

# SUPPORTING ONTARIO'S BUDDING CANNABIS INDUSTRY



## ABOUT THE ONTARIO CHAMBER OF COMMERCE

For more than a century, the Ontario Chamber of Commerce has been the independent, non-partisan voice of Ontario business. Our mission is to support economic growth in Ontario by defending business priorities at Queen's Park on behalf of our network's diverse 60,000 members.

From innovative SMEs to established multi-national corporations and industry associations, the OCC is committed to working with our members to improve business competitiveness across all sectors. We represent local chambers of commerce and boards of trade in over 135 communities across Ontario, steering public policy conversations provincially and within local communities.

Through our focused programs and services, we enable companies to grow at home and in export markets. The OCC provides exclusive support, networking opportunities and access to policy insight and analysis to our members. We also work alongside the Government of Ontario on the delivery of multiple programs, and leverage our network to connect the business community to public initiatives relevant to their needs.



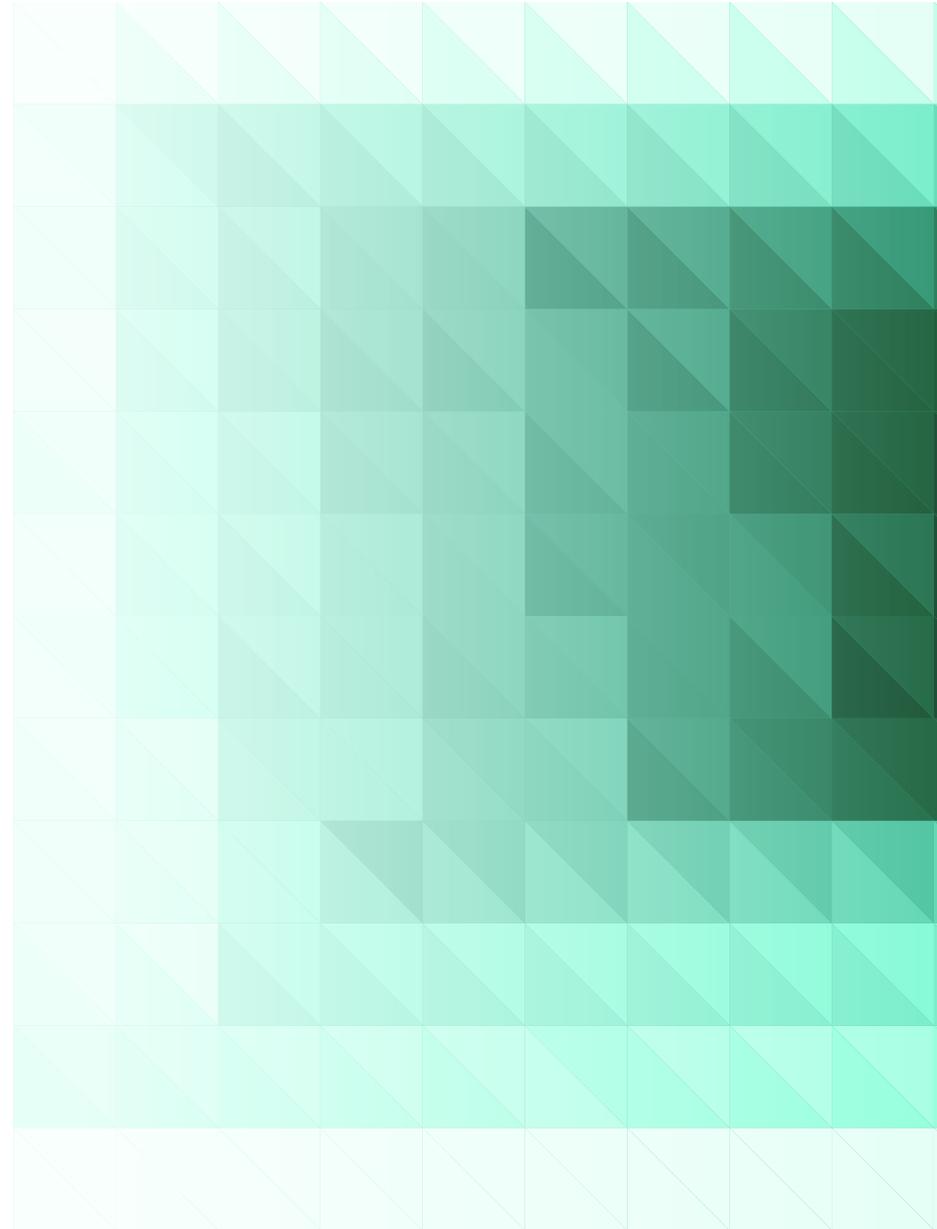
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## GLOSSARY

### ALCOHOL AND GAMING COMMISSION OF ONTARIO (AGCO)

The AGCO is the regulator for private cannabis retail stores in Ontario for the adult recreational cannabis market. It has the authority to license, regulate, and enforce the sale of recreational cannabis in privately run stores in Ontario.

### CANNABIDIOL (CBD)

Unlike Delta-9-Tetrahydrocannabinol (THC), CBD does not intoxicate users. The common reasons for CBD use include anti-inflammation, anti-nausea, anti-psychotic, anti-anxiety, pain management, sleep improvement, and to reduce seizures.<sup>1</sup>

### CANNABINOIDS

Cannabis contains hundreds of chemical substances known as cannabinoids that interact with the body, resulting in some mental and physical effects.<sup>2</sup> The two major cannabinoids in cannabis are delta-9-tetrahydrocannabinol (THC) and cannabidiol (CBD).

### CANNABIS

Cannabis is a flowering plant native to Eastern Asia, but now grown and distributed around the world and known for its psychoactive and therapeutic effects. Many psychoactive effects are associated with the consumption of cannabis leaves and flowers, including euphoria, relaxation, and heightened sensory experiences, as well as negative effects such as confusion, anxiety, and difficulties concentrating.<sup>3</sup> Cannabis can be consumed in a variety of ways, including by smoking, ingesting, vaporizing or vaping, dabbing, topically, or sublingually.<sup>4</sup>

### DABBING

Dabbing refers to the process by which a cannabis user applies an extract to a hot nail and inhales through a glass piece. Dabbing provides a potent dose of cannabinoids.<sup>5</sup>

### DELTA-9-TETRAHYDROCANNABINOL (THC)

THC is one of the chemical substances or cannabinoids responsible for how the body reacts to cannabis. It is the main psychoactive cannabinoid and is most responsible for the high associated with cannabis use.<sup>6</sup> The higher the strength of THC, the stronger the potential effects.<sup>7</sup> If a cannabis plant contains less than 0.3 percent of THC in its flower or leaves, it is classified as hemp.

### EDIBLES

Edible cannabis products are ingested through food and drinks. The effects from an edible can be felt in as little as 30-minutes or 3 to 4 hours after ingestion.<sup>8</sup> Its effects can last longer than inhaled cannabis.

### FINISHED INVENTORY

Finished inventory, per the Government of Canada's definition, refers to any cannabis held in stock by a cultivator, processor, distributor, or retailer that is packaged, labelled, and ready for sale.

### LICENSED PRODUCER (LP)

Licensed producers refers to license holders operating across Canada who are regulated by Health Canada and authorized to grow, process and/or sell cannabis under the *Cannabis Act*.

### MEDICAL CANNABIS

Medical cannabis is only available legally with a medical document from a doctor or nurse practitioner, and for those with a qualifying ailment, through licensed sellers and Health Canada-approved at-home cultivation.<sup>9</sup> Medical cannabis cannot be purchased through the Ontario Cannabis Store (OCS), nor can the OCS provide medical advice or fill medical prescriptions.<sup>10</sup> Instead, a patient must register with and order directly from a licensed producer. The LP ships the medical cannabis (i.e., fresh cannabis, dried cannabis, or cannabis oil) to the patient's home. Alternatively, patients can produce their own personal supply of medical cannabis or designate someone to produce medical cannabis on their behalf.

**ONTARIO CANNABIS STORE (OCS)**

The OCS serves a dual function – both a customer-facing channel through the online retail platform established by the Government of Ontario and a distribution centre to fulfill online orders. The OCS website allows consumers aged 19 and over to purchase up to 30 grams (approximately one ounce) of dried recreational cannabis per transaction, as well as cannabis oil, which are then delivered to a consumer's home. Until April 1, 2019, the OCS was the only legal option available for consumers in Ontario to purchase recreational cannabis. Edibles and products solely for topical use are currently not available for sale in Canada. Following the launch of regulated private retail stores on April 1, 2019, the OCS is also the exclusive wholesaler to these stores.<sup>11</sup>

**PRE-ROLL**

A pre-roll is a joint or blunt of cannabis that was prepared before its intended time of consumption.

**SAFETY SENSITIVE POSITION**

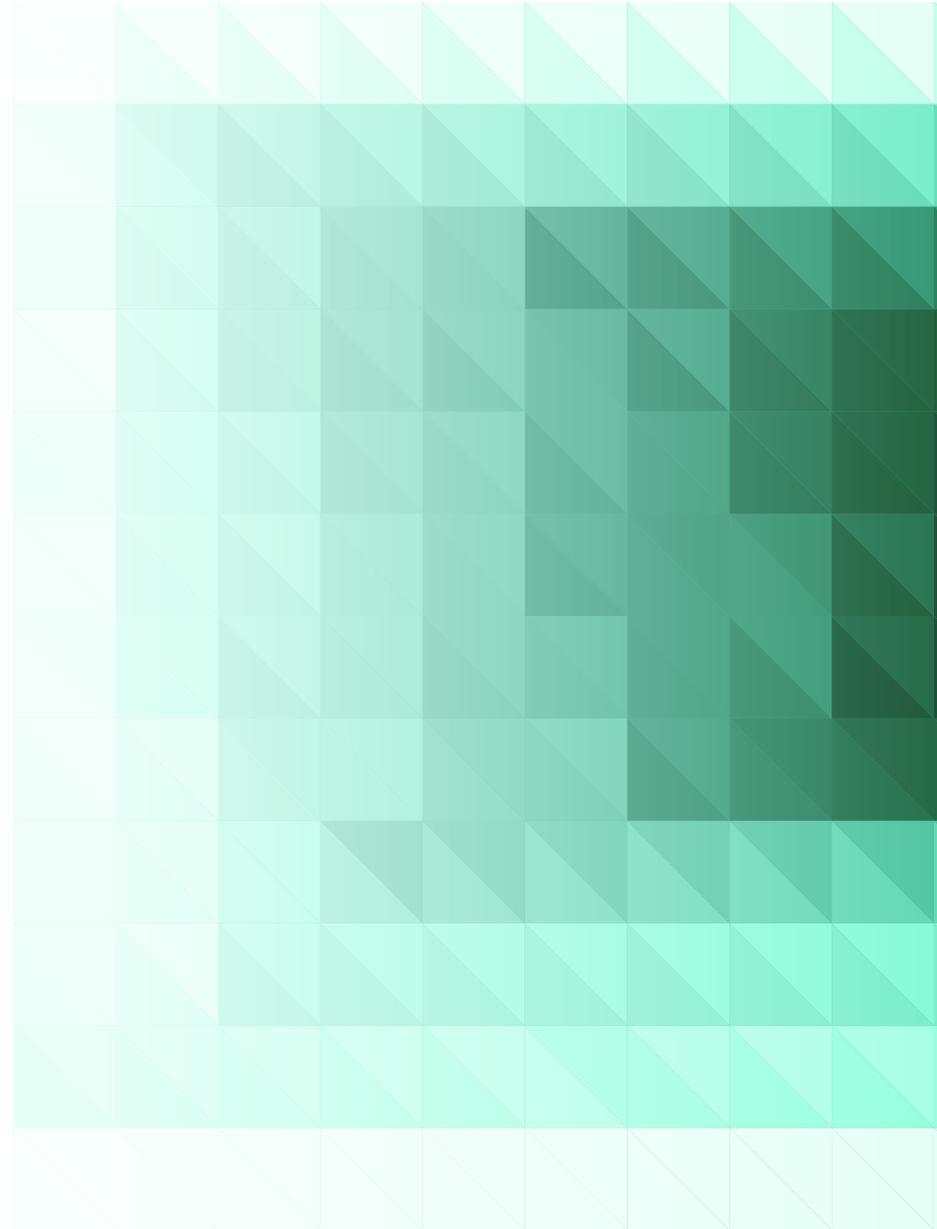
The Canadian Human Rights Commission defines a safety sensitive position as one which “if not performed in a safe manner, can cause direct and significant damage to property, and/or injury to the employee, others around them, the public, and/or the immediate environment.”

**TINCTURES**

Tinctures refer to a sublingual alcohol concentrate dropped under a cannabis user's tongue which then enters the bloodstream. They act faster than edibles and ingestible oils, though they are often less potent.<sup>12</sup>

**UNFINISHED INVENTORY**

Unfinished inventory, per the Government of Canada's definition, refers to any cannabis held in stock by a cultivator or processor that is not packaged, labelled, and ready for sale.



