



Cannabis Legalisation – Canada's Experience

A research report by Public First

Authors: Blair Gibbs, Tom Reed, Seb Wride

Cannabis Legalisation – Canada's Experience

A research report by Public First

October 2021

Authors: Blair Gibbs, Tom Reed, Seb Wride

PUBLICFIRST 

CONTENTS

Executive summary	5
Introduction	
Competing Goals	11
Structure of this report	18
Overview	13
Chapter 1: Overall use and public health	
Public health controls on legal cannabis	20
Comparing the regulation of addictive consumer substances	22
Patterns of use	25
Daily and near daily use of cannabis	31
Methods of use	35
Negative health outcomes	36
Chapter 2: Youth access and public safety	
Youth access	37
Police-reported cannabis incidents	41
Cannabis-impaired driving	43
Chapter 3: Legal sales and the illicit cannabis market	
Roll-out of cannabis retail stores	48
Growth of the legal cannabis market	51
Sources of cannabis	58
Eliminating the illicit market	59
Tax Revenue	60
Prices	60
Chapter 4: Comparing two provinces – retail in Alberta vs. Quebec	61
Chapter 5: Public attitudes to cannabis and legalisation	73
Conclusion	78
Annex	83

ACKNOWLEDGMENTS

This report was commissioned in early 2021 by Professor Keith Humphreys for the Stanford Network on Addiction Policy (SNAP), an initiative of the Wu Tsai Neurosciences Institute at Stanford University, CA. This report was entirely funded by Stanford University and no commercial sponsorship or academic grant funding was received. The authors would like to thank Professors Humphreys and MacCoun for their support and guidance, and for the generous and constructive feedback on earlier drafts offered by Dr. Beau Kilmer and Bryce Pardo at the RAND Corporation. Additional thanks are due to Professor David Hammond (University of Waterloo), Professor Michael Armstrong (Brock University), Rebecca Jesseman (Canadian Centre on Substance Abuse), Andrew Murrie (MADD Canada), and David Brown (Editor of StratCann and formerly of Health Canada), for offering the authors their insight into the Canadian market. In lieu of official published data, the authors also benefited from pricing data for retail up to September 2021 supplied by CannStandard. Any errors and omissions are the authors' own.

AUTHORS

Blair Gibbs is an Associate Director at Public First and a freelance policy consultant and writer. His policy specialism is home affairs and security, including migration, policing and drug policy and most recently he served as a senior advisor to the U.K. Prime Minister in the No10 Policy Unit (2019-20). He studied history and politics at Oxford University and held several senior roles in government 2012-20, including in the London Mayor's Office and Ministry of Justice. He co-founded the Centre for Medicinal Cannabis in the UK in 2018 and sits on the board of the network for addiction policy at Stanford University. He lives in Vancouver, BC, and writes on global affairs for www.TheHub.ca and on politics and policy for www.CapX.co.

Tom Reed is a Policy Analyst at Public First. He works mostly in tech policy, including online safety, the digital skills gap, and the competitiveness of tech markets. Tom studied History at Peterhouse, University of Cambridge at undergraduate level before moving on to complete the MPhil in Political Thought and Intellectual History at Cambridge.

Seb Wride is an Associate Director at Public First. He leads on Public First's quantitative opinion research, and has run polls across countries in Europe, MENA and North America. His work has covered a range of areas, including climate change, mental health and education. Prior to his work at Public First, Seb completed an MPhil in Psychology, carrying out research on individual learning styles through a mobile application.

EXECUTIVE SUMMARY

About this report

This study provides an overview of Canada's 2018 law change that created a legal, regulated adult-use market in marijuana (hereafter 'cannabis') with reference to the reform's impact on the three main goals set out in the legislation (Chapters 1-3). It also provides an additional in-depth look (Chapter 4) at how two provinces, Quebec and Alberta – together representing one third of Canada's population – have adopted contrasting approaches to cannabis retail and access (Chapter 5). Together the report attempts to illustrate the process of legalisation in Canada and its consequences, providing insights to other jurisdictions.

This study references only published data as of June 2021 and recognises that better data will be available in future. The report is produced in advance of the federal regulatory review of legalisation that will begin in October 2021 and report in 2023. To augment the published data, the report also references results from a specially commissioned poll of the Canadian public. This provides new quantitative analysis using a nationally representative survey to gauge public attitudes to cannabis in Canada and respondents' views of legalisation. It offers additional context for understanding how legalisation has impacted Canadians, and which elements of the regulated market are broadly popular or reflect public priorities (see Chapter 5).

Policy context for legalisation

Canada legalised the sale and possession of non-medical cannabis in 2018, becoming only the second country in the world to do so, and in clear violation of the 1961 Single Convention on Narcotic Drugs. The Canadian approach, embodied in *The Cannabis Act* (commonly known as Bill C45), was explicit about the need to achieve more than one public policy objective.

Bill C45 came into effect nationwide on 17 October 2018 and in advance, each of Canada's 10 provinces and three territories passed their own legislation to enact the changes in parallel. A second phase of legalisation took effect on 17 October 2019 when edible cannabis, extracts and topicals became legal, which have separate regulations governing their production, potency and packaging.

The overarching framework for cannabis production is regulated at a federal level, and distribution and sale of cannabis – as well as other regulations pertaining to its use – are determined by the provinces and territories. For example, although the Cannabis Act allows for home growing (four plants per residence, from legally acquired seeds, no more than 2 metres in height), provinces can prohibit this in their own statutes, which Quebec has done.

The Canadian approach to legalisation has prioritised public health, with strict marketing controls, plain packaging, limits on personal possession and public use, and powers to enable provinces and municipalities to control where cannabis is sold and where stores open. Entire categories, like edibles and vape products, are banned in some provinces.

The law gives provincial governments a key role in determining how legal cannabis markets operate, shaping the consumer experience. Provinces can also set a higher minimum age, lay down rules for where adults can buy cannabis, where they can use it, and how much they can possess. The result is that provinces have adopted different approaches to this new legal market and so the impact of legalisation differs from province to province, with local availability, price and product selection dependent on the retail model adopted in that part of Canada.

Headline Findings

Rates of Use

Overall, the data from the National Cannabis Survey suggests that **overall use of cannabis within the past 3 months has increased since legalisation**. This increase, however, should be seen in the context of a pre-existing steady upwards trend in cannabis use across the country.

The proportion of **Canadian adults reporting cannabis use within the past 3 months increased steadily from 14% in the first quarter of 2018 to 20% by Q4 of 2020**. The increase in use was driven at first by an increase in male use, with a sharp increase in female use occurring in 2020. Those aged 18–24 were the cohort to most commonly report cannabis use, and the proportion of those aged 25–44 reporting cannabis use has also increased since legalisation. On a provincial level the picture is varied. Quebec remained the province with the lowest prevalence of cannabis use within the past 3 months. There is also a notable rise in the reported use of cannabis on a daily or almost daily basis since legalisation took effect.

Methods of use

The data indicate that **legalisation has affected a moderate shift away from smoking towards other forms of cannabis consumption**, particularly after 2019, when edibles and concentrates became available in stores across most provinces. Current data indicates that there is increased popularity of processed cannabis products in the legal market.

Surveys conducted from 2018 to 2020 by the International Cannabis Policy Study (ICPS) reveal that dried flower remains the most commonly used product, however the number of **cannabis users reporting consumption of dried flower within the past 12 months declined from 83% in 2018 to 73% in 2020**. Similarly, the number of respondents to the NCS reporting use of dried flower within the past 3 months dropped from 79% in Q1 of 2018 to 66.4% in Q4 of 2020.

Youth access

Consumption rates among young people do not appear to have fallen, based on available data so far. Reducing access to cannabis amongst Canadian youth was a primary policy goal of the *Cannabis Act*.

According to one national survey in 2017 and 2018 (before legalisation), 41% and 36% respectively of 16–19-year-olds reported having used cannabis in the past 12 months. This rose back up to 44% for both 2019 and 2020. The same CCS survey in 2020 found **around 9% of all 16-to-19 year-olds reported daily or almost daily use of cannabis**, but no earlier trend data is available.

Public Safety and Criminal Justice

Enforcement of cannabis laws had been easing off before legalisation. Reducing criminal activity related to cannabis and its subsequent impact on the criminal justice system was a major policy rationale for legalisation.

Based on police-reported incidents, there was already a steep decline for cannabis cases compared to that of other drugs, with cannabis cases declining for six straight years prior to 2018. **The decline in the rate of cannabis possession cases for youth (aged 12–17) was especially stark prior to legalisation – dropping by over a third (36%) between 2017 and 2018** (under the superseded CDSA law), and by 60% overall in

the prior decade (2008–2018).¹ Just under 16,000 adults were charged for cannabis possession in 2016 falling to only 486 adults in 2020, in violation of the new offences contained in the *Cannabis Act*.

Driving after cannabis consumption remains prevalent. The Government modernised the law on impaired driving in Bill C-46 with new penalties and testing processes for drivers deemed impaired through use of drugs (including cannabis).

