing in the development of new policies, training and tools for those responsible for enforcement. Among other objectives, this can help to prevent and address impaired driving and diversion to youth, control the black market, and deal with associated crimes.

In designing the new system for legal access, close consideration must be given to new or strengthened sanctions for those who act outside the boundaries of the new system. For example, new laws may be necessary to punish those who sell to minors. Also, vigilant enforcement as well as new or strengthened laws, at the federal, provincial or territorial, or local level, may be needed to consistently protect public and individual health and safety by addressing:

- concerns regarding the location of production or distribution sites;
- hours of operation;
- density or overall number of producers and/or retailers; and,
- consumption of marijuana outside of personal dwellings (e.g., public space).

The law enforcement community will be responsible for enforcing the laws that support the new regime. If the regime (e.g., production, distribution, taxation, consumer access, etc.) is too complex or onerous for enforcement and legal production and access, there will be opportunities for organized crime to satisfy the demand through the illicit market.

While one of the objectives of legalization is to keep profits out of the hands of criminals, organized crime groups and networks currently entrenched in the Canadian illicit marijuana market may continue to produce and distribute marijuana outside of the new regime if there is profit to be made. There may be risk of theft and the diversion of marijuana from the legitimate supply chain. There are a number of other scenarios and challenges related to organized crime that will need to be minimized in a legalized system. Discussions with key law enforcement stakeholders will be essential.

Another central objective is the need to guard against marijuana-impaired driving. Driving while impaired by alcohol and/or drugs, including marijuana, is an offence under the *Criminal Code of Canada*. Impaired driving continues to kill and injure more Canadians than any other crime.

Marijuana impairs a number of brain functions needed for safe driving such as coordination, judgement of distances, reaction time, and ability to pay attention. Marijuana is second to alcohol as the drug most frequently found among drivers involved in crashes and drivers charged with impaired driving, and among seriously injured drivers. Marijuana and alcohol are also among the most frequently occurring alcohol-drug combinations.

In contrast to alcohol, there is currently no roadside "breathalyzer"-type test to detect impairment with marijuana. However, roadside oral fluid tests are being used in other jurisdictions that can detect the presence of marijuana in oral fluid which can be suggestive of recent use. This is an active area of Canadian and international research.

The development of tools, training and forensic laboratory capacity would be required for the Canadian law enforcement community to mitigate any potential increase in drug-impaired driving related to legalization of marijuana. For example, the government could establish an offence of driving while having a specified concentration of THC in the blood, similar to the offence of driving with a blood alcohol level at or above the legal limit and/or it could authorize roadside oral fluid screening devices for THC.

Possible Options

1) Strengthened laws and and appropriate enforcement response: Establishing a successful legalization regime will require the strengthening of laws that will minimize or eliminate criminal involvement. It could also require the strengthening of laws to punish those who choose to operate outside of its parameters, including those who provide marijuana to youth or produce or traffic marijuana outside of the new regulated framework, and move it across Canadian borders.

- 2) Enforcement tools for marijuana-impaired driving: There is a need and opportunity for Canada to research, develop, test, train and promote technologies and related guidelines and protocols that can equip law enforcement to deal with possible increased rates of impaired driving, particularly for roadside testing of impairment. This should be complemented by public education campaigns that emphasize risks associated with drug-impaired driving and that advocate preventive measures, as is the case for drinking and driving.
- 3) Restriction of consumption to the home or a limited number of well-regulated publicly-accessible sites: Consumption of marijuana could be restricted to private residences. However, the system may need to be pragmatic to respond to the demand for venues to consume marijuana outside the home in order to avoid proliferation of consumption in all public spaces. Consideration could be given to identifying—and strictly limiting and controlling—allowable sites for use by adults. This could serve to minimize normalization of marijuana and protect against the exposure of non-users to second-hand smoke and vapours. In addition, consideration will need to be given to the use of marijuana in workplaces. For example, a zero tolerance policy could be applied for those who operate heavy machinery or conveyances.