## EXECUTIVE SUMMARY

1. The AGCO should re-open the application process for prospective operators and LPs as quickly as possible and proceed with a licensing system based on merit (i.e., prior retail experience, industry knowledge, capital, infrastructure, etc.) for the next phase of private retail.
2. A formalized process should be developed to allow Ontario municipalities, both those that opted-in and those that opted-out, to engage with the AGCO as it determines where and how many private retail cannabis stores will be permitted within their boundary.
3. The Government of Ontario should consider allowing adult consumers to purchase cannabis directly online from licensed producers and retailers to improve customer convenience.
4. Following the Government of Alberta's approach, the Government of Ontario should consider relaxing rules governing partnerships between retailers and LPs while also allowing LPs to operate retail stores, whose total number of stores could be capped as a percentage of the market.
5. Health Canada should invest in its capacity to license facilities at an accelerated rate while not compromising the inspection process.
6. The Government of Canada should develop a common excise stamp for LPs to adhere to cannabis products, thus allowing licensees to more efficiently ship products across the country.
7. The Government of Canada should permit individual servings of edible products to contain up to 10-milligrams of THC, as well as a package limit of 100-milligrams of THC, to allow for economies of scale.
8. As edibles and other methods of cannabis consumption enter the market in late 2019, the Government of Ontario should undertake public education campaigns dedicated to these new products and work with the cannabis industry to both develop and disseminate this information to the public as these products are likely to attract less experienced and new cannabis users.
9. In anticipation of new cannabis products that are not smoked or vaped, the Government of Ontario should consider the licensing of private consumption lounges for Ontarians to consume these products.
10. The Government of Ontario should invest in public education and awareness campaigns that:
  - Provide adult consumers with basic cannabis literacy (i.e., the differences between THC and CBD, the effects of edibles vs. smoking cannabis, new cannabis products, how long to wait before operating a vehicle, safe storage, health impacts, risks associated with cannabis impairment for safety-sensitive jobs, etc.);
  - Educate adult consumers on how to recognize legal cannabis and where to purchase legal cannabis,<sup>13</sup> thus supporting the legal cannabis industry in Ontario and helping to eradicate the illegal market; and
  - Provide youth with factual information about cannabis, the health impacts, and consequences associated with impaired driving.
11. The cannabis industry should play a key role in building cannabis literacy and educating the public as industry has a direct relationship with consumers.
  - The provincial and federal government should collaborate with the cannabis industry to develop effective public education campaigns.
  - As the Government of Canada surveys Canadians, they should identify knowledge gaps with respect to cannabis use and share this information with the cannabis industry to enable industry

to develop relevant and timely public education campaigns addressing these gaps with the aim of building cannabis literacy among Canadians.

12. The Government of Ontario should invest in the necessary ongoing research to inform physicians and health care providers about the health impacts of recreational cannabis use and, in turn, help patients make informed decisions.<sup>14</sup>
13. The Government of Canada should fund high-quality, scientific research on cannabis in partnership with the cannabis industry (including but not limited to: cannabinoids within cannabis, addiction, the health impacts associated with the different types of products, and measuring impairment).
14. The Government of Canada should continue to invest in the development of cannabis impairment detection devices with the aim of bringing a device to market that can reliably and accurately measure impairment at the time of testing.
15. The AGCO should consider additional mandatory training for cannabis retail operators and employees with the introduction of new cannabis products, such as edibles, concentrates, and extracts later this year.
16. To support the development of Ontario's cannabis industry, the Ministry of Training, Colleges and Universities should act as a convener by engaging the cannabis industry and post-secondary institutions, identifying the skills needed for current and future positions in the cannabis industry and developing a strategy highlighting the variety of education and employment opportunities related to the legal cannabis sector.
17. The Government of Ontario should develop a funding pool that allows post-secondary institutions to apply for capital needed to build new infrastructure, such as those underway at the University of Guelph and Niagara College, to attract research dollars, industry, and students and, in so doing, support the growth of Ontario's cannabis talent pool.
18. The Ministry of Tourism, Culture and Sport should work with the broader tourism and cannabis industries to incorporate cannabis-related tourism in its upcoming Ontario Tourism Strategy.

## PREFACE: THE EVOLUTION OF CANNABIS IN CANADA

Prior to October 17, 2018, cannabis had been illegal in Canada since 1923 when it was added to *The Opium and Narcotic Drug Act, 1911* during a review of the legislation.<sup>15</sup> Despite being illegal for almost a century, Canada had a thriving illegal cannabis market.<sup>16</sup> Prior to the legalization of recreational cannabis, Statistics Canada estimated that Canadians aged 15 years and older consumed approximately 775 tonnes (or 775,000 kilograms) of cannabis in 2017, totalling over \$5.13 billion in illegal market sales.<sup>17</sup>

After a lengthy Supreme Court of Canada legal battle (*R v. Smith*), patients earned the right to access medical cannabis through the introduction of the *Marijuana Medical Access Regulations* (MMAR) in 2001. The MMAR was replaced by other sets of regulations, including the *Access to Cannabis for Medical Purposes Regulations* (ACMPR) in 2016. This legislation was introduced to provide Canadians with certain conditions, such as chemotherapy-induced nausea, palliative and end-of-life pain, and neuropathic pain, with access to medical cannabis if other therapies deemed ineffective.<sup>18</sup>

In 2014, the MMAR was replaced by the *Marihuana for Medical Purposes Regulations* (MMPR). The MMPR led to the emergence of an ecosystem of licensed producers (LPs) regulated by Health Canada. The MMPR coupled with the Liberal Party of Canada's campaign promise to legalize recreational cannabis during the 2015 federal election, led to the emergence of Canada's nascent cannabis industry.

On April 13, 2017, the *Cannabis Act* (Bill C-45) was introduced in the House of Commons by the Minister of Justice at the time, Jody Wilson-Raybould. The proposed legislation aimed to balance legalizing the production, distribution, and sale of cannabis for recreational purposes with protecting public health and safety, preventing youth from accessing cannabis, and reducing criminal activity.

The legislation received Royal Assent on June 21, 2018. Thus, after 95 years of prohibition, recreational cannabis became legal in Canada on October 17, 2018, making it the only drug in Canada available for both

medical and recreational purposes.<sup>19</sup> Subject to provincial/territorial restrictions, Canadian adults aged 18 and older are now legally able to, among other things, possess up to 30 grams of legal cannabis (dried or equivalent in non-dried form) in public, share up to 30 grams of legal cannabis with other adults, grow cannabis from licensed seeds or seedlings, and make cannabis products (such as food and drinks) at home.

With legalization, each province/territory is responsible for developing its own regulations for the sale and distribution of cannabis. In Ontario, cannabis is available through the government-run Ontario Cannabis Store (OCS) website and, as of April 1, 2019, in privately-owned, brick-and-mortar retail stores. By comparison, cannabis sales in other provinces take on many different forms: government-run and licensed stores in British Columbia; licensed stores run by four private entities in Manitoba; privately-owned stores in Saskatchewan and Newfoundland and Labrador; government-run stores in the Yukon, Quebec, and Prince Edward Island; and through liquor stores in Nova Scotia and the Northwest Territories.<sup>20</sup>

Provinces and territories can add additional restrictions to the federal legislation, such as increasing the age of access, while municipalities can pass bylaws to regulate the use of cannabis locally.<sup>21</sup> In Ontario, those 19 and older\* can possess up to 30 grams (one ounce) of dried cannabis in public, aligning with the province's legal age for alcohol use.<sup>22</sup>

Canada is not the first country to legalize recreational cannabis. Uruguay was the first country to fully legalize the cultivation, possession, and sale of cannabis in July 2017. The Netherlands also permits recreational cannabis use under certain conditions, and ten U.S. states plus the District of Columbia have legalized recreational cannabis use at the state level.<sup>23</sup>

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\*The Ontario Medical Association (OMA) has identified that there is scientific evidence that indicates recreational cannabis use impacts brain development and the brain continues to develop until the age of 25. The OMA has therefore advocated that the province reconsiders the minimum age it set and instead adopt a minimum age of 25 for the purchase, possession, and use of cannabis.

## INTRODUCTION

The end of cannabis prohibition in Canada, as well as the introduction of private retail in Ontario, marks a new era, one that demands careful consideration and thoughtful policy solutions. With Canada being the first G7 country to federally legalize and regulate recreational cannabis use, there will be implications of legalization, both domestically and internationally. At home, the legalization of recreational cannabis presents a significant economic opportunity for both the federal and provincial governments as well as the burgeoning cannabis industry.

However, this new era has also prompted concerns from municipalities, employers, and public health officials. To capitalize on this opportunity, quash the illegal market, and safeguard public health, all levels of government must consider how to establish balanced regulations that acknowledge the dual goals of public safety and economic growth. Other nations will likely look to Canada when developing their own regulations, providing us with the opportunity to be global leaders in this space.

This report examines how the Government of Canada and Government of Ontario can support Ontario's budding cannabis industry, while ensuring responsible adult consumption of recreational cannabis. Given the legalization of recreational cannabis in Canada on October 17, 2018,

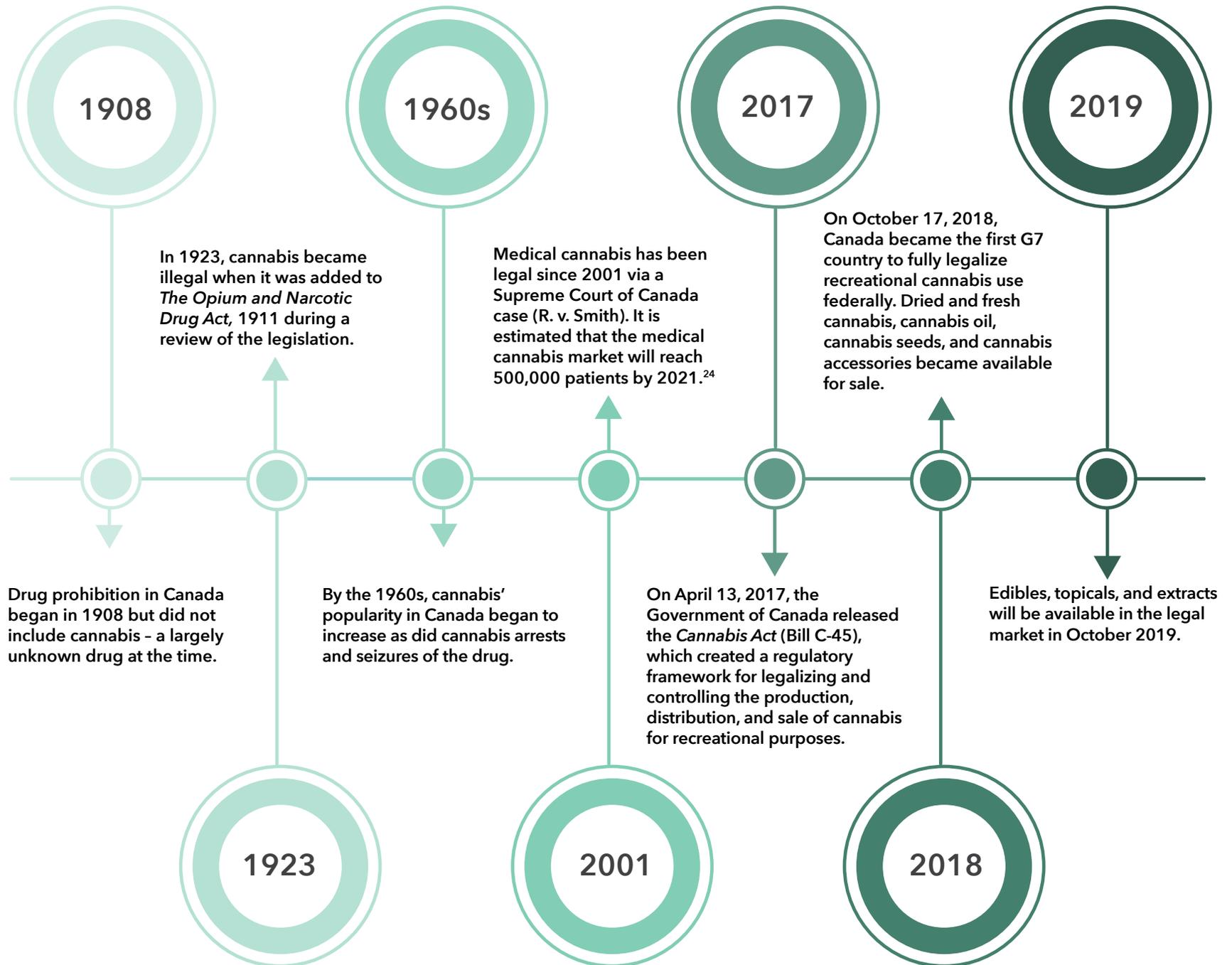
this report focuses specifically on recreational cannabis and does not examine issues pertaining to medical cannabis.