Amongst those who had used cannabis within the past 3 months, 14% of those with a driver's license reported driving within two hours of consuming cannabis in Q1, Q2, and Q3 of 2018. This rose slightly to 15% for the combined period of Q4 of 2018 and Q1 of 2019. Public First's survey found that **1 in 7 (14%) of those who had ever used cannabis had in the past year admitted to having driven a vehicle within 2 hours of using.**

Legal sales

Approaches towards retail store licensing vary dramatically from province to province. The Atlantic provinces prioritised immediate opening of a widespread retail store network. Saskatchewan, Quebec and Manitoba, by contrast, have increased the number of stores in their provinces at a steady rate since legalisation.

There were on average 0.43 retail stores per 10 000 people at the end of 2020 but this varied widely by province. By Q4 of 2020, Alberta had the highest numbers of stores on a per 10,000 basis (1.27), followed by Newfoundland and Labrador and British Columbia. Quebec had proportionally the fewest stores (0.07), followed by Nova Scotia and Ontario – though in 2020–21 Ontario has shown an aggressive upward trend following the acceleration of retail store licensing there

Cannabis sales continue to rise. According to the Monthly Retail Trade Survey, which surveys businesses across Canada, cannabis sales across Canada have steadily increased since legalisation – though the COVID-19 pandemic and subsequent lockdowns clearly had an impact in 2020 and early 2021.

The vast majority of cannabis in Canada is bought in physical stores. All provinces have a legal online sales channel, however consumers have shown a clear preference to purchase from retail stores. Even in the first quarter of 2020 when, as a consequence of the pandemic, stores were shut for extended periods of time, retail store sales far surpassed online.

In 2020 as a whole in Ontario for example, barely a fifth (17.8%) of OCS's cannabis sales in Canadian dollars were online. In Alberta – a province with far greater retail store coverage than Ontario – the number was considerably lower at 1.6% and in Quebec it was 8.2%.

Cannabis spending was on an upward trajectory before legalisation and then accelerated in 2020. Estimated household spending on cannabis had risen consistently for at least 8 years prior to legalisation.

¹ [Table 15 Police-reported youth crime for selected drug offences, Canada, 2017 and 2018 \(statcan.gc.ca\)](https://www150.statcan.gc.ca/n1/pub/25-001-x/2019001/article/00001-eng.htm)

Overall cannabis consumption did not dramatically accelerate with legalisation in Q4 of 2018, but rather did so only in Q1 of 2020, potentially impacted by the COVID-19 pandemic and once the roll-out of stores across provinces began to have an effect on cannabis availability (cannabis retail stores remained open as an 'essential service' despite the wider lockdowns in Canada).

Impact on the illicit market

The percentage of users sourcing their cannabis from the legal market has steadily increased since legalisation There has been a consistent sharp increase in the proportion of cannabis expenditure captured by the legal market.

In Q1 of 2019 the NCS recorded that **47.4% of cannabis users reported obtaining cannabis from a legal source rising to 68.4% in 2020**. Over the same time period, the number of users sourcing their cannabis from an illegal supplier dropped from 51.3% to 35.4%. The Public First survey in Q2 2021 revealed that 66% of respondents who had consumed cannabis had obtained it from a legal source – only 11% reported acquiring it from a dealer.

Taxation and prices

Cannabis is taxed in Canada as a legal consumer product attracting a federal excise duty and a provincial sales tax at point of sale. National revenue data is not available, however some provincial budgets have also included projections of income from cannabis sales.

Ontario's 2021 provincial budget projected that for 2021-2022 the province would claim a \$245m share of the federal cannabis excise duty, with a further \$170m in revenue from the Ontario Cannabis Store (including the online channel).

There is a lack of good quality data on the price of legal and illegal cannabis, though some provincial cannabis agencies have published data on the average price of cannabis sold in their retail stores and online.

Provincial Models of Legalisation: Two Contrasting Approaches

Two provinces with large populations and contrasting political cultures adopted different regulatory approaches that provide some insight into the impact of legalisation, and the extent to which retail regulations and the proliferation of licensed stores may impact use.

Retail in Alberta vs. Quebec

Alberta has a predominantly private sector retail model, with a provincial licensing body and distributor, and no government-owned stores. Quebec by contrast has a public sector model where the province acts as wholesale purchaser and distributor, and owns and operates all stores and no private retail is permitted. The two models provide a different level of access to the population:

The population coverage provided by the retail model in Quebec is almost as good as the private model in Alberta, even though Alberta has 10 times as many stores (and 18 times as many on a per capita basis. On the day of legalisation someone in Alberta was on average 37km from a store, whilst in Quebec they would be 51km. Over the last few years these numbers have dropped respectively to 5km in Alberta and 14km in Quebec. As it stands, we estimate that **over 1 in 3 (38%) Alberta residents live within walking distance (or 1km) of a store**, and 79% within 3km. In Quebec we estimate this to be 5% and 29% respectively. 88% of those in Alberta live within 10km, while in Quebec this was 75%.

StatCan estimates of cannabis sales show that increasing store count has come hand-in-hand with increases in sales. Perhaps the most obvious indicator of this is in Quebec where sales were relatively stable in the first 5 months after legalisation while store-count stayed at 12, but then began to increase alongside the opening of new stores.

The private-sector legalisation model appears to have had more of an impact on the prevalence of cannabis use in Alberta than in Quebec. Whereas cannabis use within the past 3 months in Quebec has – after a brief rise in Q4 of 2018 – returned to around pre-legalisation levels, cannabis use in Alberta has risen by several percentage points.

Canadian Attitudes to Legalisation

Polling for this project explored whether public attitudes to legalisation had shifted since the *Cannabis Act* and also examined the level of support among Canadians for potential changes to the legal regime for cannabis.

Support for the legalisation of cannabis has grown a small amount since October 2018. Whereas about 46% of Canadians supported legalisation on the eve of legalisation with 30% opposing it, our survey found that 53% of respondents approved of legalisation now, and only 18% opposed it.

Half of Canadians (49%) thought legalisation had gone well overall – only 15% thought it had gone badly. The remaining respondents either did not know or considered legalisation to have gone neither well nor badly. A total of 40% of Canadians thought that other countries should follow Canada's example and also legalise the drug in their jurisdiction, with only 20% disagreeing.

By some margin, respondents considered the generation of tax revenue to be the most positive consequence of legalisation. The creation of new jobs was also a popular response, followed by the elimination of the illicit market and the prospect that police could focus on more serious crime.

Other survey findings indicate where public appetite for future changes might focus. For example, excluding those who thought no one should be allowed to purchase cannabis, **half (49%) of respondents thought there should be a higher minimum age than the legal age in most provinces today** (19 years-old).

Implications for Policy-Makers

On almost every measure, Canada's is a more restrictive consumer model than any US state that gives a higher priority to protecting public health. Largely due to the packaging rules and marketing restrictions, Canada's private sector has not been able to commercialise cannabis to the same degree, and legalisation is less 'visible', despite the steady increase in the number of physical stores between 2018-21.

At present a large and growing legal market for cannabis in Canada co-exists with an illicit market which continues to offer a wider range of products (including unregulated, high strength varieties) and a dealer supply chain that is easy to access and has not been outcompeted on price. It is too early to expect the regulated marketplace to have eliminated the competition entirely (if it ever will) and the illegal market is in flux.

Despite all the constraints on how cannabis companies can reach consumers, at a national level rising rates of use do appear to be happening, with use gradually increasing and daily or almost daily use rising, both in official data and in our own survey conducted for this project. Although it is a reasonable assumption, it is not possible to attribute the rise in prevalence seen in Canada to legalisation itself, as more data will be needed to determine what is behind increased use.

Canada's experience therefore reveals familiar challenges to those experienced by state governments in the US, including policy objectives that are in tension. The Canadian model has some distinctive elements that may not translate to the different political and cultural context of other jurisdictions, including the government-owned retail model and the provisions for home-grow.

This report demonstrates that there is not one Canadian model, but several, and the lessons for other federal jurisdictions like the USA are still emerging. Canada's ten provinces have had decisive roles in agreeing the sale and distribution model for cannabis, such that the experience of legalisation in Canada is highly dependent on where Canadians actually live. With growing support for federal legalisation in the United States, Canada's experience as a neighbouring democracy operating a regulated model within a federal political setup should be instructive.

INTRODUCTION

North America dominates the international policy debate on marijuana (hereafter ‘cannabis’) not just because of the wider cultural acceptance of the drug in this region, but because of the size and longevity of the medical cannabis markets in both the USA and Canada. In various different forms, a medicinal cannabis regime had become established in many US states and in Canada for over a decade or more before recreational or adult-use cannabis became a policy proposition. However, despite moves at the state level to legalise cannabis for adult-use in places like Washington, Oregon and Colorado, it was Canada that adopted federal legalisation of non-medical cannabis first.

The 2018 decision by Canadian MPs to legalise non-medical cannabis came after two years of policy and legislative debate, but it was in reality the beginning of a much longer process by which a familiar drug that was already widely consumed in the country, gradually becomes incorporated into a legal market where participation has rules, restrictions and obligations. The Liberal Government’s policy rationale was clear: consumption of cannabis was widespread and use rates were rising, and yet Canadians could only access cannabis from illicit sources, putting themselves at risk.