Questions

- How should governments approach designing laws that will reduce, eliminate and punish those who operate outside the boundaries of the new legal system for marijuana?
- What specific tools, training and guidelines will be most effective in supporting enforcement measures to protect public health and safety, particularly for impaired driving?
- Should consumption of marijuana be allowed in any publicly-accessible spaces outside the home? Under what conditions and circumstances?

5. ACCESSING MARIJUANA FOR MEDICAL PURPOSES

Considerations

Courts have found that Canadians have a constitutional right to reasonable access to a legal source of supply of marijuana for medical purposes. A recent court decision found the MMPR failed to satisfy the constitutional requirement that there be "reasonable access" to marijuana for medical purposes.¹

Determining how best to provide "reasonable access" to marijuana for medical purposes in the context of a legalized market for marijuana is not straightforward.

At a minimum, it seems clear that those whose medical needs cannot be met in a legal regime (e.g., those below the legal age or those who require a high-potency product if not legally available) will need a method of legal access.

Beyond that, it is the details of the legal regime created by governments (including production and distribution models) that will allow decision makers to determine whether a separate regime for medical users is required in order to provide "reasonable access" for medically-authorized marijuana users.

Limited experiences in other jurisdictions where separate medical and recreational markets coexist provide some interesting insights. For example, in Colorado, several stakeholders noted that the co-existence of retail and medical markets was problematic as it creates dual standards (e.g., different minimum ages, purchase quantities and taxation) and contributes to the grey market, therefore complicating regulation and enforcement. Some stakeholders have said that if they had the chance, they would have proceeded with recreational use only, instead of a dual recreational and medical system.²

In the 18 U.S. states that have medical marijuana regimes and where marijuana is not legal for recreational purposes, the production model varies between states:

Seven allow commercial production and prohibit personal cultivation. A patient may only
access medical marijuana from commercial producers that have been licensed by the
government's health department. Once a commercial cultivator is licensed, it must respect
production limits, which are enforced in order to maintain public safety and to limit the
diversion of marijuana to the black market.

¹ Allard et al v. Canada: Federal Court, February 24, 2016.

² Canadian Centre on Substance Abuse. Cannabis Regulation: Experiences, Impacts and Lessons Learned In Colorado. June 2015.

- Three allow for personal cultivation only. In these states, the number of plants a patient may legally cultivate ranges from six to 15 mature plants at any given time. There are no provisions for commercial production and no licensed marijuana dispensaries. If a patient is unable to cultivate marijuana on their own, they are able to designate a grower to do so on their behalf.
- The remaining eight states allow individuals to choose personal cultivation or to purchase from state-licensed distributors.

Control of marijuana distribution in jurisdictions that allow for both personal and commercial cultivation can be a challenge. Marijuana produced commercially is tracked, which prevents producers from cultivating and holding material that is in excess of their plant limit. However, when personal cultivation is allowed, a grey market for products produced or distributed in ways that are unauthorized may be created.

In terms of quantities authorized for medical purposes, the range under the former Canadian personal cultivation regime is 0.5 grams/day to more than 300 grams/day, with average being 17.7 grams/day by December 2013. The College of Family Physicians of Canada suggests a maximum of 3 grams/day.

Possible Options

1) Continued access to marijuana for medical purposes: It is anticipated that there could continue to be a need to enable access to marijuana for those who require it for medical reasons, but for whom reasonable access is not possible in the legalized context. This might require allowing different production methods (e.g., home cultivation) not available to others. It could also require carve-outs for medically-authorized youth or those who need high potency products. Physician involvement would still be necessary.

Questions

 What factors should the government consider in determining if appropriate access to medically authorized persons is provided once a system for legal access to marijuana is in place?

CONCLUSION

The subject of marijuana access and use is important, sensitive and complex, with issues and implications spanning health, public safety, and social and criminal justice policy domains. This discussion document presents key considerations for Canada's approach to designing a system to legalize, regulate and restrict access to marijuana. It will be important to determine the most effective approaches to designing and implementing an effective system.