*Supporting Ontario's Budding Cannabis Industry* focuses on six timely and pressing themes for Ontario's business community:

1. Private retail in Ontario;
2. The supply shortage;
3. Edible cannabis products;
4. The need for greater public education and awareness on cannabis;
5. Recreational cannabis and the workplace; and
6. Skills and workforce development as it pertains to the cannabis industry.

The Ontario Chamber of Commerce (OCC) would like to thank the members of the Cannabis Working Group, whose input helped shape the report in a meaningful way. This report was greatly informed by five consultative meetings held in February and March 2019.

# HISTORY OF CANNABIS IN CANADA



In August 2018, the newly-elected Government of Ontario announced it would implement a private retail model for the sale of cannabis.<sup>25</sup> This was a departure from the previous provincial government's plan to have 150 government-run, brick-and-mortar cannabis stores over the first three years as a subsidiary of the Liquor Control Board of Ontario (LCBO).

To effect this change in direction, the provincial government passed the *Cannabis Statute Law Amendment Act, 2018* on October 17, 2018, which also amended several pieces of legislation. These changes gave the Ontario Cannabis Store (OCS) the exclusive right to sell cannabis online. Prospective operators would be allowed to establish one retail store at an Ontario-based production facility, the licensing of private retail stores would be administered through the Alcohol and Gaming Commission of Ontario (AGCO), and there was to be no cap on the number of cannabis retail store licenses in Ontario – at least, not initially.

Despite the province's intention to *not* cap the number of cannabis retail stores, the Government of Ontario announced on December 13, 2018 that it would only allow private cannabis retail stores to open in phases, citing a shortage of legal cannabis from federally licensed producers. In the initial phase, the AGCO was given the authority to license up to 25 private retail stores. Licenses were to be determined through a lottery, and private retail stores would be mandated to open by April 1, 2019.<sup>26</sup> Accordingly, licences were divided regionally: five going to the east of the province, seven in the west, two in the north, six in the Greater Toronto Area, and five in Toronto. The Province noted that once the federal government had a reliable supply of cannabis, they would lift the cap on the number of private retail stores.

With over 17,000 applications submitted to the lottery, the randomized draw was conducted on January 11, 2019, and the results posted online by the AGCO 24-hours later. The vast majority of lottery entries were from sole proprietorships (64 percent), followed by corporations (33 percent), and partnerships (3 percent).<sup>27</sup> The 25 lottery winners were given until January 18, 2019 to submit a Retail Operator Licence Application,

followed by a background check, a \$50,000 letter of credit, and \$6,000 non-refundable license application fee to the AGCO. Applicants who received a retail licence but fail to open their stores by the end of April 2019 will face a \$25,000 fine from the AGCO.<sup>28</sup>

### Municipal Concerns and Recreational Cannabis Stores

Ontario municipalities were given until January 22, 2019 to determine whether to permit physical cannabis stores within their boundaries.<sup>29</sup> While municipalities electing to opt-out could choose to lift the prohibition at a later date, those who opted-in were not permitted to subsequently ban cannabis stores from their city.<sup>30</sup> Ultimately, out of Ontario's 414 municipalities, 337 opted-in to have storefronts and 77 opted-out. Among the reasons why municipalities opted-in included eliminating the illegal market, ensuring residents could purchase legal cannabis in their home municipality as well as contributing to municipal revenues and attracting economic growth to their region.

In contrast, municipalities who opted-out expressed two primary concerns. First, some worried they would have little say as to where and how many cannabis retail stores would be located within their jurisdiction. Currently, the power to approve or deny site applications for retail cannabis stores rests with the AGCO. Second, municipalities were concerned that the financial support provided by the province through the Ontario Cannabis Legalization Implementation Fund (OCLIF) was too little to offset costs associated with the legalization of cannabis, like increased policing or public health costs.\* Through the OCLIF, the province will provide municipalities with \$40 million over two years to help with the costs associated with the legalization of recreational cannabis.<sup>31</sup>

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\*A first payment of \$15 million will be given to all municipalities on a per-household basis, with at least \$5,000 provided to each municipality. Following the deadline for municipalities to opt-out of hosting private retail stores, a second payment of \$15 million will be given to municipalities. For this payment, municipalities that opted-in will receive funding on a per household basis, adjusted so that at least \$5,000 is provided to each municipality. Municipalities that opted-out will receive \$5,000 each. Finally, Ontario is setting aside \$10 million of the municipal funding to help address unforeseen costs. Priority for this funding will be given to municipalities that have not opted-out.

The existence of 77 municipalities that opted out presents additional issues. Questions surrounding whether these municipalities will, by default, encourage the continuation of the illegal market remain unanswered. Similarly, it is unclear whether residents will purchase products from municipalities that opted-in and subsequently re-sell this cannabis in so-called “dry districts.”<sup>32</sup>

Also of concern is the restriction that the first 25 cannabis retail stores must be located in a municipality that opted in with a population of 50,000 or more. For small and rural municipalities, the cannabis industry presents an opportunity to support regional economic development by attracting investments, businesses, and jobs. For instance, Canopy Growth, located in Smith Falls, Ontario, is the first Canadian cannabis company listed on the New York Stock Exchange and currently employs over 2,000 full-time staff – most of whom are based in Ontario. Therefore, this population requirement disadvantaged small communities that could benefit from the opportunities presented by the cannabis industry and private retail.

### Addressing the Costs Associated with the Legalization of Recreational Cannabis

As part of the legalized cannabis framework, governments will levy an excise duty on cannabis products, including medical cannabis, as well as the Goods and Services Tax/Harmonized Sales Tax (GST/HST) at the point of sale. Revenues from the excise duty will be shared between the different levels of government to cover the societal costs associated with establishing a recreational cannabis market. Specifically, 75 percent of revenue will be allocated to the provincial/territorial government, which will, in turn, pass some of that revenue to municipalities. The remaining 25 percent is reserved for the federal government. The federal government’s share will be initially capped at \$100 million, with any federal revenue over this amount given to the provinces and territories. This revenue-sharing arrangement will be reviewed after two years.<sup>33</sup>

Cannabis has direct impacts on government spending in various areas, including health, the criminal justice system, regulation, taxation, and distribution. In *Sharing the Costs of Cannabis in Canada*, the Mowat Centre explains that, between 2015 and 2016, the total direct costs to all levels of government and attributable to cannabis was estimated to be

over \$830 million. The criminal justice system was the largest expense, with municipalities bearing the greatest share of costs.

The legalization of recreational cannabis will alter these costs and, according to the Mowat Centre, a two-year period is too short of a timeframe to determine which level of government will carry the cost burden of legalization in the long term. While the costs associated with the criminal justice system and issues at the border should decline following the legalization of recreational cannabis, there may be an increase in costs to the health care system and criminal prosecution due to improvements in roadside-testing tools.<sup>34</sup>

Given these uncertainties, as well as the new costs associated with managing the regulation, distribution, and zoning elements of the legalization framework, the Mowat Centre recommends that the current 75-25 formula be flexible, evaluated on an ongoing basis, and subsequently updated to reflect the impacts of cannabis-related costs on each level of government.

### Industry Perspective on the Lottery System

Ontario businesses expressed several concerns about the roll out of private retail in Ontario. To begin, prior to the announcement made by Ontario’s Minister of Finance and Attorney General on December 13, 2018, to meet the Government of Ontario’s licensing criteria ahead of the original December 17, 2018 application deadline, prospective cannabis retail operators were required to make substantial investments in real estate, company infrastructure, and key personnel. Accordingly, a number of businesses in Ontario invested significant capital to secure one or more retail locations across the process to meet the province’s original criteria. The subsequent changes introduced by the Province to the licensing process in December 2018 impacted business owners who are currently paying carrying costs from initial licensing requirements, investments, and retail locations.

Furthermore, the inherently random nature of the lottery sparked a number of legitimate concerns from businesses in the cannabis industry. More specifically, lottery winners may not possess the requisite capital, business acumen, and/or retail experience needed to successfully build and open a private retail store by April 1, 2019. Since cannabis retail operators need to purchase and pay for products from the OCS on

delivery, rather than on credit, prospective operators need access to significant capital to stock their shelves for customers. These concerns were warranted and reflected in the number of retail stores unable to open on April 1. This is concerning as it offers no competition to the illegal market, poses a risk to public health, stalls job creation, and limits government revenue from the sale of legal cannabis.

### The Path Forward for Private Retail in Ontario

While the lottery system was a stop-gap measure, owing to the supply shortage, the Government of Ontario must take a different approach in its next phase. More specifically, the AGCO and province should re-open the retail license application, take a merit-based approach when evaluating and awarding licenses, and reconsider its decision to not allow licensed producers to sell directly to consumers.

By way of comparison, in Kelowna, British Columbia, cannabis retail applications are evaluated using a scoring matrix, with ten criteria that allows city planning staff to rank applications and provide Kelowna City Council with the applications for approval based on key metrics.<sup>35,36</sup> Among the criteria is how the retail store will operate and fit in within the neighbourhood.<sup>37</sup> A merit-based approach in Ontario would enable applicants, including entrepreneurs, investors, and businesses, with the relevant expertise, skills, experience, capital, and infrastructure to apply for a retail license and establish a retail store, ultimately, improving the prospect of establishing a successful recreational cannabis industry in Ontario.

Without a merit-based approach, the supply of legal recreational cannabis will in time ramp-up, however, there may be few private retail stores open to meet consumer demand. In fact, as of April 1, only ten out of 25 legal cannabis stores opened across Ontario. The lack of private retail will only encourage the illegal market and reduce potential government revenue through the sale of legal cannabis.

Having knowledgeable retailers and employees through a merit-based approach is beneficial for a number of reasons. By interacting directly with consumers, private retail operators can help develop cannabis literacy among new and less experienced cannabis consumers. A merit-based approach increases the chance that retailers have the expertise needed to help adult consumers make informed choices. Having applicants vetted through a merit-based approach would ease concerns of municipalities

who are wary that licenses could be given to inexperienced operators. With this approach, professionals and business owners are more likely to have a comprehensive retail strategy including: employee handbooks, guidelines, and internal training programs, as well as an understanding of how to create a positive customer experience.

To improve customer convenience, the Province should also reconsider its decision to not allow online orders from retailers and “click and collect” services. Implementing this change would enable consumers to buy cannabis products directly from licensed producers and retailers online and pick them up at retail stores. This would also create another consumer-friendly option for the purchase of legal cannabis, helping to combat the illegal market and allowing retailers to better serve customers.

Under Ontario’s cannabis law, LPs are not allowed to operate a retail store, apart from a “farm gate” store which must be located at one of the producer’s Ontario-based production facilities. The law also captures the “affiliates” of LPs, meaning LPs cannot own more than 9.9 percent of a cannabis retailer. This is problematic because these partnerships, if permitted in Ontario, could serve as a vehicle for retailers to build safe, responsible, and professional cannabis retail operations, and to do so quickly. The Government of Ontario may be concerned that LPs, if allowed to enter Ontario’s cannabis retail market, may use their industry position and financial resources to dominate the retail model, making it difficult for small, independent businesses to have a chance at competing in this new industry. However, the solution does not lie in banning LPs from having any commercial relationships with cannabis retailers as this hinders the opportunity to have cannabis retailers who have the experience, knowledge, and capital needed to establish a recreational market, particularly in the early days following legalization. Instead, Ontario could adopt the approach taken by the Government of Alberta. Alberta put in place a provision that prevents any single retailer from holding more than a fixed percentage of licenses, helping to stabilize the industry in the beginning and limiting the ability of retailers to dominate the market in the long-run.

The Ontario Government should also be cognizant of the price of legal versus illegal cannabis as high prices may encourage the public to turn to the latter despite concerns over safety and quality. According to Statistics Canada, the cost of legal cannabis at the end of 2018 was \$9.70 per gram

versus \$6.51 in the illegal market – nearly 50 percent more.<sup>38</sup> Industry experts explain that the high price of legal cannabis, due to overhead costs and supply challenges, will hinder adult consumers from purchasing legal cannabis and efforts aimed at combatting the illegal market.<sup>39</sup>

The Province has a role to play in ensuring the legal market remains competitive. For example, increased law enforcement will likely raise the price of illegal cannabis due to the higher likelihood of getting caught, thereby deterring consumers from purchasing from the illegal market.<sup>40</sup> Moreover, the Province should also resolve issues with the OCS such as shipping delays, data privacy, and mislabelled products that emerged right after legalization. If issues with its online retail system are not resolved, recreational consumers may turn to more convenient, economical, or illegal options.