Despite concerns about health harms in some quarters, the Government argued that it was considered preferable to create a legal market so that, firstly, consumers could be better protected from adulterated products; secondly, cannabis production and distribution could be closely regulated; and thirdly, the criminal supply chain could be competed against and gradually supplanted, offering wider benefits in terms of new sources of tax revenue and fewer social harms.

The way Canada chose to legalise – by delegating to provinces key decisions around legal age, retail licensing and distribution models – has had the benefit of providing different policy approaches within a single federal framework. The national parameters reflected the federal government’s policy priorities, but the legislation nonetheless allowed a range of different regulated models to be developed at provincial level over the last three years. For this report, two of Canada’s larger provinces with contrasting approaches – Quebec and Alberta – were explored in more depth, not least because the approach taken to retail stores is an important determinant of how legalisation is experienced by the public.

Competing goals

A regulated adult-use cannabis market has many goals that are in tension. The Canadian approach, embodied in *The Cannabis Act* (commonly known as Bill C45), was explicit about the need to achieve more than one public policy objective. The Canadian agencies tasked with running legal distribution and retail recognise this. The mission statement of the Crown Corporation in Quebec reflects this multi-layered set of goals. In 2020, SQDC described their mission to “*Sell cannabis in compliance with the Cannabis Regulation Act and with a focus on health protection in order to attract and retain users from the illegal cannabis market without encouraging use.*”² The competing goals of public health and public safety are reflected not just in this mission statement, but in how the legislation was crafted, and how provinces have chosen to use their freedom to devise a legal retail market in their jurisdiction.

² [SQDC.ca | Publications | Annual report 2019-20](https://www.sqdc.ca/publications/annual-report-2019-20)

Competing Goals

Undermine the illicit market		Protect public health
Discourage youth use		Attract users from the illicit market
Provide quality-controlled supply		Increase awareness of health risks
Combat illicit activities		Reduce burden on the justice system

Any assessment of whether Canada's legalisation experience has been successful depends on the value that is placed on these different goals. For example, the priority of protecting public health, compared to the legitimate goal of displacing the illicit market and the crime and harms associated with it. Invariably, the balance is difficult to strike, and there is no magic formula for guaranteeing a good policy outcome whereby illicit cannabis consumption is significantly eroded, while overall prevalence rates stay stable (or even fall), especially given the inevitable novelty of a new legal market involving branded products marketed and sold by for-profit entities (either private or government-owned). After two years of a legal regulated market in Canada, this report examines the progress to date on legalisation in Canada, drawing on the available data and considering the implications for the future, and for other jurisdictions..

Structure of this report

This study provides an overview of the current state of knowledge of legalisation's impact on C45's three main goals, and provides an additional in-depth look at how two particular provinces with varying approaches to cannabis retail – Quebec and Alberta – have fared under legalisation (Chapter 5). The other chapters examine the current position based on the objectives set out in Bill C45.

This report attempts to illustrate the process of legalisation in Canada and its consequences, recognising that there are many areas where data is not being collected or published or is not comprehensive. We reference only published data and recognise that better data will be available in future. This will emerge as part of the federal regulatory review of legalisation that will begin in October 2021 and report in 2023. To augment the data we do reference, the project also commissioned new quantitative analysis using a nationally representative survey to gauge public attitudes to cannabis in Canada and respondents' views of legalisation. This new survey provides additional context for understanding how legalisation has impacted Canadians, and which elements of the regulated market are broadly popular or reflect public priorities (see Chapter 6).

This study examines the policy outcomes of legalisation but does not cover wider topics related to the profitability of the market, the experience of cannabis consumers, the developments in the retail sector, or the commercial performance of retailers or Canada's 692 federally approved license holders (as of June 2021).³

³ [Licensed cultivators, processors and sellers of cannabis under the Cannabis Act - Canada.ca](https://www24.intelcom.ca/cannabis/cannabis-act/cannabis-act-2018/cannabis-act-2018-101)

OVERVIEW

Canada legalised the sale and possession of non-medical cannabis in October 2018, becoming only the second country in the world to do so, and in violation of the 1961 Single Convention on Narcotic Drugs. The nationwide legalisation of cannabis in Canada followed a platform pledge to “*Legalize, regulate, and restrict access to marijuana*” by the Liberal Party that formed a majority government after the 2015 federal election.⁴ Prior to this, Canada had had some form of access regime for medicinal cannabis to registered patients for over a decade by this time, with an established network of private companies operating as licensed cannabis producers. In several provinces there was also an established grey market of unregulated ‘dispensaries’.⁵

Goals of the legislation

The *Cannabis Act* (commonly known as Bill C45)⁶ followed the conclusion of the Cannabis Taskforce⁷, established in 2016, which advocated for a federal legalisation of cannabis for non-medical use by adults on the basis of a number of public health goals.⁸ The taskforce was created to advise Ministers on how to legalise, not to advise on whether Canada should do so, and the recommendations were largely followed in the subsequent legislation.

The Cannabis Act listed 7 priorities for legalisation:

- protect the health of young persons by restricting their access to cannabis;
- protect young persons and others from inducements to use cannabis;
- provide for the licit production of cannabis to reduce illicit activities in relation to cannabis;
- deter illicit activities in relation to cannabis through appropriate sanctions and enforcement measures;
- reduce the burden on the criminal justice system in relation to cannabis;
- provide access to a quality-controlled supply of cannabis; and
- enhance public awareness of the health risks associated with cannabis use.⁹

Subsequently, Health Canada’s public messaging¹⁰ defined two purposes of the Cannabis Act:

1. Prevent youth from accessing cannabis
2. Displace the illegal cannabis market

⁴ [Liberal Party platform summary - FEDERAL Election 2015 \(weebly.com\)](http://www.liberalparty.ca/en/2015/05/2015-federal-election-platform-summary)

⁵

⁶ [Government Bill \(House of Commons\) C-45 \(42-1\) - Royal Assent - Cannabis Act - Parliament of Canada](https://www.parliament.ca/bills/42-1/c45)

⁷ [Task Force on Cannabis Legalization and Regulation presents its advice on a framework for legalization and regulation of access to cannabis - Canada.ca](https://www.taskforcecannabis.ca/en/2016/09/task-force-on-cannabis-legalization-and-regulation-presents-its-advice-on-a-framework-for-legalization-and-regulation-of-access-to-cannabis)

⁸ [A Framework for the Legalisation and Regulation of Cannabis in Canada - Canada.ca](https://www.taskforcecannabis.ca/en/2016/09/task-force-on-cannabis-legalization-and-regulation-presents-its-advice-on-a-framework-for-legalization-and-regulation-of-access-to-cannabis)

⁹ [Cannabis Act - Laws-lois.justice.gc.ca](https://laws-lois.justice.gc.ca/2018/10/19/C-45/)

¹⁰ [What you need to know about cannabis - Canada.ca](https://www.healthcanada.ca/en/2018/10/20181001/)

At its outset, legalisation of cannabis in Canada has recognised the tension between competing goals inherent in the Act between promoting public health and competing with the illicit market. Most obviously, extremely low prices in the legal market are particularly likely both to increase use and to put illicit sellers out of business.

Broadly, these competing priorities can be grouped into three general areas of interest: public health; youth access; and criminal activity. Bill C45 was approved and received Royal Assent on 21 June 2018, coming into effect on 17 October 2018. Each of the 10 provinces passed their own legislation to enact the changes in parallel. A second phase of legalisation took effect on 17 October 2019 when edible cannabis, extracts and topicals became legal, which have separate regulations governing their production, potency, and retail given that these products *“pose unique health risks”*.¹¹

Devolved responsibilities

Canada is a parliamentary democracy organised on a federal basis, where the provinces and territories pass laws that govern and administer large areas of civic and commercial activity, and provinces fund and oversee most public services. However, in creating a legal, regulated framework for a controlled substance, it was necessary for the federal Parliament in Ottawa to pass new primary legislation because Canada has a single criminal code.

Bill C45 revised the illicit status of the product according to its source, established licensed production for non-medical consumption, created associated penalties for unlawful export, unlicensed growing, sales to minors, and possession in excess of defined per person limits. The federal government also established an excise tax regime and associated requirements around records and data returns to enable traceability of legal product in the supply chain.

The same bifurcated approach governs tobacco, where federal legislation sets the framework in law, and defines permitted activity and penalties (for unlicensed production, import/export, improper promotion or sale), and then provincial governments pass legislation in their respective areas, or where required to by the federal law. The minimum age for tobacco, alcohol and cannabis all follow this model, where the floor is set by Act of Parliament but provinces have the freedom to raise this minimum age if they choose in their own legislation.

Other areas where provinces can diverge on legal cannabis include home-grow entitlements, and public consumption. British Columbia is the only province to set a limit on the possession of cannabis at home (1000g of dried cannabis). Provinces also apply their own sales tax regime to legal cannabis sales and administer the licensing of retail stores where those are private businesses. Municipalities within a province have a role in approving business licenses, store locations and zoning applications, but permission to operate a licensed cannabis store is granted by the provincial authority.