Addressing legalization requires input from all sectors and Canadians. In order to shape the best long-term approach for Canadians, engagement with experts, provinces and territories, and Canadians is key.

This document will be used to form the basis of discussions with provinces, territories and experts. All stakeholders – from governments and experts to Canadians – are invited to submit their views through the <u>website</u>.

Based on the comments received through engagement, the Task Force will draft a report that will be submitted to the Government to inform decisions on how best to legalize, regulate and restrict access to marijuana.

REFERENCES

Bowes et al. (2013) Lifecourse SEP and tobacco and cannabis use European Journal of Public Health 23(2): 322-7.

Calvignioni et al. (2014) Neuronal substrates and functional consequences of prenatal cannabis exposure *European Child and Adolescent Psychiatry* 23(10): 931-41.

Canadian Centre on Substance Abuse. (2015) Cannabis Regulation: Experiences, Impacts and Lessons Learned In Colorado.

Centre for Addiction and Mental Health (CAMH). Cannabis Policy Framework. Toronto, ON: CAMH; 2014 Oct.

Chadwick et al. (2013) Cannabis use during adolescent development: susceptibility to psychiatric illness *Frontiers in Psychiatry* 4: 129.

Degenhardt and Hall (2012) Extent of illicit drug use and dependence, and their contribution to the global burden of disease *The Lancet* 379(9810): 55-70.

Degenhardt et al. (2013) The global epidemiology and contribution of cannabis use and dependence to the global burden of disease: results from the GBD 2010 study *PLoS One* 8(10): e76635.

Devinsky O, Cilio MR, Cross H, Fernandez-Ruiz J, French J, Hill J, et al. Cannabidiol: Pharmacology and potential therapeutic role in epilepsy and other neuropsychiatric disorders. *Epilepsia*. 2014 Jun;55(6):791–802.

El Sohly et al. (2000) Potency trends of delta-9 THC and other cannabinoids in confiscated marijuana from 1980-1997. *Journal of Forensic Science* 45(1): 24-30.

EMCDDA Annual Report (2010) Risk Factors for Cannabis Initiation and Dependence http://www.emcdda.europa.eu/online/annual-report/2010/boxes/p45

Fergusson et al. (2008) Cannabis use and later life outcomes Addiction 103(6): 969-76.

George, T., & Vaccarino, F. (Eds.). (2015). *Substance abuse in Canada: The Effects of Cannabis Use during Adolescence*. Ottawa, ON: Canadian Centre on Substance Abuse.

Hall W, Degenhardt L. The adverse health effects of chronic cannabis use. *Drug Test Anal.* 2014 Jan–Feb;6(1–2):39–45.

Hall (2015) What has research over the past two decades revealed about the adverse health effects of recreational cannabis use? *Addiction* 110(1): 19-35.

Hartman RL, Brown TL, Milavetz G, Spurgin A, Pierce RS, Gorelick DA, et al. Cannabis effects on driving lateral control with and without alcohol. *Drug Alcohol Depend*. 2015 Sep 1;154:25–37.

Hartman RL, Brown TL, Milavetz G, Spurgin A, Gorelick DA, Gaffney G, et al. Controlled vaporized cannabis, with and without alcohol: Subjective effects and oral fluid-blood cannabinoid relationships. *Drug Test Anal.* 2015 Aug 10. doi: 10.1002/dta.1839.

Health Canada. Consumer Information—Cannabis (Marihuana, marijuana). Ottawa, ON: Health Canada; 2015 Dec. Available from: http://www.hc-sc.gc.ca/dhp-mps/alt_formats/pdf/marihuana/info/cons-eng.pdf

Health Canada. Information for Health Care Professionals—Cannabis (marihuana, marijuana) and the cannabinoids. Ottawa, ON: 2013 Feb. Available from: http://www.hc-sc.gc.ca/dhp-mps/alt_formats/pdf/marihuana/med/infoprof-eng.pdf

Heishman SJ, Arasteh K, Stitzer ML. Comparative effects of alcohol and marijuana on mood, memory, and performance. *Pharmacol Biochem Behav.* 1997 Sep;58(1):93–101.