### RECOMMENDATIONS

1. The AGCO should re-open the application process for prospective operators and licensed producers as quickly as possible and proceed with a licensing system based on merit (i.e., prior retail experience, industry knowledge, capital, infrastructure, etc.) for the next phase of private retail.
2. A formalized process should be developed to allow Ontario municipalities, both those that opted-in and those that opted-out, to engage with the AGCO as it determines where and how many private retail cannabis stores will be permitted within their boundary.
3. The Government of Ontario should consider allowing adult consumers to purchase cannabis directly online from licensed producers and retailers online to improve customer convenience.
4. Following the Government of Alberta's approach, the Government of Ontario should consider relaxing rules governing partnerships between retailers and LPs while also allowing LPs to operate retail stores, whose total number of stores could be capped as a percentage of the market.

# CANADA'S CANNABIS INDUSTRY

2,399



At the end of 2017, 2,399 Canadians were employed in the cannabis industry by 55 licensed producers.<sup>41</sup>

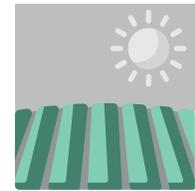
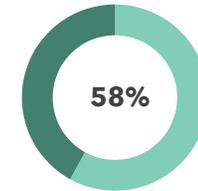
10,400



By November 2018, the number of Canadians employed in cannabis-related jobs increased to 10,400.<sup>42</sup>



Representing over half the national total, the majority of cannabis employment is in Ontario with an estimated 5,700 jobs.<sup>43</sup>

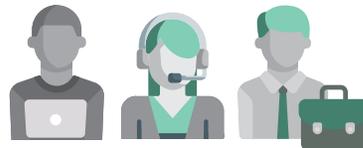


58% of cannabis-related jobs are in the agricultural sector, with the remaining spread across a range of industries, including educational services, health care, and retail trade.<sup>44</sup>



The average hourly wage for employees in cannabis-related jobs is \$29.58 - higher than the national average of \$27.03.<sup>45</sup>

150,000 jobs



Around 150,000 cannabis-related jobs are expected to emerge after legalization.<sup>46</sup>



\$7.2 billion by 2019

Canada's cannabis market could generate \$7.2 billion by 2019.<sup>47</sup>



\$1.3 billion by 2019

It is estimated that, if the entire cannabis market were supplied through the legal market and taxed at current rates, the federal and provincial governments could gain \$1.3 billion through excise and goods and services taxes.<sup>48</sup>

## SUPPLYING DEMAND

In the first 24-hours after legalization, 100,000 orders were placed through the OCS website, resulting in an inventory backlog. The supply shortage soon emerged as a significant issue for Ontario consumers trying to purchase cannabis through the province's only legal channel, a nascent cannabis industry trying to meet the incredible demand within a short timeframe, and policymakers attempting to quash the illegal market. Various concerns also emerged, including complaints about shipping delays, a data breach that exposed customers' signatures and postal codes, and mislabelled products,<sup>49</sup> as well as criticisms about excessive packaging due to strict Health Canada requirements.<sup>50</sup>

The supply shortage is not unique to Ontario and has been felt across Canada. While Ontario capped the initial launch of private cannabis stores to 25, Alberta suspended allocating new retail licenses for several months, New Brunswick's provincially-owned chain of cannabis retailers laid off employees and briefly closed 12 of its 20 stores, Quebec-run stores reduced their hours of operation to four days a week, and a private cannabis store in Newfoundland closed their doors.<sup>51,52</sup>

Despite these setbacks, Statistics Canada revealed that annualized Canadian household spending on cannabis totalled \$5.9 billion in the fourth quarter of 2018, with the legal market estimated at \$1.2 billion of that figure and the black market accounting for \$4.7 billion.<sup>53</sup>

### Accounting for the Supply Shortage

The supply shortage has been attributed to a number of issues, including an inadequate supply chain, packaging and processing constraints, and Health Canada's multi-step licensing approval process.<sup>54</sup>

To sell cannabis in Canada, producers need to obtain two licenses. Following a successful inspection by Health Canada, a producer may be granted a license to cultivate cannabis. The producer must then complete two growth cycles and Health Canada must be satisfied that the facility is growing cannabis without mould, mildew, or pestilence. A producer may then be granted a license to sell cannabis. Industry representatives note that it takes time to pass Health Canada's approval process and ramp-

up production.<sup>55</sup> The introduction of new product classes later this year will also require more licensed producers. To tackle the supply shortage, Health Canada should invest in its capacity to license facilities at an accelerated rate while not compromising the inspection process.

Estimates for how long the shortage could last range from the end of 2019 to 2022.<sup>56</sup> The Parliamentary Budget Office estimated that demand for cannabis would range from 378,000 to 1,017,000 kilograms in 2018, while the C.D. Howe Institute estimated that the total market demand for cannabis would be 600,000 kilograms.<sup>57</sup> Canadian licensed producers are currently producing approximately 400,000 kilograms of dried cannabis. However, one million kilograms will be needed to meet domestic demand and up to six million kilograms will be needed to meet the domestic demand for dried flower, edibles, and other extracts entering the marketplace later this year.<sup>58</sup>

For dried cannabis, there is a significant discrepancy between finished and unfinished inventory, hinting to a processing issue as production lines may not be set up to package or label products quickly. Health Canada data shows that the amount of unfinished inventory from October 2018 to January 2019 has been increasing steadily. In October 2018, there was 95,975 kilograms of unfinished inventory, increasing to 114,628 kilograms in January 2019 – approximately a 19.4 percent increase. In contrast, there was 18,710 kilograms of finished inventory in October 2018 and only 19,520 kilograms by January 2019 – an increase of just 4.7 percent.<sup>59</sup>

### Cannabis Excise Stamps

A federal excise duty is payable by a licensed cannabis producer when the cannabis products they package are delivered to a provincially-authorized distributor or retailer. An excise stamp must be present on all legally produced cannabis products available for purchase. Only a person who has obtained a cannabis license from the Canada Revenue Agency (cultivators, producers, and packagers of cannabis products) are able to purchase cannabis excise stamps. Excise stamps are meant to show consumers, retailers, and law enforcement that the product was legally produced

and applicable duties were paid by a licensee. They also allow these same stakeholders to more easily identify counterfeit products.<sup>60</sup>

However, excise stamps present several challenges.\* The stamp must be adhered manually as it was not designed for automation, which is a time-consuming process.<sup>61</sup> In addition, the stamps have a specific colour band and background for the province or territory in which the product is intended to be sold. The cannabis licensee packaging the product is responsible for determining and applying the appropriate excise stamp before the product can be sold legally. The development of a common excise stamp that could be adhered to cannabis products, regardless of province or territory, would allow LPs to more efficiently ship products to consumers.

### The Consequences Associated with the Supply Shortage

With the existing production levels of cannabis, the legal supply would meet only 30 to 60 percent of the total demand in Canada, according to an October 2018 report from the C.D. Howe Institute. The report predicts that although there will be a legal supply shortage in the first half of the year following legalization, it will not likely last with the increase in LPs and production capacities over time.

The federal and provincial governments stand to lose approximately \$800 million in the first year from tax revenues – approximately \$380 million in lost excise tax revenues plus \$426 million in provincial and federal sales tax – due to a large illegal market and the supply shortage.<sup>62</sup> In Ontario alone, there is a demand for 235 tonnes (or 235,000 kilograms) of cannabis: the shortage equates to \$105.2 million in lost sales tax revenue for the Province and \$109.6 million in lost excise tax revenue for the federal government.<sup>63</sup> If the entire cannabis market were supplied through the legal market, the federal and provincial governments could reap approximately \$1.3 billion through both excise and goods and services taxes.<sup>64</sup>

Besides the loss of government revenue, the continuation of the illegal market poses other challenges. From a public health standpoint, cannabis obtained through the illegal market has health implications for consumers since it is not subject to regulations that ensure it is free from contaminants,

such as heavy metals, molds, and harmful pesticides. In addition, from a public safety and criminal justice perspective, the revenue generated from the illegal sale of cannabis may be used to fund criminal activities.<sup>65</sup> With these risks in mind, it is critical for the federal government to address the supply shortage.

### RECOMMENDATIONS

5. Health Canada should invest in its capacity to license facilities at an accelerated rate while not compromising the inspection process.
6. The Government of Canada should develop a common excise stamp for licensed producers (LPs) to adhere to cannabis products, thus allowing licensees to more efficiently ship products across the country.

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\*Low-THC cannabis products, prescription cannabis drugs, and cannabis products intended for export are not required to be stamped.

## THE APPETITE FOR EDIBLES

On October 17, 2018, only oils, seeds, and fresh or dried cannabis became legal, while edibles, extracts, and topicals are expected to become available for purchase by October 17, 2019. Ontarians are currently permitted to make edibles at home for personal use.

Since edibles are currently only available through the illegal market, this poses a threat to public health. There is no guarantee that the contents of cannabis obtained through the illegal market are accurately described, or that potency and servings per package are standardized.<sup>66</sup>

The popularity of cannabis edibles is reflected in the numbers. According to Statistics Canada, twenty-eight percent of cannabis users consumed edibles in the first quarter of 2018.<sup>67</sup> A 2018 Deloitte survey of current and likely recreational cannabis consumers across Canada asked respondents to rate whether they would consume a range of cannabis edibles. Among the list of edibles, 51 percent were interested in trying cannabis-baked goods, 43 percent were interested in cannabis chocolate, 37 percent were interested in cannabis candies, and 31 percent were interested in cannabis-infused beverages, among other edible products.<sup>68</sup> Overall, Deloitte estimates that, once legal, six out of ten cannabis users will choose to consume edible products.<sup>69</sup> For new cannabis consumers or those who do not want to smoke or inhale cannabis, edibles are viewed as a more attractive and potentially less harmful option.

It is estimated that the sales and excise tax applied to edibles could generate approximately \$120 million in federal revenues after the first year, in addition to revenue generated from income taxes and regulatory fees paid by LPs.<sup>70</sup>

### Ingesting Versus Smoking Cannabis

Edibles pose a unique set of challenges for inexperienced consumers. Most importantly, the effects of edibles are not immediately felt. The chemicals from an edible product first have to enter an individual's digestive system, followed by the bloodstream, central nervous system, and then the brain. Depending on a number of factors, including the individual's metabolism and if cannabis was ingested with other food or

on an empty stomach, the effects can be felt as quickly as 30 minutes or as late as three to four hours after ingestion.<sup>71</sup>

In contrast, the effects from inhaling cannabis are felt almost immediately. The active compounds contained in cannabis enter a user's body through the lungs, which quickly enters the bloodstream.<sup>72</sup> Whereas the effects of smoked or vaped cannabis can last between two and four hours, the effects from an edible product can last up to eight hours or longer.<sup>73</sup>

As a result of the delayed onset from edibles, individuals who do not understand this aspect may accidentally consume more cannabis than intended, resulting in unwanted effects such as severe anxiety, nausea, vomiting, a psychotic episode, hypotension, and/or loss of consciousness.<sup>74</sup> Data from the Canadian Institute for Health Information shows that the number of emergency room visits due to cannabis overdoses in Ontario almost tripled – from 449 in 2013-2014 to nearly 1,500 in 2017-2018. While the data does not break-down what kind of cannabis patients used, some physicians attribute these numbers to edibles that were not properly labelled with serving sizes and individuals accidentally ingesting large amounts.<sup>75</sup> The OCS recommends that those who are new to ingesting cannabis sample a very small amount and wait at least one hour to determine their body's response.<sup>76</sup>

Edibles can also take the form of everyday food items, such as cookies, brownies, chocolate, pizza, and sodas. This leads to the fear that children may not be able to distinguish them from cannabis-free products. These concerns are not unfounded. Between 2000 and 2003, and prior to changes made in the regulation of cannabis in Colorado, 75 percent of the 1,969 cases of cannabis exposure in children (under the age of six) were due to the ingestion of cannabis products, according to the National Poison Data System in the United States.<sup>77</sup>

However, concerns about the overconsumption of edibles cannot be addressed through regulation alone. As the cannabis market continues to grow in Canada, and new product forms are introduced, both current and potential cannabis consumers need to be educated on product offerings and responsible consumption.

The cannabis industry has a strong understanding of consumer demand for various products, best practices in communicating health and safety messaging to consumers, how to ensure messaging around new products is relevant and reaches the right audiences, as well as direct relationships with consumers. The federal and provincial governments should work with the cannabis industry, LPs, and retail operators to not only successfully eradicate the illegal market, but also develop basic cannabis literacy amongst Canadians on edibles and new products to be introduced later this year.

### COLORADO'S EXPERIENCE WITH EDIBLES

In the United States, cannabis is illegal for sale at the federal level and remains a scheduled substance. Despite this, 10 states (Alaska, California, Colorado, Maine, Massachusetts, Michigan, Nevada, Oregon, Washington, and Vermont) and the District of Columbia have legalized recreational cannabis for adult use.