Many legalisation models

Though the overarching framework for cannabis production is regulated at a federal level, this only sets the parameters. The actual distribution and sale of cannabis – as well as other regulations pertaining to its use – are determined by the ten provinces and three territories. For example, although the Cannabis Act allows for home growing (four plants per residence,

¹¹ [Health Canada finalizes regulations for the production and sale of edible cannabis, cannabis extracts and cannabis topicals – Canada.ca](#)

from legally acquired seeds, no more than 2 metres in height), provinces can prohibit this in their own statutes, which Quebec has done.

Provinces can also set a higher minimum age, lay down rules for where adults can buy cannabis, where they can use it, and how much they can possess. Entire categories, like edibles and vape products, are banned in some provinces. The result is that provinces have adopted sometimes radically different approaches, and we should expect the impact of legalisation to differ from province to province. Equally, the long-term scale and shape of the illicit market will depend upon the contours of the legal market locally, whereby popular demand for certain products that may still be banned in the regulated market could sustain an ongoing illicit market for those products in those places.

Table 1: Retail model by Canadian province

Province	Retail model adopted
Alberta	Private licensed in-person and government-operated online
British Columbia	Government-operated in-person and online stores; private licensed in-person stores
Manitoba	Private licensed in-person and online stores
New Brunswick	Government-operated in-person and online stores
Newfoundland and Labrador	Private licensed in-person and government operated online stores
Nova Scotia	Government-operated in-person and online stores
Ontario	Private licensed in-person and government-operated online store
Prince Edward Island	Government-operated in-person and online stores
Quebec	Government-operated in-person and online stores
Saskatchewan	Private licensed in-person and online stores

Table 2: Provincial laws governing cannabis

PROVINCE	Legal Age	Prevalence % of those aged 15 or older who had used cannabis within the past 3 months (NCS 2020)	Number of licensed cannabis retail stores (and rate per 10 000 residents)	Personal Cultivation (the federal limit allows for the cultivation of up to 4 plants per household)	Use in Public	Co-location with alcohol	Edibles and extract restrictions
Alberta	18	21.7%	599 ¹² (1.3)	Yes	Not in areas frequented by children or where smoking or vaping is prohibited	No	No
British Columbia	19	24.8%	356 (0.7) ¹³	Yes	Limited (Not where smoking is prohibited)	Yes (Not in urban areas, exceptions are for rural communities)	No
Manitoba	19	22.4%	107 (0.7) ¹⁴	No	No	No	No
New Brunswick	19	18.2 %	20 (0.3) ¹⁵	Yes	No	No	No

¹² [Ontario overtakes Alberta to lead Canada in legal cannabis stores - MJBizDaily](#)

¹³ [Map of Cannabis Retail Stores – British Columbia Liquor and Cannabis Licensing](#)

¹⁴ [Buying Cannabis in Manitoba – LGCA Manitoba](#)

¹⁵ [Stores – Cannabis-nb.com](#)

Newfoundland and Labrador	19	19.5%	30 ¹⁶ (0.6)	Yes	No	No	Yes (the sale of cannabis vaping products is prohibited)
Nova Scotia	19	27.3%	30 (0.3) ¹⁷	Yes	Limited (Not where smoking is prohibited)	Yes (In a separated area of the store)	Yes (sale of cannabis vaping products that produce a scent or flavour other than that of cannabis or that are synthetically flavoured is prohibited)
Ontario	19	23.1%	613 (0.4) ¹⁸	Yes	Limited (Not where smoking is prohibited - consultation process launched in Feb 2020 for the creation of consumption venues and special occasion permits)	No	No

¹⁶ [Stores – Nova Scotia Liquor Corporation](#)

¹⁷ [Stores – Nova Scotia Liquor Corporation](#)

¹⁸ [Ontario overtakes Alberta to lead Canada in legal cannabis stores – MJBizDaily](#)

Prince Edward Island	19	22.3%	4 (0.2) ¹⁹	Yes	No	No	No
Quebec	21	10.6%	65 (0.1)	No	No	No	Yes (Sale of cannabis products that appeal to children and all cannabis vaping products are prohibited)
Saskatchewan	19	13.9%	80 (0.7) ²⁰	Yes	No	No	No

¹⁹ [Buying Cannabis on PEI - princeedwardisland.ca](http://princeedwardisland.ca)

²⁰ [Cannabis Retailers in Saskatchewan - SLGA](#)

CHAPTER 1: Overall use & public health

One of the priorities of the *Cannabis Act* is the protection of public health. As such, the development of the legal market has been influenced by the controls and restrictions put in place to safeguard cannabis consumers. Because cannabis is a psychoactive drug with addiction potential, the Canadian model imposed a range of rules to educate users, protect consumers from marketing inducements, and address risks inherent in the retailing of an intoxicating substance.

Given the widespread availability of cannabis in Canada before October 2018, the main public health benefit would arise from shifting consumption from illicit sources – including cannabis that presented health risks by being contaminated or of unknown or very high potency – to legal sources, where consumers could be better protected and have more certainty over what they were buying. The measures taken in Bill C45 were therefore designed to deliver an improvement in cannabis quality whilst also imposing a set of restrictions that would limit the ability of producers and retailers to make this more reliable product significantly more popular and so more widely consumed. This is what justified the strict controls on packaging, labelling and marketing, which were proposed by the Taskforce in 2017, adopted under the ‘Cannabis Act Promotion Prohibitions’, and which Canadians appear to largely support (see Chapter 6).

Public health controls on legal cannabis

The Cannabis Act and the accompanying provincial laws adopt a range of controls to protect public health. The most significant measure considered by the Cannabis Taskforce in 2017 but not recommended was legal potency limits to avoid the market becoming geared to higher strength products that pose greater risks in terms of impairment. Minimum unit pricing, or a taxation regime linked to THC content, was recommended as an alternative, but was also not adopted in the legislation.²¹ The Taskforce did advise that Ministers should *“Enable a flexible legislative framework that could adapt to new evidence to set rules for limits on THC or other components.”*

Potency limits were not adopted for flower products but did get adopted one year later with the regulations governing edibles (mandating a maximum THC content per package). This move made Canada the first country to create production rules for legal cannabis products tied to potency (rather than weight or volume), and it reflected the wider concerns about the potential for misuse from over-consumption of high-strength edible products. The issue of taxation based on potency for all types of cannabis products may yet be revisited again as part of the review that the law requires the government to initiate three years after legalisation (beginning in October 2021).

²¹ [A Framework for the Legalisation and Regulation of Cannabis in Canada – Canada.ca](#)

Table 3: Controls on cannabis

Production	<i>All production must be federally licensed. Health Canada validates and inspects all licensees. Domestic production only. Total of 692 licenses issued (as of June 2021) for growers, distributors, or processors. Licensed Producers can supply both the medical and non-medical markets across all 10 provinces and 3 territories.</i>
Distribution	<i>Licensed cultivators must have a distribution licence to supply into the wholesale market. Licensed Producers cannot supply non-medical cannabis products directly to consumers (unlike in the medicinal regime).</i>
Market position	<i>Federal law does not prevent Licensed Producers from owning or operating distributors or licensed retail stores, however some provinces ban vertical integration. There are no rules preventing Canadian cannabis companies from being part-owned by foreign companies, including alcohol or tobacco businesses.</i>
Retail	<i>Both online and in-store retail is permitted but stores must be licensed by provinces (where applicable), and abide by rules on location, zoning and local signage. Federal rules require legal retailers to have opaque store windows and minimum distances from schools. Some provinces have limited the number of stores and municipalities can have a role in approving retail locations.</i>
Access	<i>The purchase of cannabis is age-restricted and age verification is required to visit the authorised online store in each province, or to make a purchase in store. Customers cannot handle the product prior to purchase or hand select from open shelves. International customers are unable to access online stores from non-Canadian IP addresses. Adults in Canada (regardless of citizenship or residential location) can shop in any retail store in any province or territory.</i>
Product types	<i>Most provinces supply a range of products (flower, oils, edibles, concentrates) but food and drink products are not permitted to be sold in Quebec.</i>
Potency	<i>No restrictions on potency for flower but package limits for edible products (total of 10mg THC) and ingestible capsules (10mg THC per unit)</i>
Marketing	<i>Cannabis companies cannot advertise via traditional or social media and are barred from proxy marketing efforts e.g. sponsoring community sports events. Age-gates are required for websites and rules prevent brands</i>

	<i>from using customer testimonials or celebrity endorsements to promote cannabis products.</i>
Packaging	<i>Federal rules require plain labelling, child-safe containers, and mandatory Health Canada approved warning messages and a standardised THC warning label for products containing more than 0.3% tetrahydrocannabinol. Small company logos are permitted (and many Licensed Producers employ innovative packaging designs to generate recognition and brand association).</i>

Table 4: Public health messaging on cannabis products

<i>"Do not use if pregnant or breastfeeding. Using cannabis during pregnancy may harm your baby and result in low birth weight"</i>
<i>"Cannabis can be addictive. 1 in 11 people who use cannabis will become addicted."</i>
<i>"Adolescents are at greater risk of harms from cannabis. Early and regular use increases the risk of psychosis and schizophrenia"</i>
<i>"Cannabis can be addictive. Up to half of people who use cannabis on a daily basis have work, social or health problems from using cannabis"</i>

Comparing the regulation of addictive consumer substances

The way that Health Canada and the Canadian provinces have chosen to regulate non-medical cannabis resembles the approach adopted for alcohol on the retail and distribution side, and with tobacco on the public health and marketing side.