Horwood et al. (2010) Cannabis use and educational achievement: findings from three Australasian cohort studies. *Drug and Alcohol Dependence* 110(3): 247-53.

Hussain SA, Zhou R, Jacobson C, Weng J, Cheng E, Lay J, et al. Perceived efficacy of cannabidiol-enriched cannabis extracts for treatment of pediatric epilepsy: A potential role for infantile spasms and Lennox-Gastaut syndrome. *Epilepsy Behav*. 2015 Jun;47:138–41.

Husni et al. (2014) Evaluation of Phytocannabinoids from High Potency Cannabis sativa using In Vitro Bioassays to Determine Structure-Activity Relationships for Cannabinoid Receptor 1 and Cannabinoid Receptor 2. *Medicinal Chemistry Research* 23(9): 4295-4300.

Leyton, M., & Stewart, S. (Eds.). (2014). Substance abuse in Canada: Childhood and adolescent pathways to substance use disorders. Ottawa, ON: Canadian Centre on Substance Abuse.

Loflin and Earlywine (2014) A new method of cannabis ingestion: the danger of dabs? *Addictive behaviors*_39(10): 1430-3.

Marihuana for Medical Purposes Regulations, SOR/2013-119. Available from: http://www.laws-lois.justice.gc.ca/eng/regulations/SOR-2013-119/

Meier et al. (2012) Persistent cannabis users show neuropsychological decline from childhood to midlife. *Proceedings of the National Academy of Sciences* 109(40): E2657-64.

Naftali T, Bar-Lev Schleider L, Dotan I, Lansky EP, Sklerovsky Benjaminov F, Konikoff FM. Cannabis induces a clinical response in patients with Crohn's disease: A prospective placebo-controlled study. *Clin Gastroenterol Hepatol*. 2013 Oct;11(10):1276–80.

Porter BE, Jacobson C. Report of a parent survey of cannabidiol-enriched cannabis use in pediatric treatment-resistant epilepsy. *Epilepsy Behav*. 2013 Dec;29(3):574–7.

Public Health Agency of Canada. (2016) The Chief Public Health Officer's Report on the State of Public Health in Canada, 2015: Alcohol Consumption in Canada.

Radhakrishnan et al. (2014) Gone to Pot—A review of the association between cannabis and psychosis *Frontiers in Psychiatry* 5: 54.

Rigucci et al (2015) Effect of high-potency cannabis on corpus callosum microstructure *Psychological Medicine* Nov 27: 1-14.

Rogosch et al. (2010) From child maltreatment to adolescent cannabis abuse and dependence: a developmental cascade model *Development and Psychopathology* 22(4): 883-97

Sewell RA, Poling J, Sofuoglu M. The effects of cannabis compared with alcohol on driving. *Am J Addict*. 2009;18(3):185–93.

Silins et al. (2014) Young adult sequelae of adolescent cannabis use: an integrative analysis *The Lancet Psychiatry* 1(4): 286-93.

UNICEF Office of Research (2013). 'Child Well-being in Rich Countries: A comparative overview', *Innocenti Report Card 11*, UNICEF Office of Research, Florence.

UNODC, World Drug Report 2012 (United Nations publication, Sales No. E.12.XI.1).

Vanyukov et al. (2012) Common liability to addiction and "gateway hypothesis": theoretical, empirical and evolutionary perspective *Drug and Alcohol Dependence* 123 Suppl 1 S3-17.

Volkow ND, Baler RD, Compton WM, Weiss SRB. Adverse health effects of marijuana use. *New Engl J Med*. 2014 Jun 5;370(23):2219–27.