When Colorado's first dispensaries opened in January 2014, there were almost no restrictions on edibles. They were packaged in clear bags like regular sugar treats with no standardized dose on the package.<sup>78</sup> Issues emerged in this state when initial regulations set a maximum dosage for edible products but did not specify how that dosage was to be distributed relative to individual servings or units. As a result, producers packaged edibles with several doses in what most consumers would consider a single serving of a product. Consequently, there were several high-profile overdoses from the consumption of edible cannabis, including child poisonings, prompting the establishment of a task force in April 2014 to review the regulations. Analysis of admissions to poison control centres and hospitals revealed a 225 percent increase in cannabis-related exposure in children between the age of zero and five years after Colorado legalized recreational cannabis in 2012.<sup>79</sup>

The state of Colorado worked with the cannabis industry to develop packaging, labelling, and potency restrictions that came into effect in 2015. Edibles must now be contained in child-resistant packaging, wrapped individually, and separated into doses consisting of 10-milligrams or less of THC.<sup>80</sup> The aforementioned data from the Canadian Institute for Health Information and Colorado underscores the importance of educating the public on the delayed onset of edibles to prevent overconsumption as well as educating parents on proper storage to prevent them from getting into the hands of children and youth.

### Edibles: THC Levels and Multi-Packs

Health Canada's proposed regulation for edibles offered initial guidance, including mandating a limit of 10-miligrams of THC per discrete unit of cannabis intended for ingestion, as well as a 10-milligram limit of THC within each package.

In line with the Canadian Chamber of Commerce, the OCC supports a THC limit of 10-milligrams per discrete unit of edibles, as well as the sale of multi-packs or multiple products (up to a maximum of 100-milligrams of THC per package) within child-proof packaging.

Single packs are costly while multi-packs would allow LPs to create economies of scale. Industry would also benefit from increased revenue per unit attributed to multi-packs. The sale of multi-packs already exists for pre-rolls as multiple units are available within a single child-proof package.

It is worth noting the Ontario Medical Association (OMA) has advocated for a 5-milligram limit of THC, which is in line with a harm reduction approach, and a ban on multi-packs due to concerns around stacked dosages and overconsumption as well as to ensure each unit is individually child-proofed.<sup>81</sup> However, having low THC limits in products such as edibles may not satisfy consumer demand and preferences. If only low THC products are available in the legal market, some consumers may turn to the illegal market, posing a risk to public health, negatively impacting legal operators in the cannabis industry, and reducing government tax revenue.

A 10-milligram per package maximum is also significantly lower than in U.S. jurisdictions where recreational cannabis is legal. For example, Washington State has a 100-milligram limit per multi-pack, with individually packaged 10-milligram servings. As long as edibles and their servings are clearly marked and dosage is easily visible and understandable, a 100-milligram per package regulation would strike the necessary balance between prioritizing public safety while more effectively displacing the illegal market.

## Looking Ahead: Licensed Consumption Lounges in Ontario

With THC-infused edibles and beverages expected to enter the legal market in late 2019, the Province should consider where Ontarians will be allowed to consume edibles. The emergence of cannabis consumption lounges for edibles (excluding smoking or vaping cannabis) in Ontario would necessitate robust legislative and regulatory changes.

In addition to creating opportunities for investors, entrepreneurs, and existing businesses to open these types of establishments and, in turn, create jobs, the emergence of consumption lounges would provide adults with a safe, secure, and sanitary space to consume cannabis products. Consumption lounges also present an opportunity to act as a front-line resource for public education, thereby complementing the Province's efforts to educate consumers on responsible consumption, especially for new products they may be unfamiliar with. Messaging that should be emphasized include how edibles metabolize in the body, the amount of time it takes to feel the effects, how to mitigate the possibility of overconsumption, proper storage, and impaired driving.

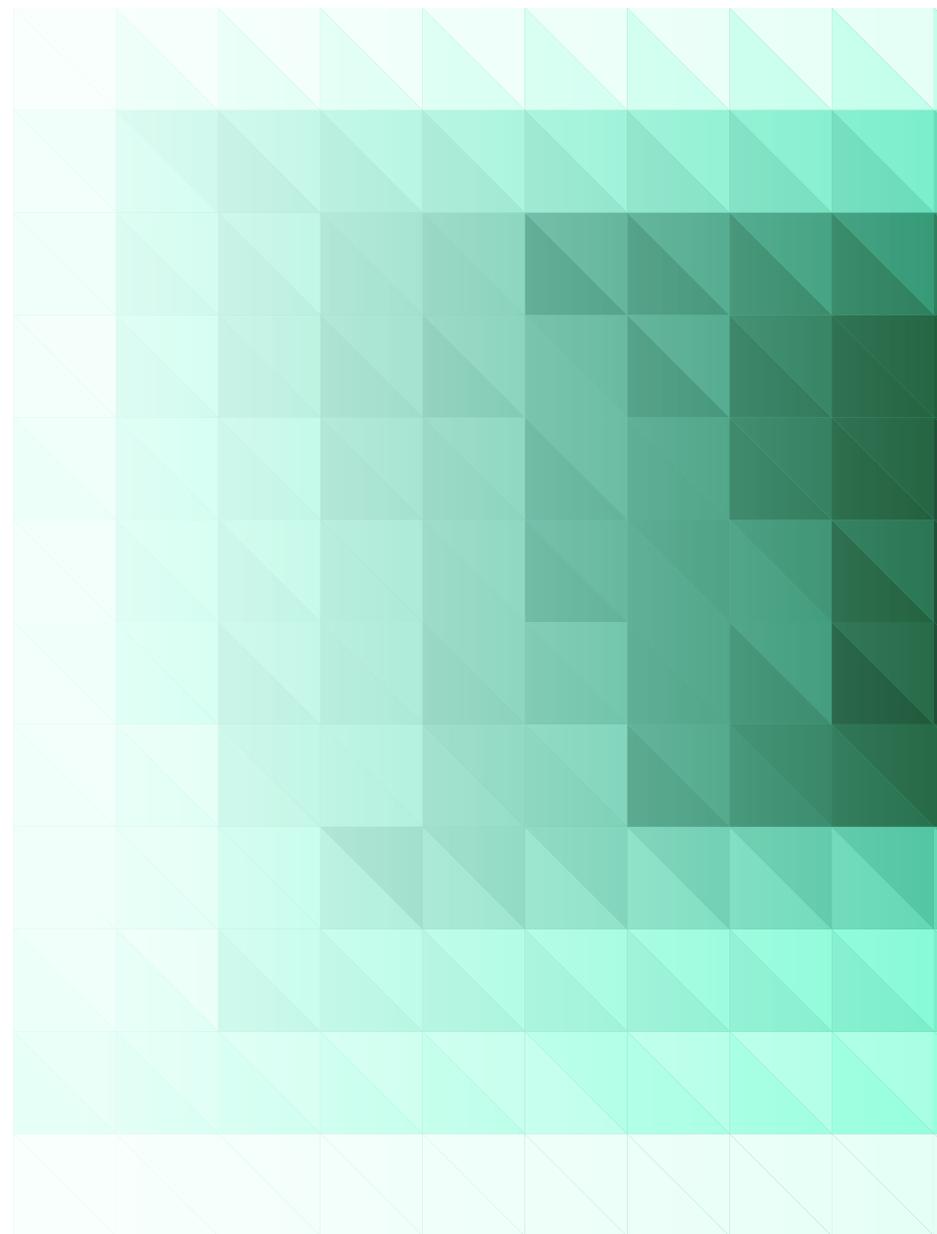
The Province should also work with municipalities to determine zoning, such as where consumption lounges will be permitted, and whether municipalities will be able to opt-out of consumption lounges within their jurisdiction. Furthermore, only individuals aged 19 and older should be allowed to enter a licensed consumption lounge by presenting government-issued photo identification.

### RECOMMENDATIONS

**7.** The Government of Canada should permit individual servings of edible products to contain up to 10-milligrams of THC, as well as a package limit of 100-milligrams of THC, to allow for economies of scale.

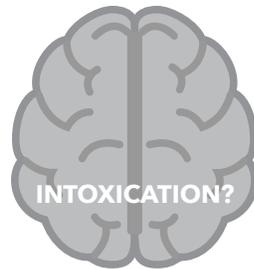
**8.** As edibles and other methods of cannabis consumption enter the market in late 2019, the Government of Ontario should undertake public education campaigns dedicated to these new products and work with the cannabis industry to both develop and disseminate this information to the public as these products are likely to attract less experienced and new cannabis users.

**9.** In anticipation of new cannabis products that are not smoked or vaped, the Government of Ontario should consider the licensing of private consumption lounges for Ontarians to consume these products.



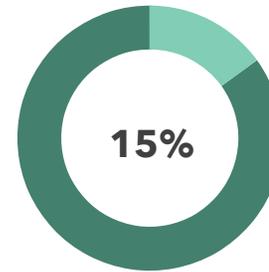
# CANNABIS CONSUMPTION

Cannabis can be consumed through a variety of methods including: rolling cannabis in paper and smoking it like a cigarette; smoking it in a hand or water pipe; steadily heating cannabis using a vaporizer; infusing it into drinks or food; or heating and inhaling as a concentrated oil or shatter.<sup>82</sup>



**THC: YES    CBD: NO**

THC is the cannabinoid that causes intoxication, while CBD does not produce intoxication or a high.<sup>83</sup>

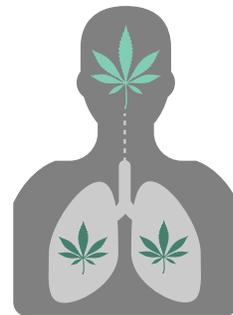


**OVER AGE 15**

15% of Canadians over the age of 15 have used some form of cannabis.<sup>84</sup>



6 out of 10 likely cannabis consumers will choose to consume edible products.<sup>85</sup>



Smoking cannabis delivers cannabinoids into the system within seconds of inhalation.<sup>86</sup>



The effects of consuming an edible can be felt as quickly as 30 minutes or as late as 3 to 4 hours after ingestion, depending on a number of factors, such as metabolism and food consumption.<sup>87, 89</sup>



Legalization is expected to attract an older demographic, with a university or graduate school education, between the ages of 35 and 54, who are open to trying cannabis, less than once a month.<sup>90</sup>

## NEED FOR PUBLIC EDUCATION AND AWARENESS

Deloitte's 2018 survey describes the average cannabis consumer prior to legalization as “risk-takers” – individuals between the ages of 18 and 34, with a high school or college education, who consume cannabis several times a week. They anticipate, however, that legalization will attract an older demographic of “conservative experimenters” – individuals between the ages of 35 and 54, with an undergraduate or graduate education and family obligations, likely to consume cannabis less than once a month.

While the vast majority of “conservative experimenters” have prior experience with recreational cannabis,<sup>90</sup> the introduction of edibles, extracts, and topicals into the Canadian market will necessitate robust public education and awareness campaigns to support responsible adult consumption and safeguard public health.

### How Government Can Ensure Safe, Legal, and Responsible Adult Consumption

The provincial and federal governments have a role to play when it comes to cannabis literacy and ensuring responsible adult consumption. There are legitimate concerns that most Canadians do not possess strong cannabis literacy, or an understanding of its effects and potential health impacts, to make informed decisions. With legalization ending nearly a century of prohibition, Canadians also need to be aware of how much they are legally permitted to possess or grow at home, rules surrounding cross-border travel, and the financial and criminal penalties for impaired driving.

In addition to developing basic cannabis literacy to support the legal market, the provincial government should invest in education campaigns to inform consumers about where they can purchase legal cannabis products, namely online through the OCS and, starting April 1, 2019, in up to 25 privately-run retail stores licensed by the AGCO. Furthermore, the province should educate Canadians on how to identify legal cannabis products. Legal cannabis products have an excise stamp on the package, carry the standardized cannabis symbol, and mandatory health warnings that provide information on risks.<sup>91</sup> Together, these recommendations provide consumers with the knowledge needed to purchase cannabis

through legal channels, which, in turn, helps support Ontario's legal cannabis industry and will also eventually eradicate the illegal market.

### Industry's Role in Public Education and Awareness

However, the responsibility to educate the public does not rest solely with government; the cannabis industry also has a role to play in developing cannabis literacy. The industry has a strong understanding of the substance and a direct relationship with potential and current consumers. The province should engage and consult with the cannabis industry and other relevant private sector actors to develop content that is not only effective and reaches the desired audience, but also ensures responsible adult consumption of recreational cannabis.