Table 5: Comparison of regulatory approaches in Canada

Activity	Tobacco	Alcohol	Cannabis	Specifics of cannabis controls
Legal age	18 or 19	18 or 19	18, 19, or 21	Quebec raised the minimum age for cannabis to 21 in 2020. Most provinces align their age of majority for alcohol and cannabis

Advertising	Not permitted	Permitted – with restrictions	Not permitted	No advertising on TV or radio for alcohol. Limited online advertising permitted for cannabis.
Taxation	Federal excise duty and provincial sales tax	Federal excise duty and provincial sales tax	Federal excise duty and provincial sales tax	All provinces (and territories) except Manitoba have signed a Coordinated Cannabis Taxation Agreement (CCTA) with the federal government, which decrees that the combined rate of all federal, provincial and territorial cannabis-specific duties and taxes will not exceed the higher of \$1 per gram, or 10% of a producer's selling price. ²²
Direct to consumer marketing	Not permitted	Not permitted	Permitted – with restrictions	Consumers can receive targeted email marketing from retailers and Licensed Producers (opt-in)
Branding on products	Permitted – with restrictions	Permitted	Permitted – with restrictions	Small logos are allowed but brands focus on package design to stand out
Plain packaging rules	Yes	No	Yes	Plain packaging and no branded labels, though package design / material for cannabis products can be distinctive
Child-safe package	No	No	Yes	All cannabis products must have child-safe packages

²² [How are Cannabis Sales Taxed - Legalline.ca](https://www.legalline.ca/en/How-are-Cannabis-Sales-Taxed)

Mandatory health warnings	Yes	Yes	Yes	Mandatory health warnings are set federally and apply to all products. A federally-approved warning label for THC applies.
Deterrent messaging (addiction, pregnancy risk etc)	Yes	Yes	Yes	Messages include: “Keep out of reach of children”
Products available on store shelf	No	Yes	No	All cannabis products are over the counter from secure storage that customers cannot access
Geographic restrictions	Yes	Yes	Yes	Retail sales are restricted to the province where the customer is based.
Government -run retail	No	Yes	Yes	Some provinces have private liquor and/or cannabis stores. Some provinces have a cannabis authority / Crown Corporation which operates all retail stores
Online retail	No	Yes	Yes	Most provinces have government-run online retail
Vertical integration	No	No	Permitted – in some provinces	Licensed Producers can own and operate cannabis retail stores if provincial law allows it but few have in practice

Home delivery	No	Yes	No – with exceptions	Canada Post deliver orders placed through provincial online stores (not private stores)
Store ordering for curbside pick up	No	Yes	Yes	Orders can be placed directly with some cannabis retailers for store pick-up only (no business-to-customer delivery).
Permitted to transport across the Canadian border	Yes	Yes	No	Duties must be paid on alcohol and tobacco and these have per person limits. Non-medical cannabis cannot be imported/exported in any form or size. No transport of cannabis by individuals through international airports. No bans on internal (intra-provincial) transport.

Patterns of use

One obstacle to examining the impact of legalisation on trends in cannabis use lies in differentiating consumer response to legalisation from pre-existing secular trends in the use of cannabis. Fortunately, surveys on cannabis usage in Canada go back several decades. One study, drawing on the Canadian Tobacco Use Monitoring Survey and Canadian Tobacco, Alcohol and Drugs Survey showed that, from 1985 to 2015, cannabis use within the past 12 months remained stable among 15 to 17 year old males, decreased among 15 to 17 year old females, decreased among 18-24 year olds of both sexes and increased among those aged 25 or older.²³ A further study examining usage from 2004 to 2017 indicates that use within the past year remained stable for 18 to 24 year olds and increased among adults aged 25 to 64. In this period, growth in cannabis use appears to have been driven by males.²⁴ One major issue is that there is no pre-2018 data which tracks Daily or Almost-Daily (DAD) use – a metric considered crucial in tracking the potential abuse of cannabis, and one that is recorded now (and is measured in our survey for this report).

²³ M. Rotermann, and R. MacDonald, [“Analysis of trends in the prevalence of cannabis use in Canada, 1985 to 2015” \(2018\).](#)

²⁴ M. Rotermann, [“Analysis of trends in the prevalence of cannabis use in Canada” \(2019\)](#)

There are three national government-sponsored surveys that provide a picture of the impact of legalisation on overall patterns of cannabis use: the National Cannabis Survey (NCS), the Canadian Cannabis Survey (CCS), and the Canadian Student Tobacco, Alcohol and Drugs Survey (CSTADS). An additional, highly anticipated independent survey is the one conducted by International Cannabis Policy Study, which has yet to release the majority of its data. Additional province-level surveys were also conducted in Saskatchewan in 2017 and Quebec in 2018 and 2019. Finally, for this project, Public First conducted a nation-wide cannabis survey in Q2 of 2021.

Table 6: Cannabis surveys in Canada

Survey	Data	Age group	Key Metrics	Sample Size	Modality
National Cannabis Survey	Quarterly data published from Q1 of 2018 through to Q3 2019 – resumed for Q4 of 2020.	15+	Use within past 3 months; Daily or almost Daily (DAD) use; cannabis-impaired driving; sources of cannabis	Between 5,400 and 6,100	Online
Canadian Cannabis Survey	Annual data published from 2017 through to 2020.	16+	Use within past 12 months or 1 month; DAD use; cannabis-impaired driving; sources of cannabis; perception of health risks	~11,000	Online
Canadian Student Tobacco, Alcohol and Drugs Survey	Published data for the years 2014-15; 2016-17; 2018-19;	Grades 7 to 12 and Secondary I through V in Quebec (ages 12 – 18)	Use within past 12 months; mode of consumption; perception of health risks	~ 62,000	Pen and Paper Personal Interviews

International Cannabis Policy Study	Data collected annually since 2018, publication under review	16-65	Use within different time periods; methods of use; quantity consumed; Daily or almost Daily (DAD) use; cannabis-impaired driving; sources of cannabis;	9,976 respondents in 2018; 15,081 respondents in 2019 and 15,571 respondents in 2020	Online
Public First nation-wide cannabis survey	Q2 of 2021	18+ (with only those of legal age in their respective province responding to questions concerning cannabis use)	Use within past 3 months; DAD use; modes of use; cannabis-impaired driving; sources of cannabis; views on legalisation;	1,148	Online

Overall, the data from the National Cannabis Survey suggests that overall use of cannabis within the past 3 months has increased since legalisation. This increase, however, should be seen in the context of a pre-existing steady upwards trend in cannabis use across the country. It is widely suggested that a 'normalisation' of cannabis in Canada had occurred prior to legalisation, largely resulting from having an established medicinal cannabis regime since 2001, especially as earlier versions of this programme allowed for at-home cultivation.

The proportion of Canadian adults reporting cannabis use within the past 3 months increased steadily from 14% in the first quarter of 2018 to 20% by Q4 of 2020. The increase in use was driven at first by an increase in male use, with a sharp increase in female use occurring in 2020. Those aged 18-24 were the cohort to most commonly report cannabis use, and the proportion of those aged 25-44 reporting cannabis use has also increased since legalisation. Prevalence of use only increased a small amount for those aged 45 and older.

On a provincial level the picture is varied. Quebec remained the province with the lowest prevalence of cannabis use within the past 3 months – although it is worth noting that the Quebec Cannabis Survey 2019 reported a slightly higher cannabis use prevalence within the past 3 months of 13%.²⁵

²⁵ [Quebec Cannabis Survey 2019 – Statistique.quebec.ca](https://www150.statcan.gc.ca/n1/pub/82-625-x/2020001/article/00001-eng.htm)

Table 7: Per cent (%) of Canadians who had used cannabis within the past 3 months, National Cannabis Survey²⁶

	Before legalisation	After legalisation	
	Q1 2018	Q1 2019	Q4 2020
Total	14%	17.5%	20%
Gender			
Female	12.2%	12.7%	18.4%
Male	15.8%	22.3%	21.1%
Age group			
15 to 17	N/A	N/A	19.2%
18 to 24	28.1%	34.8%	35.6%
25 to 44	21.4%	24.2%	30.3%
45 and older	7%	10.3%	10.5%
Province			
Newfoundland and Labrador	16.4%	18.5%	19.5%
Prince Edward Island	14.1%	15.4%	22.3%
Nova Scotia	20%	18.2%	27.3%

²⁶ [M. Rotermann, "Looking back from 2020, how cannabis use and related behaviours changed in Canada"](#)

New Brunswick	14.3%	18.2%	18.2%
Quebec	10.4%	11%	10.6%
Ontario	13.5%	20%	23.1%
Manitoba	16.6%	13%	22.4%
Saskatchewan	15.1%	15.7%	13.9%
Alberta	16.6%	21.5%	21.7%
British Columbia	17.1%	19.1%	24.8%

Saskatchewan was the only province to report a decrease in cannabis use between Q1 of 2018 and Q4 of 2020 – usage in Quebec remained fairly stable, and prevalence in Manitoba has also seen fluctuations, rather than steady growth, since legalisation. Prince Edward Island, Nova Scotia, and Ontario saw the most drastic increases in overall prevalence since legalisation, despite having different retail regimes.