Since the legalization of recreational cannabis, data surrounding cannabis use is increasingly important to inform decision-making by the public and private sectors alike. Statistics Canada has conducted quarterly surveys to measure cannabis use among Canadians and launched the Cannabis Stats Hub to provide the public with information on cannabis consumption by age, sex, province/territory, plus cannabis offences, household spending on cannabis, and the price of cannabis across the country. Beyond this, the Government of Canada should collect data that identifies where cannabis literacy is waning amongst Canadians. This data should then be shared with the cannabis industry to enable the development of messaging that fills knowledge gaps among Canadians.

### A Word on Cannabis Concentrates

Cannabis concentrates are becoming an increasingly popular consumption method, which has given rise to concerns for new and inexperienced users. Concentrates can be consumed in many ways, including by dabbing, through an ingestible oil, and tinctures. While the potency of cannabis flowers range between 10 percent and 25 percent, potency for cannabis concentrates range between 50 percent and 80 percent. Plant matter is stripped from the concentrate using solvents (butane, CO<sup>2</sup>, and ethanol), resulting in a product that is packed with cannabinoids in every drop.<sup>92,93</sup> Accordingly, the province should include concentrates in their public

education campaigns, emphasizing their potency and the importance of starting with a low dose. Working with cannabis producers and cannabis information resources can help government develop and disseminate responsible consumption messaging.

### **Cannabis-Impaired Driving: A Top Concern for Canadians**

In repeated surveys, the issue of driving and cannabis use post-legalization has consistently emerged as a prominent concern for Ontarians and Canadians alike.\* A national survey conducted by Leger in August 2018, on behalf of the Insurance Bureau of Canada (IBC), found that 78 percent of Canadians were concerned about cannabis-impaired drivers on the road following legalization.<sup>94</sup>

These fears are not unfounded. A report by the Highway Loss Data Institute in the United States found, when compared to neighboring states that had not legalized recreational cannabis, the frequency of motor vehicle collision claims increased by six percent in Colorado, Nevada, Oregon, and Washington after recreational cannabis stores opened.<sup>95</sup> In Colorado, a 32 percent increase in cannabis-related traffic fatalities were reported one year following the legalization of recreational cannabis and this number rose to 92 percent after four years.<sup>96</sup>

At the same time, the data from IBC also suggests that the vast majority of Canadians are aware of, and concerned about, cannabis-impaired driving and, presumably, will be inclined to avoid cannabis-impaired driving. To ensure they do, both government and industry have a role to play in building cannabis literacy among Canadians when it comes to driving under the influence of cannabis. Investing in public education campaigns that address misperceptions and inform Canadians of the social, financial, and economic consequences will be key to protecting public safety.

\*A survey conducted by Navigator Ltd. in February 2018 found that 82 percent of respondents said they were concerned about issues associated with individuals driving under the influence of cannabis. A national survey conducted prior to legalization by Desjardins in March 2018 found that 86 percent of Canadians were worried about drug impaired driving, 77 percent of respondents were concerned about a lack of driver education on the topic, and 66 percent wanted more information on cannabis and its effects on driving. A national survey commissioned by the Canadian Centre on Substance Use and Addiction, and conducted by Nanos in September and October 2018, revealed that driving or working while impaired was the top concern for Canadians.

### **Need for Public Education on Cannabis-Impaired Driving**

Data from the third quarter of the National Cannabis Survey in 2018 presented several alarming findings regarding cannabis-impaired driving. About one in seven cannabis users with a driver's license reported driving within two hours of using cannabis. Furthermore, 21 percent of respondents were unsure when it was safe to drive if they had consumed cannabis and 13 percent thought cannabis use does not affect driving.<sup>97</sup> Youth and young adults aged 15 to 24 were more than four times more likely than people aged 25 and older to report being passengers in vehicles operated by drivers who had consumed cannabis within the previous two hours.<sup>98</sup>

The Canadian Centre on Substance Use and Addiction's analysis of 2012 national self-report and roadside surveys found that, although those aged 16 to 34 accounted for only 32 percent of the Canadian population, they were responsible for 61 percent of cannabis-attributable fatalities, 59 percent of injuries, and 68 percent of collisions resulting in property damage only.<sup>99</sup> These figures are not surprising given that only 48 percent of Canadian youth between 16 and 19 years of age understand the risks associated with cannabis consumption and driving.<sup>100</sup> There exists the perception among youth that cannabis-impaired driving is safer or less dangerous than alcohol-impaired driving. Generally, young people do not associate the feeling of being high (or feeling relaxed, happy, or calm as a result of using cannabis) with impairing driving skills.<sup>101</sup>

The need for continued investment in education on cannabis-impaired driving is further reinforced by IBC's August 2018 poll, which largely echoed the federal government's National Cannabis Survey. Three significant findings emerged. First, IBC found that 62 percent of Canadian cannabis users reported either driving or having been a passenger in a car where the driver had consumed cannabis. Second, 43 percent of respondents did not know how long they should wait after consuming cannabis before it is safe to drive. Third, 61 percent believed it is sufficient to wait less than three hours before getting behind the wheel.<sup>102</sup>

As noted by the OMA, cannabis impairs reaction times and the ability to concentrate on the road. When one consumes cannabis, factors that are critical for driving, such as attention, motor skills, reaction time, and

the organization of complex information, are all reduced.<sup>103</sup> Research also indicates that cannabis use increases the likelihood of a motor vehicle collision by 1.3 or 3 times.<sup>104</sup>

The OCS recommends individuals who use cannabis refrain from driving, operating other machinery, or mobility devices for at least six hours after using cannabis. However, it is important to note that THC can be detected in the bloodstream up to seven days or more after using cannabis, depending on several factors like the frequency of use, how much was consumed, and the method of consumption.<sup>105</sup> In light of these variables, the OMA suggests that greater research is needed on this issue as there is no standard recommendation about how long an individual should wait before getting behind the wheel.<sup>106</sup>

### Importance of Effective Education Campaigns Targeted at Youth

Education campaigns targeted at Canadian youth are important for several reasons. Cannabis use often starts in early adolescence,\* while the brain continues to develop until the age of 25. Cannabis use can also lead to problems paying attention, remembering or learning, and making decisions, ultimately impacting one's ability to perform well at school.<sup>107</sup> The OMA notes that the long-term health risks associated with recreational cannabis are higher for those who start using in their teens. These health risks include addiction, increased risk for developing mental health issues, and impacts on cognitive development.<sup>108</sup> Canadian adolescents also have among the highest rates of cannabis use compared to their peers in other developed countries.<sup>109</sup> The 2016-2017 Canadian Student Tobacco, Alcohol and Drugs Survey found that 17 percent of Canadian students between grades 7 and 12 reported using cannabis in the past year.<sup>110</sup>

The Government of Quebec's February 2019 public education campaign on the risks associated with cannabis use provides useful insights into how Ontario can ensure it develops effective messaging geared towards youth and young adults. While the four ads had a consistent message ("There is no way cannabis can do this. But the risks are real.") and

contained facts about cannabis use, they drew criticism. The images included one of a young woman with hair growing out of her eyes and another with a young man with an extremely elongated neck.<sup>111</sup> These unrealistic depictions of the health risks associated with underage use are not likely to be taken seriously by the very demographic they were meant to reach. Instead, effective education campaigns targeted towards youth require factual information, rather than fear-based messaging or sensational imagery, and non-judgemental language to educate youth on cannabis consumption.<sup>112</sup>

### Investing in Continued Research on Cannabis

Physicians play a critical role in providing patients with information on the health impacts cannabis can have. Naturally, patients often turn to their doctors, as well as other health care practitioners, as a trusted voice on an array of health issues, including recreational cannabis.

Unfortunately, there has been insufficient resources allocated to cannabis research at the provincial-level. As a result, there is a gap in evidence-based information, posing a risk to public health and leaving physicians ill-equipped to inform patients on the health impacts to help them make informed decisions.<sup>113</sup> Accordingly, the OMA recommends the Province invest in research on the effects of recreational cannabis on children and youth, including second-hand cannabis smoke, and the long-term effects of vaping devices and products.<sup>114</sup>

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\*Low-THC cannabis products, prescription cannabis drugs, and cannabis products intended for export are not required to be stamped.

## RECOMMENDATIONS

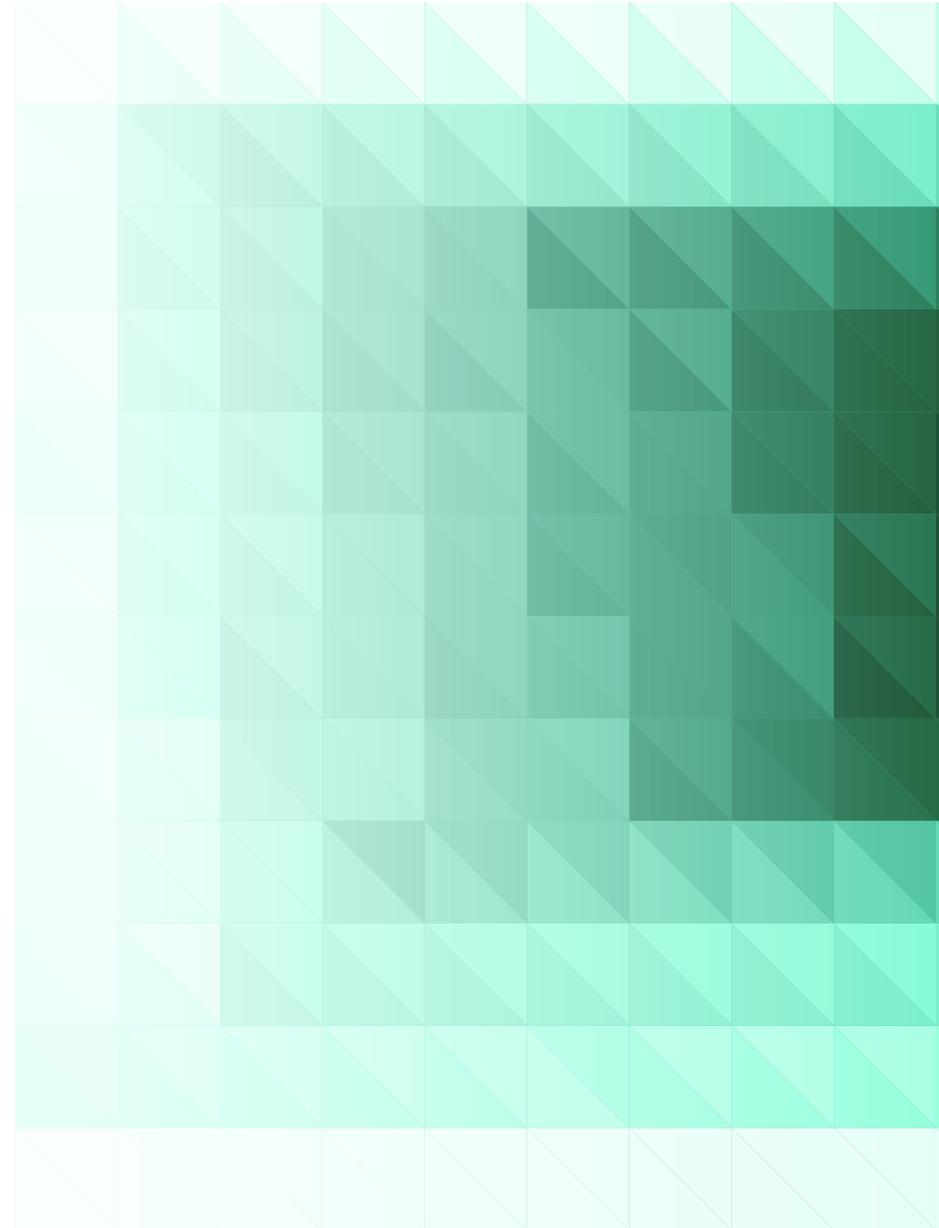
**10.** The Government of Ontario should invest in public education and awareness campaigns that:

- Provide adult consumers with basic cannabis literacy (i.e., the differences between THC and CBD, the effects of edibles vs. smoking cannabis, new cannabis products, how long to wait before operating a vehicle, safe storage, health impacts, risks associated with cannabis impairment for safety-sensitive jobs, etc.);
- Educate adult consumers on how to recognize legal cannabis<sup>115</sup> and where to purchase legal cannabis, thus supporting the legal cannabis industry in Ontario and helping to eradicate the illegal market; and
- Provide youth with factual information about cannabis, the health impacts, and consequences associated with impaired driving.

**11.** The cannabis industry should play a key role in building cannabis literacy and educating the public as industry has a direct relationship with consumers.

- The provincial and federal government should collaborate with the cannabis industry to develop effective public education campaigns.
- As the Government of Canada surveys Canadians, they should identify knowledge gaps with respect to cannabis use and share this information with the cannabis industry to enable industry to develop relevant and timely public education campaigns addressing these gaps with the aim of building cannabis literacy among Canadians.

**12.** The Government of Ontario should invest in the necessary ongoing research to inform physicians and health care providers about the health impacts of recreational cannabis use and, in turn, help patients make informed decisions.<sup>116</sup>



# DRIVING AND CANNABIS USE



Driving while under the influence of cannabis affects coordination, reaction time, ability to pay attention, decision-making abilities, and ability to judge distances.<sup>117</sup>

62% of Canadian cannabis users have either driven or been a passenger in a car where the driver recently consumed cannabis.<sup>118</sup>

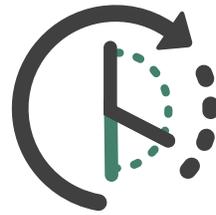


50% of cannabis users believe cannabis does not affect their driving much.

1 in 5 users do not believe cannabis has any negative effect on their driving at all.<sup>119</sup>



43% of Canadians say they don't know how long to wait before it's safe to drive after consuming cannabis.<sup>120</sup>



Individuals who consume cannabis should wait 6 hours before driving or longer, depending on the user and the product consumed.<sup>121</sup>



Recent research shows a 1.3 to 3-fold increase in risk of a motor vehicle collision after cannabis use.<sup>122</sup>

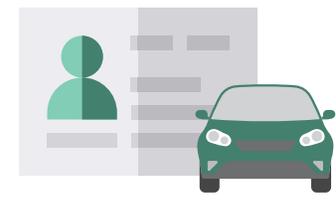


In 2012, cannabis collisions cost the Canadian economy \$1.08 billion.<sup>123</sup>



81% of Ontarians do not believe police have the tools and resources needed to detect cannabis or cannabis impairment.<sup>124</sup>

Officers can use a Standard Field Sobriety Test, a Drug Recognition Evaluator, oral fluid drug screening equipment, and blood samples.<sup>125</sup>



Ontarians caught driving with over 5 nanograms of THC can face a 3-day license suspension and \$250 fine for their first offence.

Young, novice, and commercial drivers are not allowed to have any cannabis in their system when driving a motor vehicle.<sup>126</sup>

Cannabis in the workplace remains a key concern for employers in terms of the impact legalization will have on the workplace when it comes to relevant policies and maintaining a safe and productive work environment. A survey of employers conducted by the Conference Board of Canada in the Spring of 2018 found that 52 percent of respondents were either concerned or very concerned about the workplace implications associated with legalization.

The results of the 2018 Canadian Cannabis Survey provide useful insights into cannabis use among Canadians before and after work, prior to legalization.<sup>127</sup> The survey found that 64 percent of respondents who used cannabis in the past 12 months had not used cannabis before or at work. Interestingly, this figure stood at 79 percent in 2017, suggesting that the impending legalization of recreational cannabis may have shifted perceptions among Canadians.

The 2018 Canadian Cannabis Survey also found that, among those who reported using cannabis in the past 12 months, 15 percent of respondents used cannabis before or at work less than once per month – a figure which stood at 10 percent in the 2017 survey. In addition, 8 percent reported using cannabis before or at work weekly or more often – a figure that did not change from the 2017 survey. Most respondents (90 percent) in the 2018 survey said they had not been absent from work due to their cannabis use.<sup>128</sup> Therefore, this survey provides a useful baseline for determining whether there has been an increase in cannabis use among workers since legalization and, more importantly, either temper employer concerns or highlight the need for future action.

### Employer Concerns and the Legalization of Recreational Cannabis

Canada had one of the heaviest usage rates of cannabis worldwide prior to legalization. Perhaps unsurprisingly, many employers and workplaces were already dealing with issues related to recreational cannabis, such as impairment, problematic use or dependence, and the operation of heavy machinery and company vehicles. Legalization simply brought these challenges to the forefront.<sup>129</sup>

According to a June 2017 survey conducted by the Human Resources Professional Association's (HRPA), employer concerns centred on safety and productivity in the workplace. The top five issues for employers were:

- Employees operating motor vehicles while impaired;
- Handling disciplinary procedures;
- Decreased work performance;
- Safety issues with heavy machinery; and
- Attendance.<sup>130</sup>

These concerns reflected those raised by employers who participated in the Conference Board of Canada's 2018 survey.\* The HRPA's survey also found that 45.9 percent of human resources professionals did not believe their policies adequately covered workplace issues that could arise after legalization.

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\*For employers who participated in the Conference Board of Canada's survey, the top concerns were workplace safety (especially in safety sensitive roles), impairment or intoxication at work, increased use of cannabis (both inside and outside the workplace), testing for impairment, managing accommodation needs, and the financial impacts as a result of legalization and coverage for medical cannabis.

## Workplace Impairment and Testing: Canadian versus American Context

A 2003 Supreme Court of Canada decision determined that employers in a unionized workplace must demonstrate they have a general workplace problem with drugs or alcohol to legally justify a universal, random drug and alcohol testing policy.\*

In Canada, employers running safety sensitive operations have the right to conduct pre-employment drug testing as a condition to hire someone, or to prove the satisfaction or non-satisfaction of Bona Fide Occupational Requirements (BFOR) for a particular job. If an employer does not have a BFOR in place, they are not legally allowed to discriminate against a non-negative (or positive) result.<sup>131</sup> However, Canadian employers do have the right to conduct post-incident drug testing where a serious safety incident occurred, a near-miss occurred, or where there are signs of impairment. In contrast, employers in the United States are allowed to test for impairment prior to hiring a candidate and during the course of their employment.

In the absence of a BFOR, Canadian employers cannot implement drug testing programs, so they must rely on policies, programs, and training to ensure workers are not under the influence while performing their duties.<sup>132</sup>

## Developing Appropriate Workplace Policies on Recreational Cannabis

As per occupational health and safety legislation across Canada, employers have a duty to provide a safe work environment and must take all reasonable precautions to protect the health and safety of employees and others in the workplace. Employers have the right to set rules for recreational cannabis use in the workplace in much of the same way they currently set rules for the use of alcohol. Employers can also prohibit the use of cannabis at work or during working hours, and may also prohibit employees from attending work while impaired.

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\*The Toronto Transit Commission (TTC) has proven that they meet the standard set out in the Supreme Court of Canada's 2003 ruling. The TTC brought in random drug and alcohol testing for all employees and defines a THC level of over 10 nanograms per millilitre of blood as a failure. While the TTC is conducting random tests among two-thirds of its 15,000 employees, the matter is before an arbitrator and the tests could be ruled illegal.

Unlike impairment from alcohol, cannabis impairment is more complex, individualized, and difficult to measure. For instance, a frequent cannabis user may have recently ingested cannabis and have more than five nanograms of THC per milliliter of THC in their bloodstream, but not be impaired. In contrast, an occasional cannabis user may still have enough THC in their bloodstream to be beyond these limits after up to seven days of non-use and well after the acute effects of the substance has dissipated.<sup>133</sup>

Prior to developing a new alcohol and drug policy, adapting a previous policy in response to legalization, or determining discipline for impairment on the job, the Conference Board of Canada recommends that employers consider the operational needs of their industry and the type of position held by their employees. For some employers, having an impaired employee could be a significant concern due to the safety sensitive nature of the employee's work, while the issue may be a matter of ethics, optics, or productivity for others.<sup>134,8</sup> For the former, these employers will need to consider and address various issues, including workplace safety, alcohol and drug policies and testing, problematic drug use or dependence, prevention strategies, and consumption during work-related events.<sup>135</sup>

Yet, all organizations should be prepared to manage cannabis in the workplace to remove ambiguity for employees and reduce the risk to workplace safety.<sup>136</sup> Employers should also clearly communicate new/ revised policies to ensure employees understand what will and will not be tolerated at work, as well as consider providing resources for those struggling with problematic cannabis use and addiction.<sup>137</sup>

## The Importance of Educating Employees and Managers

Education will be key to preventing issues that may arise in the workplace post-legalization<sup>138</sup> and employers therefore have a role to play in developing cannabis literacy among their employees. A study conducted in June 2018 by the Institute for Work and Health with over two thousand

\*As the Ministry of Labour explains, commercial drivers face a zero tolerance sanctions for the presence of drugs, as well as alcohol in the blood, as detected by an approved drug-screening device prescribed by the Criminal Code of Canada.

Canadians revealed knowledge gaps around workplace policies on cannabis and permissibility to use cannabis at work after legalization.<sup>139</sup>

The Canadian Centre for Occupational Health and Safety noted that employers should provide employees with education and training on a number of issues, including the organization's policies, disciplinary measures, available resources as well as how to report and recognize signs of impairment.<sup>140</sup> Employers may also want to provide employees with specific and relevant facts to encourage safer cannabis use, such as the differing quantities of THC in products, different strains, cannabis-impaired driving, and the varied effects depending on the method of consumption.

A survey of one thousand employers conducted by Morneau Shepell in June 2018 found that only seven percent of employers trained their managers on how to handle cannabis in the workplace. Forty-eight percent of respondents planned to provide this type of training in the next 12 to 18 months and 45 percent have not made such plans for the future.<sup>141</sup> Since managers interact with their employees on a frequent, if not daily, basis, employers should consider providing managers with training on organizational policies and procedures related to impairment and potential disciplinary measures, how to recognize signs of impairment and/or substance abuse, as well as training on how to appropriately raise the topic with an employee.<sup>142</sup>

### Investing in Technologies that Determine Cannabis Levels and/or Impairment

While drug-testing technologies can detect the presence of THC, they can only signal recent use and cannot measure the level of impairment. Unlike testing for blood alcohol levels, obtaining a positive test result (that indicates a person has THC in their system) is not necessarily a clear indication of the risk of impairment.<sup>143,144</sup>

Given the need for a rapid test to detect for THC in impaired drivers, the Government of Canada approved a device (Draeger 5000) that allows law enforcement to test drivers' saliva for THC. However, the device that is currently approved has been criticized for its lack of accuracy, tendency to produce false positives or false negatives, and its unreliability in cold weather.<sup>145</sup> Consequently, some police forces are hesitant to use it.<sup>146</sup> While the federal government has pledged \$161 million in

funding for police training and drug-testing equipment over the next five years,<sup>147</sup> it is imperative that government and industry work together to develop detection devices that can detect impairment, as well as measure impairment, more accurately.

### RECOMMENDATIONS:

**13.** The Government of Canada should fund high-quality, scientific research on cannabis in partnership with the cannabis industry (including but not limited to: cannabinoids within cannabis, addiction, the health impacts associated with the different types of products, and measuring impairment).

**14.** The Government of Canada should continue to invest in the development of cannabis impairment detection devices with the aim of bringing a device to market that can reliably and accurately measure impairment at the time of testing.

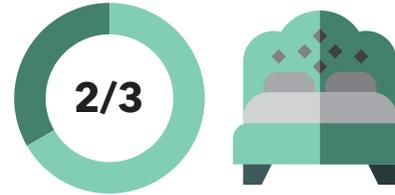
# CANNABIS AND HEALTH IMPACTS



Cannabis contains **hundreds of chemical substances** known as cannabinoids, which change how cells act and speak to each other.<sup>148</sup>



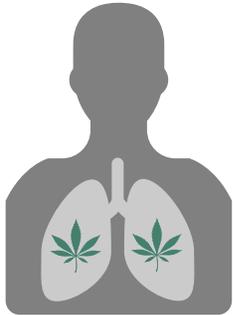
Cannabis consumption causes **psychoactive effects**, including euphoria, relaxation, and heightened sensory experiences.<sup>149</sup>



**Two-thirds of recreational cannabis consumers** say they use cannabis to help relax, sleep, or reduce stress and anxiety.<sup>150</sup>



Adult cannabis use can be associated with a number of **negative health risks**, including addiction, a range of respiratory and circulatory diseases and disorders, cognitive effects, as well as effects on mental health for some individuals.<sup>151</sup>



Tar from cannabis cigarettes **harms the lungs** in much the same way as tar from tobacco cigarettes.<sup>152</sup>



Exposure to **second-hand cannabis smoke** contains much of the same toxins found in cannabis smoke that is directly inhaled, including carcinogens.<sup>153</sup>



The **addiction risk** for recreational cannabis users is 1 in 11.



This number rises to **1 in 6** for those who begin using cannabis as a teenager.<sup>154</sup>

As previously mentioned, it is predicted that the legalization of recreational cannabis will attract an older customer base who are likely to consume cannabis less than once a month on average.<sup>155</sup> New and occasional recreational cannabis consumers will need to rely on the expertise of retail stores and employees to make informed decisions about their purchases at the point of sale. Experienced consumers will expect store employees to have knowledge of the various products, including their origin, safety, as well as testing for pesticides and other harmful materials.

According to a 2018 Deloitte survey, 71 percent of current consumers and 69 percent of likely consumers believe having staff with strong product knowledge is the most critical feature for cannabis stores.<sup>155</sup> The survey also found that 61 percent of likely cannabis users and 55 percent of current users expect to feel welcome upon entering a retail store.<sup>156</sup> These findings underscore the need for cannabis retail employees to have customer service skills as well as technical and product knowledge to provide consumers with a positive and engaging shopping experience.