The CCS, which records usage within the past 12-months and is held in Q2 every year, records a similar nation-wide trend to the NCS. When it comes to provincial level, however, very different trends emerge. It is unclear why this is the case.

Table 8: Per cent (%) of Canadians who had used cannabis within the past 12 months, Canadian Cannabis Survey²⁷

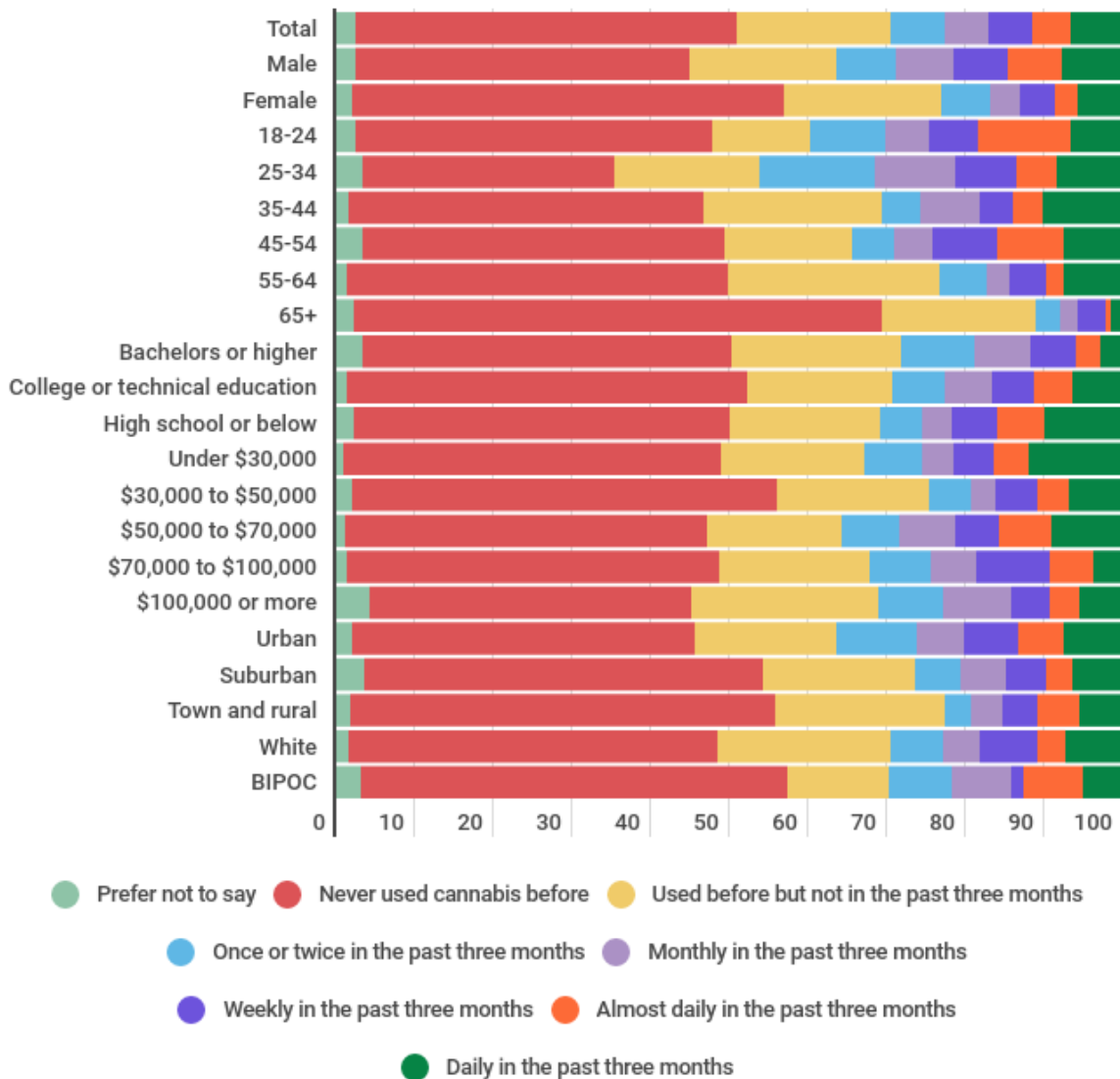
	2018	2019	2020
Canada	22%	25%	27%
Alberta	23%	26%	28%
British Columbia	26%	29%	29%
Manitoba	22%	21%	28%

²⁷ [Cannabis – Health-infobase.canada.ca](https://health-infobase.canada.ca/cannabis/)

New Brunswick	17%	30%	28%
Newfoundland and Labrador	24%	28%	29%
Nova Scotia	28%	31%	30%
Ontario	24%	25%	29%
Prince Edward Island	26%	25%	28%
Quebec	16%	19%	21%
Saskatchewan	19%	25%	27%

Finally, the Public First survey conducted in May 2021 also tracked usage of cannabis within the past 3 months. Overall 31% of respondents nationwide reported having consumed cannabis within the past 3 months – a number far greater than the 20% reported by the latest NCS survey. For Alberta, Quebec and Ontario, this figure was 28%, 25.4%, and 31.4% respectively. This survey suggests that cannabis use may have sharply increased in the first quarter of 2021, even accounting for some variation in sampling methodology.

Cannabis Usage (Original polling from Public First)



Daily and near daily use of cannabis

Overall prevalence data provides only a very limited picture of the public health impacts of cannabis. Reported use within the last three months cannot describe the health impacts of cannabis on that section of the population, as it provides no indication of the quantity and regularity of use.²⁸ When discussing the health impacts, therefore, DAD use is a key statistic, which correlates with an increased risk in cannabis use disorder and related negative health effects.²⁹

²⁸ M. Rotermann, [“What has changed since cannabis was legalised?”](#)

²⁹ Ibid.

There are three primary sources for DAD use in the Canadian population: the NCS, which has data on DAD use broken down by age group and province quarterly from Q1 of 2018 to Q3 of 2019, and again for Q4 of 2020; the CCS, which has annual data on DAD use by age group and province; and the International Cannabis Policy Study, which has collected data on DAD use annually from 2018 to 2020, the publication of which is currently under review. Finally, the national survey for Public First also asked about DAD use in Q2 of 2021.

Both the CCS and the NCS paint a picture of DAD use hovering around 6% from 2018 through to 2019. In 2020, however, the NCS reported a sharp increase in DAD use from 6.1% in Q3 of 2019 to 7.9% in Q4 of 2020. This increase seems to have been driven by a sharp rise in female DAD use, which became equal to that of males for the first time.³⁰ DAD use remained most prevalent for 18-44 year olds. The NCS reported increase in DAD use reported from 2019 to 2020 was reflected in all provinces other than Quebec and Saskatchewan. Significant increases of 5.5% and 5.7% were reported in Manitoba and Nova Scotia respectively.

One possible explanation for the rise in DAD use is that it was driven by the COVID-19 pandemic. One study held three waves of online, repeated cross-sectional surveys on 8 May and 23 June, and showed that cannabis use in the overall population remained stable in May and June, but that about half of those who used cannabis increased their cannabis use compared to before the start of the pandemic.³¹ Another research project published in 2021 indicated that cannabis users had increased their consumption as a result of the COVID-19 pandemic, although the sample size was small.³²

It is worth noting that the CCS does not reflect a dramatic increase in DAD use – the national reported DAD use rate increased marginally from 4.5% to 4.86% according to the CCS. One possible explanation for this is that the surveys were collected at different periods of the year: whereas the CCS was collected from April 30 2020 to June 22 2020,³³ the data for the 2020 NCS was collected between mid-November and 31 December 2020.³⁴ It remains unlikely, however, that this slight difference in time period can account for such a drastic change in daily cannabis use patterns. Moreover, both the ICPS and the recent Public First Survey suggest that DAD use has indeed increased significantly when compared to 2018.

ICPS data, like the NCS, attest to an increase in DAD since 2018 but, in contrast to the NCS, suggest that the sharpest increase in DAD use was between 2018 and 2019 rather than in 2020. The proportion of ICPS respondents who reported using cannabis daily or almost daily rose from 8.9% in 2018 to 11.3% in 2019 and 11.8% in 2020.

The survey conducted by Public First in Q2 of 2021 also suggests a further drastic increase in the prevalence of DAD use across Canada – 12% of respondents nationwide reported using cannabis daily or almost daily within the past 3 months. For Alberta and Ontario, respective figures were slightly above the national average at 13.3% and 13%. Quebec remained below the average but above its Q4 2020 NCS estimate with 8% of legal age respondents (21 or over) reporting Daily or Almost Daily cannabis use.

³⁰ Rotermann, [“Looking back”](#)

³¹ Imtiaz et. al, [“Cannabis Use During the COVID-19 Pandemic in Canada: A Repeated Cross-sectional Study” \(2020\)](#)

³² [Covid Cannabis Report – Cannabisandpsychosis.ca](#)

³³ [Canadian Cannabis Survey 2020 – Canada.ca](#)

³⁴ [Rotermann, “Looking Back”](#)

It remains difficult to draw any conclusions about trends in DAD use since legalisation, but the evidence would overall seem to indicate an increase in its prevalence.