As the cannabis sector becomes further established, formalized education will be vital to the industry's continued acceptance. Hiring talent from outside of the cannabis industry and providing in-house training can be a costly and time-consuming endeavor. As a result, cannabis courses and programs offered through Ontario's post-secondary institutions and developed in partnership with the cannabis industry have a key role to play in building the province's cannabis talent pool. Such programs and courses are responsive to industry needs and a rapidly changing regulatory environment as well as provide hands-on training to students that position them for success.

### Importance of Skills Development and Training

In February 2019, Lift & Co. announced it received multi-year approval from the AGCO for its new CannSell retail certification program. CannSell is the only cannabis retail training program approved by the AGCO for cannabis retailers in Ontario. Developed in partnership with MADD Canada, all Ontario cannabis retail employees, holders of retail

store authorizations, and holders of cannabis retail manager licenses are required to complete the CannSell training program before their first day of work. The online program takes approximately four hours to complete and is available in English and French. It educates employees of privately-run retail cannabis stores about the responsible sale of cannabis and their legal and regulatory obligations. The program covers a range of topics on cannabis, including basic information, the various forms, effects, and potential risks and harms associated with cannabis use, including impaired driving.<sup>157</sup>

The OMA has consistently advocated for licensed, recreational cannabis stores to invest in training their staff on a number of key areas, including the negative health effects of recreational cannabis use, the different types of cannabis, the strength of each product sold, how each product might affect the user, as well as how to identify underage consumers and those already under the influence.<sup>158,159,160</sup>

While CannSell is a step in the right direction, the province should consider subsequent mandatory training programs for retail employees and owners with the introduction of edible cannabis, extracts, and topicals in late 2019. Moreover, if Ontario makes the necessary regulatory and legislative changes needed to permit private consumption lounges for consumable products, staff working in these licensed establishments should be required to complete training comparable to a Smart Serve certification that those serving or handling alcohol in a licensed establishment in Ontario must complete. Such a training would ensure responsible cannabis service and consumption in licensed consumption lounges.

## Labour Market Projections for Canada's Cannabis Industry

Many cannabis companies have opted to recruit talent from traditional or cannabis-adjacent industries, such as the beverage alcohol, food and beverage sector, or pharmaceutical industry. These individuals possess the transferable skills needed to work in a highly-regulated environment, have experience interacting with government, and understand taxation and distribution issues.<sup>161</sup>

In November 2018, the number of Canadians employed in cannabis-related jobs was 10,400 – an increase of 7,500 from 12 months earlier.<sup>162</sup> Currently, 58 percent of those employed in cannabis-related jobs work in the agricultural sector. However, it is projected that careers in the cannabis industry will rapidly diversify, supporting careers in other sectors, including research and development, technology, marketing, retail, sales, food science, and engineering.

As the post-prohibition landscape unfolds, LPs expand production facilities, and new product classes enter the market in late 2019, the demand for labour will also increase.<sup>163</sup> It is predicted that around 150,000 cannabis-related jobs will emerge after legalization, which would make employment in the cannabis sector larger than Canada's agricultural, utilities, and real estate sectors.<sup>164</sup>

## Cultivating a Homegrown Talent Pool

Several post-secondary institutions in Ontario have responded to current and future labour market demands stemming from legalization by creating unique courses or programs aimed at training qualified graduates for the cannabis industry. The following section provides a selection of programs available to prospective students in Ontario.

Ryerson University and George Brown College both offer courses on the fundamentals of the cannabis industry, and the University of Ottawa's law school offers two courses on cannabis law.<sup>165</sup> In addition to offering a course on medical cannabis, Durham College plans to incorporate cannabis courses into other degree programs, like nursing and human resources.<sup>166</sup>

In contrast, Niagara College and Loyalist College launched post-graduate cannabis-focused certificate programs. Niagara College's eight-month Commercial Cannabis Production program focuses on large-scale crop cultivation, the federal regulatory environment around

cannabis production, and business fundamentals, in addition to an experiential learning component developed with over a dozen LPs. Niagara College also established the Canadian Cannabis Research and Education Institute, which focuses on applied research and training in cannabis production and food and beverage innovation in partnership with industry. Loyalist College's eight-month Cannabis Applied Science program provides students with access to one of the few post-secondary laboratories approved by Health Canada for cannabis research.

Since the legalization of recreational cannabis impacts a range of sectors, including public health, human resources, transportation, and law enforcement, it is likely that new cannabis courses and programs will continue to emerge. Post-secondary institutions will need to continue to work with the cannabis industry, not only in Ontario but across Canada, to ensure courses and programs meet industry needs and an evolving regulatory environment.

As the first university in North America to have conducted studies on cannabis production and completed the first peer-reviewed publication on this topic, the University of Guelph is investing in the development of the Guelph Centre for Cannabis Research (GCCR). The GCCR will be a home for cannabis research in Canada and provide opportunities for governments and academic researchers, in partnership with industry and associations, to perform collaborative and multidisciplinary research at a centralized facility. The centre aims to engage in a range of projects, including horticulture research to optimize production, yield, and quality. They are further developing cannabis strains targeting certain human and animal disorders, as well as processing and extracting essential oils to maintain medicinal properties. The GCCR's mandate includes training and enhancing the technical capacity of the cannabis industry. The GCCR will also include a greenhouse to grow cannabis plants to full maturity, which will need to be licensed by Health Canada.<sup>167</sup>

To date, the University of Guelph has secured \$10 million – half of the funds needed to complete this 30,000 square-foot research venue. More broadly, the lack of infrastructure funding currently hinders the ability of post-secondary institutions to invest in the infrastructure needed to build

a talent pool for Ontario's cannabis industry. Since Canada is one of a handful of countries to have legalized cannabis production, with the right approach and research capacity, there is an opportunity for Ontario to be a leader in research and development activities related to cannabis.

### Capitalizing on Canada's First-Mover Status and Ontario's Competitive Advantage

As the first G7 country to legalize recreational cannabis at the federal level, industry representatives note that Ontario is uniquely positioned to capitalize on Canada's first-mover status. Ontario is home to more than half of the LPs in Canada. Moreover, Ontario is home to 44 leading post-secondary institutions and well-known for a number of relevant sectors, including its life sciences and food and beverage manufacturing sectors. Ontario also produces over 40,000 science, technology, engineering, and mathematics graduates annually.

With access to a strong talent pool, cannabis tourism is an additional market Ontario should develop. This approach would complement the initiatives and investments that have been made to support tourism related to craft beverage alcohol in this province. According to a report from Colorado's department of revenue, the state attracted around 6.5 million cannabis tourists in 2016.<sup>168</sup> In recent months, Ontario hosted several cannabis events, including a cannabis-friendly curling tournament in Wiarton<sup>169</sup> and a cannabis-friendly golf course opening in Eastern Ontario.<sup>170</sup> With access to highly-qualified personnel, Ontario should undertake a more coordinated approach to developing cannabis tourism to support legal businesses, drive economic growth, and job creation.

### RECOMMENDATIONS

**15.** The AGCO should consider additional mandatory training for cannabis retail operators and employees with the introduction of new cannabis products, such as edibles, concentrates, and extracts later this year.

**16.** To support the development of Ontario's cannabis industry, the Ministry of Training, Colleges and Universities should act as a convener by engaging the cannabis industry and post-secondary institutions, identifying the skills needed for current and future positions

in the cannabis industry and develop a strategy highlighting the variety of education and employment opportunities related to the legal cannabis sector.

**17.** The Government of Ontario should develop a funding pool that allows post-secondary institutions to apply for capital needed to build new infrastructure, such as those underway at the University of Guelph and Niagara College, to attract research dollars, industry, and students and, in so doing, support the growth of Ontario's cannabis talent pool.

**18.** The Ministry of Tourism, Culture and Sport should work with the broader tourism and cannabis industries to incorporate cannabis-related tourism in its upcoming Ontario Tourism Strategy.

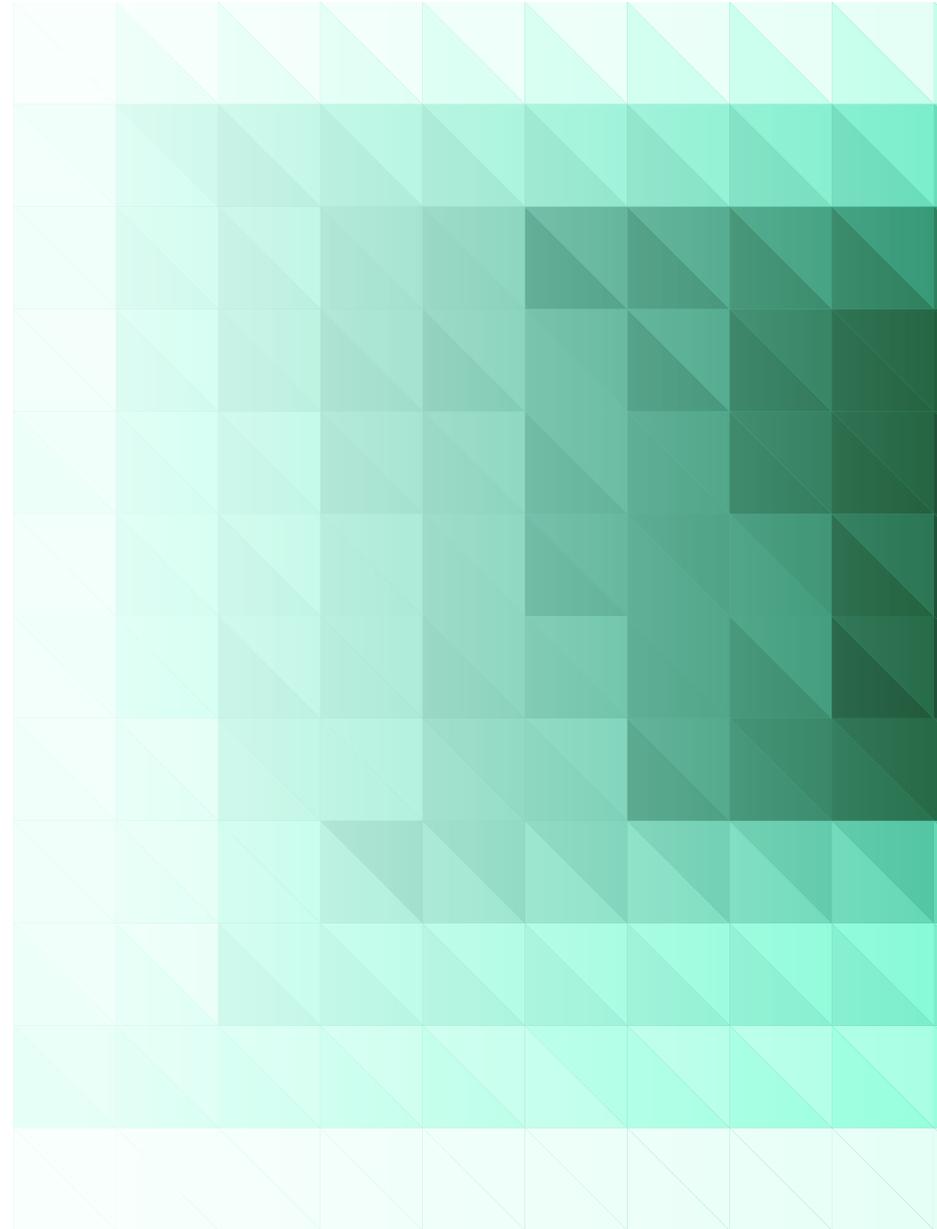
## CONCLUSION

While many questions remain after the legalization of recreational cannabis, including how private retail in Ontario will unfold, it is clear that the cannabis industry presents a significant opportunity for all levels of government.

To capitalize on this new, multi-billion-dollar industry, the Government of Ontario and Government of Canada should create an environment that supports investors, entrepreneurs, business owners, and post-secondary institutions. In turn, these stakeholders can support Ontario's budding cannabis industry, creating successful businesses and new jobs.<sup>171</sup> Government should also strike the right balance between establishing the necessary restrictions to ensure public safety and providing adult recreational cannabis consumers with access to products, without inadvertently encouraging the illegal market.

Being the first industrialized country to legalize and regulate recreational cannabis on a national level presents a unique opportunity to position Canada as a global leader in the cannabis space. Canada and Ontario are positioned to influence public policy at home and abroad, setting the stage for other countries that might follow our lead.<sup>172,173</sup>

It is incumbent on government and stakeholders to work together to establish a global precedent for a recreational cannabis market that both achieves the public policy objectives set forth by government, while positioning Ontario's cannabis industry for success.



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