Table 9: Per cent (%) of Canadians reporting Daily or Almost Daily Cannabis use during the past three months, National Cannabis Survey³⁵

NCS DAD use amongst total population	Q1 2018	Q1 2019	Q4 2020
Canada	5.4%	6.1%	7.9%
Alberta	9.3%	7.3%	9.2%
British Columbia	5.4%	8.4%	11.2%
Manitoba	6.9%	4.1%	9.6%
New Brunswick	4.6%	7.7%	8.7%
Newfoundland and L.	7.4%	5.9%	7.4%
Nova Scotia	7.3%	6.7%	12.4%
Ontario	4.9%	6.4%	9.3%
Prince Edward Island	6.3%	5.4%	8.3%
Quebec	3.8%	3.4%	2.5%
Saskatchewan	6.4%	7.3%	4.7%

³⁵ [National Cannabis Survey, first quarter 2018 – StatCan.gc.ca](https://www150.statcan.gc.ca/n1/pub/28-661-x/2019001/article/00001-eng.htm); [National Cannabis Survey, first quarter 2019 – StatCan.gc.ca](https://www150.statcan.gc.ca/n1/pub/28-661-x/2019001/article/00001-eng.htm); Rotermann, “Looking Back”.

Table 10: Per cent (%) of Canadians reporting Daily or Almost Daily use of cannabis, Canadian Cannabis Survey³⁶

CCS DAD use amongst total population	2018	2019	2020
Canada	4.2%	4.5%	4.9%
Alberta	5.8%	6.8%	7.0%
British Columbia	6.2%	7.3%	7.8%
Manitoba	4.8%	5.7%	8.4%
New Brunswick	N/A	6.3%	7.0%
Newfoundland and L.	7.2%	8.1%	7.8%
Nova Scotia	6.7%	8.4%	8.7%
Ontario	6.2%	5.8%	7.8%
Prince Edward Island	6.0%	7.0%	7.0%
Quebec	3.8%	4.2%	3.4%
Saskatchewan	N/A	5.5%	7.6%

Daily use is not the only metric by which we can measure problematic cannabis use. The CCS also asks respondents about intoxication and to estimate the number of hours spent “stoned” or “high” on a typical day. Apart from a sudden increase to 9% in 2019, between 6% and 7% of those who had used cannabis in the past 30 days placed themselves in the highest available category of being “stoned” for 7 or more hours on a typical use day. The proportion of Canadians who used cannabis within the past 30 days who reported typically being “stoned” for 5 to 6 hours a day also remained stable at 8% between 2017 and 2019, before increasing to 9% in 2020. It is therefore unclear whether or not legalisation has had any impact on the number of Canadians spending a large portion of their days “stoned”. Other metrics include

³⁶ [Canadian Cannabis Survey 2018 Summary – Canada.ca](#); [Canadian Cannabis Survey 2019 Summary – Canada.ca](#); [Canadian Cannabis Survey 2020 Summary – Canada.ca](#).

the proportion of Canadians getting stoned before work or education, and the amount of cannabis typically consumed per day.³⁷

A key question remains whether or not usage of high THC products has been affected by legalisation – it is expected that the release of ICPS survey data will shed light on this. Sales data from Ontario does indicate a preference for higher strength products and a shift in consumer behaviour towards the placing of larger orders (by weight) on the province's online store (see Chapter 4).

Methods of use

The data indicate that legalisation has affected a moderate shift away from smoking towards other forms of cannabis intake, particularly after 16 December 2019, when edibles and concentrates became available in stores across most provinces (they were legalised in October 2019). Surveys conducted from 2018 to 2020 by the International Cannabis Policy Study (ICPS) reveal that dried flower remains the most commonly used product, though the number of cannabis users reporting consumption of dried flower within the past 12 months declined from 83% in 2018 to 73% in 2020.³⁸ Similarly, the number of respondents to the NCS reporting use of dried flower within the past 3 months dropped from 79% in Q1 of 2018 to 66.4% in Q4 of 2020.

Legalisation appears to have increased the popularity of processed cannabis products. From 2018-2020, ICPS data reveal an increase in the proportion of cannabis users reporting consumption of edibles within the past 12 months of 38% to 53%. These findings are further corroborated by NCS data which show the number of users reporting consumption of edibles as rising from 31.8% in Q1 of 2018 to 41.4% in Q4 of 2020.³⁹ The ICPS also reveals an increase in the popularity of cannabis oil (drops or capsules) from 22% in 2018 to 34% in 2020 and in vaped cannabis oil from 21% to 26%.⁴⁰

The proportion of cannabis users reporting smoking as their most common method of consumption also dropped from 65.3% in Q1 of 2019 to 58.3% in Q4 of 2020. In the meantime the number of those who reported eating or drinking cannabis as their main mode of consumption rose from 13.2% to 18.6% – the number of those who mainly vaped cannabis actually decreased from 12.9% to 9%.⁴¹ The Public First survey similarly testifies to the continued growth in popularity of edibles amongst cannabis users: 58% of respondents who had consumed in the past 3 months testified to smoking cannabis as their most common form of consumption, 11% reported vaping, and 23% reported consuming in food or drink. It remains unclear how much of this change has been caused by pre-existing trends in cannabis consumption, with rates of vaping for example, increasing before legalisation. It is probable, however, that the legalisation of products other than dried flower has played a role by improving the accessibility of these products and providing new consumers with alternatives to smoking joints of dried cannabis flower in the traditional way.

³⁷ [Canadian Cannabis Survey 2018 Summary – Canada.ca](#); [Canadian Cannabis Survey 2019 Summary – Canada.ca](#); [Canadian Cannabis Survey 2020 Summary – Canada.ca](#).

³⁸ D. Hammond et. al, "Trends in the use of cannabis products in Canada and the USA, 2018 – 2020: Findings from the International Cannabis Policy Study" (under review).

³⁹ Rotermann, "[Looking Back](#)"

⁴⁰ Hammond et. al, "Trends in the use of cannabis products" (under review).

⁴¹ Rotermann, "[Looking Back](#)"

Negative health outcomes

Legislators and policy-makers are concerned about the public health consequences of legalisation in respect of short-term impacts (e.g. drug-induced psychotic episodes, and deaths or injuries caused by impaired driving) and the long-term impacts (mental health disorders, impact on earnings and life trajectories). In these areas, crucial data in Canada is missing. One study citing data up to 2015 in Canada did report an increase in cannabis-use disorder, but that study has not been replicated to establish trends beyond the onset of legalisation.⁴²

More broadly, cannabis health harms cannot be deduced from general prevalence figures like DAD use because frequency is not the only or even the best indicator of cannabis-related harms. As such, these numbers do not show the strength or quantity of cannabis being consumed, and the physical and mental health consequences of this use.⁴³ Until data on crucial metrics such as cannabis-related hospitalisation and impairment-related injuries are released, any conclusions on the public health impacts of legalisation must be provisional.⁴⁴

Another snapshot prior to legalisation is offered by figures supplied to the media by Canadian Institute for Health Information (CIHI) and reported in January 2019 which revealed a steady rise in cannabis-induced psychosis cases in previous years. The CIHI data recorded 373 people as being discharged from Canadian hospitals (excluding Ontario and Quebec) after receiving treatment for cannabis-induced psychosis in the 2012/13 fiscal year and that rose to 723 cases in 2016/17.⁴⁵ No comparable data has subsequently been published for the period after legalisation in 2018.

The area of greatest concern for policy-makers is the impact on young people's mental health and brain development from the early, frequent use of high strength cannabis strains. The Canadian data on Emergency Department visits and hospitalisations is not comprehensive, and the trend data on general mental health conditions does not allow drug-induced psychosis (generally, or cannabis specifically) to be disaggregated. Even prior to the COVID-19 pandemic, Canadian data indicated a long-term rise in the number of negative mental health episodes affecting children and youth (aged 5 to 24). According to the CIHI – *"Between 2008–2009 and 2018–2019, there was a 61% increase in visits to the emergency department and a 60% increase in hospitalizations. During this same time period, there was a 26% decrease in hospitalizations for other conditions."*⁴⁶ Against this backdrop, and given the onset of cannabis consumption among late adolescent age groups, it will be an important area of inquiry to consider legislation's impact on long-term mental health, when data eventually becomes available.

⁴² [Original quantitative research – Psychotic disorder and cannabis use: Canadian hospitalisation trends 2006 – 2015](#)

⁴³ [Rotermann, "Analysis of trends"](#)

⁴⁴ [B. Fischer et. al. "Initial indicators of the public health impacts of non-medical cannabis legalization in Canada" \(2020\)](#)

⁴⁵ [Mental health expert warns of 'significant increase' in cannabis-induced psychosis | CTV News](#)

⁴⁶ [Child and youth mental health in Canada – Infographic | CIHI](#)

CHAPTER 2: Youth access & public safety

The Government of Canada argued that on many levels a legal, regulated cannabis market would be safer than the unregulated and criminally-controlled market that exists under prohibition. There are many ways in which cannabis markets may be unsafe – with the drug posing risks to younger users, or pedestrians and other road users from impaired driving, or by contributing to crime, exploitation and the harms arising from the illicit drug trade.

Youth access

Reducing access to cannabis among Canadian youth was a primary policy goal of the *Cannabis Act*. Despite this, however, good quality data on youth usage patterns is scarce. Although a number of figures from NCS, CCS and CSTADS can be compiled, these surveys use a variety of definitions for cannabis prevalence across differing age groups. Neither the CCS, which only includes respondents aged 16 and older, and the NCS, which includes respondents aged 15 and over, are capable of providing an adequate picture of cannabis usage amongst Canadian youth, given that the average age of initiation amongst Canadian students is 14.⁴⁷ The Canadian Student Tobacco, Alcohol and Drugs (CSTADS) survey, which targets students from ages 12 to 18, on the other hand, has not published any data since the 2018-19 cycle. As a result, the impact of legalisation on youth usage cannot be fully understood.

Data from CSTADS suggests a mild increase in the use of cannabis during a period that includes the early months of legalisation. In total, 18.1% of respondents reported having consumed cannabis within the past 12 months in 2018-19, up from 16.7% in 2016-17. It is worth noting, moreover, that this marginal increase has occurred against the backdrop of an apparent downward trend in youth usage from 2004 -2017, for which CTUMS (Canadian Tobacco Use Monitoring Survey) and CTADS data suggest that the prevalence of cannabis use in the past 12 months decreased amongst 15-17 year olds.⁴⁸ The modest increase in this age group was not observed across all provinces – usage decreased in Prince Edward Island, and a large and somewhat anomalous decrease also occurred in Nova Scotia. British Columbia saw by the far the biggest increase, followed by Manitoba. It is worth noting that CSTADS does not monitor DAD use, which is a more relevant metric by which to assess the health impacts of cannabis use.

⁴⁷ [Summary of results for the Canadian Student Tobacco, Alcohol and Drugs Survey 2018-19 – Canada.ca](#)

⁴⁸ [Rotermann, “Analysis of trends” \(2019\)](#)

Table 11: Per cent (%) of students in grades 7-12 (~ ages 12 - 18) reporting cannabis use within the past 12 months, Canadian Student Tobacco Alcohol and Drugs Survey⁴⁹

	2016-17	2018-19
Canada	16.7%	18.1%
Newfoundland and Labrador	22.8%	24.1%
Prince Edward Island	19.9%	18.7%
Nova Scotia	29.2%	23.4%
New Brunswick	Refused	24.5%
Quebec	16.0%	16.3%
Ontario	15.1%	15.7%
Manitoba	17.7%	19.9%
Saskatchewan	22.2%	22.4%
Alberta	16.0%	17.0%
British Columbia	19.0%	25.2%

Though the NCS includes respondents aged 15 and up, it has published very little data on prevalence patterns for 15-17 year olds because numbers of respondents in this group have typically been too low for the data to be of reliable quality. The only period for which they have a figure is quarter 4 of 2020, in which 19.2% of 15- to 17-year-olds reported using cannabis in the past three months.⁵⁰ Unfortunately, there is no comparable data for the period before legalisation.

⁴⁹ [Summary of results for the Canadian Student Tobacco, Alcohol and Drugs Survey 2018-19 – Canada.ca](#); [Summary of results for the Canadian Student Tobacco, Alcohol and Drugs Survey 2016-17 – Canada.ca](#)

⁵⁰ Rotermann, [“Looking back”](#)

Finally, the CCS provides us with a reasonable picture of cannabis use prevalence amongst 16 – 19-year-olds. In 2017 and 2018 (before legalisation), 41% and 36% respectively of 16 – 19-year-olds reported having used cannabis in the past 12 months. This rose back up to 44% for both 2019 and 2020. Though the CCS collects data on DAD use, age-specific breakdowns have only been published for the years 2019 and 2020, in which around 9% of all 16 to 19 year olds reported daily or almost daily use of cannabis.

Another important metric of youth cannabis use is the mean age of initiation of cannabis use, which the CCS has collected annually since 2017.

Table 12: Mean age of initiation of cannabis use of Canadians aged 16 and older, Canadian Cannabis Survey⁵¹

CCS Age of Initiation	2018	2019	2020
Alberta	19	18.5	19.2
British Columbia	18.5	18.6	19.2
Manitoba	18	18.5	20.6
New Brunswick	18.9	20.3	21
Newfoundland and L.	18.5	19.3	20.6
Nova Scotia	19.7	20.4	19.8
Ontario	19.1	19.6	20.3
Prince Edward Island	19.5	20.3	20.1
Quebec	18.9	19.3	20.1
Saskatchewan	18.2	18.4	19.6

Given that reducing youth access to cannabis was a major policy aim of the *Cannabis Act*, it is noteworthy that the average age of initiation appears to have increased since legalisation. This data, however, could be more indicative of older Canadians using cannabis for the first

⁵¹ [Canadian Cannabis Survey 2018 Summary – Canada.ca](#); [Canadian Cannabis Survey 2019 Summary – Canada.ca](#); [Canadian Cannabis Survey 2020 Summary – Canada.ca](#).

time after legalisation, and is as such not the greatest indicator of youth first-time-use patterns. Furthermore, other data from CSTADS, which also asked 12 to 18 year olds about age at first consumption of cannabis, suggests that the mean age of initiation amongst cannabis users from grades 7 to 12 has remained broadly unchanged – 14.2 in 2016–17 to 14.3 in 2018–2019.

⁵² This would suggest that there has been no clear relationship between the legalisation of cannabis and the desired policy aim of preventing youth access to cannabis.

A final source of information on youth access to cannabis comes from survey questions about ease of access. In 2016–17, 39% of 12 – 18 year olds students reported to CSTADS that they thought it would be “fairly easy” or very easy to obtain cannabis if they wanted to. In 2018–19 this changed marginally to 40% – however, the number of students reporting that it would be “very or fairly difficult” to obtain cannabis if they wanted to also decreased from 46% to 42%.

The CSTADS 2018–19 survey further asked students (grades 7 – 12) whether it had been easier to get cannabis for themselves since legalisation. About 4% indicated it had become easier, less than 1% indicated it had become harder, and 12% indicated it had become “neither easier nor harder.”⁵³ In summary, therefore, it is difficult to make any conclusion about the degree to which the prevalence of youth cannabis use has been impacted by legalisation. If anything, the data suggest that the policy goal of reducing youth access through legalisation has been unsuccessful.

Police-reported cannabis cases

Until 2018, the possession, production and distribution of cannabis was illegal in Canada. A medicinal cannabis regime existed, but only adults who were registered as lawful medicinal cannabis patients were permitted to purchase cannabis from licensed producers. In practice, many of these people also purchased from unregulated dispensaries or grey market store fronts.

Reducing criminal activity related to cannabis and its subsequent impact on the criminal justice system was a major policy rationale for the legalisation of cannabis in Canada. There was also a desire to address the long-term impact on life chances by the criminalisation of young persons for cannabis possession. In effect, the creation of a legal market removes the need for police enforcement of what becomes authorised activity by consenting adults, and over time it takes these cases out of the criminal justice system and relieves the burden on courts and prisons. However, the legal market still depends upon criminal penalties to sustain it – guarding against exploitation, protecting minors, and ensuring that criminal players do not use the cover of legalisation to continue illicit activity like unlicensed cultivation, selling to youth, or moving cannabis products across international borders.

The Cannabis Act repealed existing offences related to cannabis as a prohibited drug (under the Controlled Drugs and Substances Act), and replaced them with new offences that apply within the legal, regulated market from October 17 2018.⁵⁴

⁵² [Summary of results for the Canadian Student Tobacco, Alcohol and Drugs Survey 2018–19 – Canada.ca](#)

⁵³ [Summary of results for the Canadian Student Tobacco, Alcohol and Drugs Survey 2018–19 – Canada.ca](#)

⁵⁴ [Police-reported crime statistics in Canada, 2018 \(statcan.gc.ca\)](#)

Expired violations on October 16, 2018, under the Controlled Drugs and Substances Act

- Possession of cannabis
- Trafficking of cannabis
- Importation and exportation of cannabis
- Production of cannabis

New violations effective on October 17, 2018, under the Cannabis Act*Possession:*

- Possession of illicit or over 30 grams dried cannabis (or equivalent) by adult
- Possession of over 5 grams dried cannabis (or equivalent) by youth
- Possession of budding or flowering plants, or more than four cannabis plants
- Possession of cannabis by organization

Distribution:

- Distribution to an organization, illicit or over 30 grams dried cannabis (or equivalent) by adult
- Distribution of cannabis to youth by adult
- Distribution to an organization or over 5 grams dried cannabis (or equivalent) by youth
- Distribution of budding or flowering plants, or more than four cannabis plants
- Distribution of cannabis by organization
- Possession of cannabis for purpose of distributing

Sale:

- Sale of cannabis to adult
- Sale of cannabis to youth
- Sale of cannabis to an organization
- Possession of cannabis for purpose of selling

Importation and exportation:

- Importation and exportation of cannabis
- Possession of cannabis for purpose of exportation

Production:

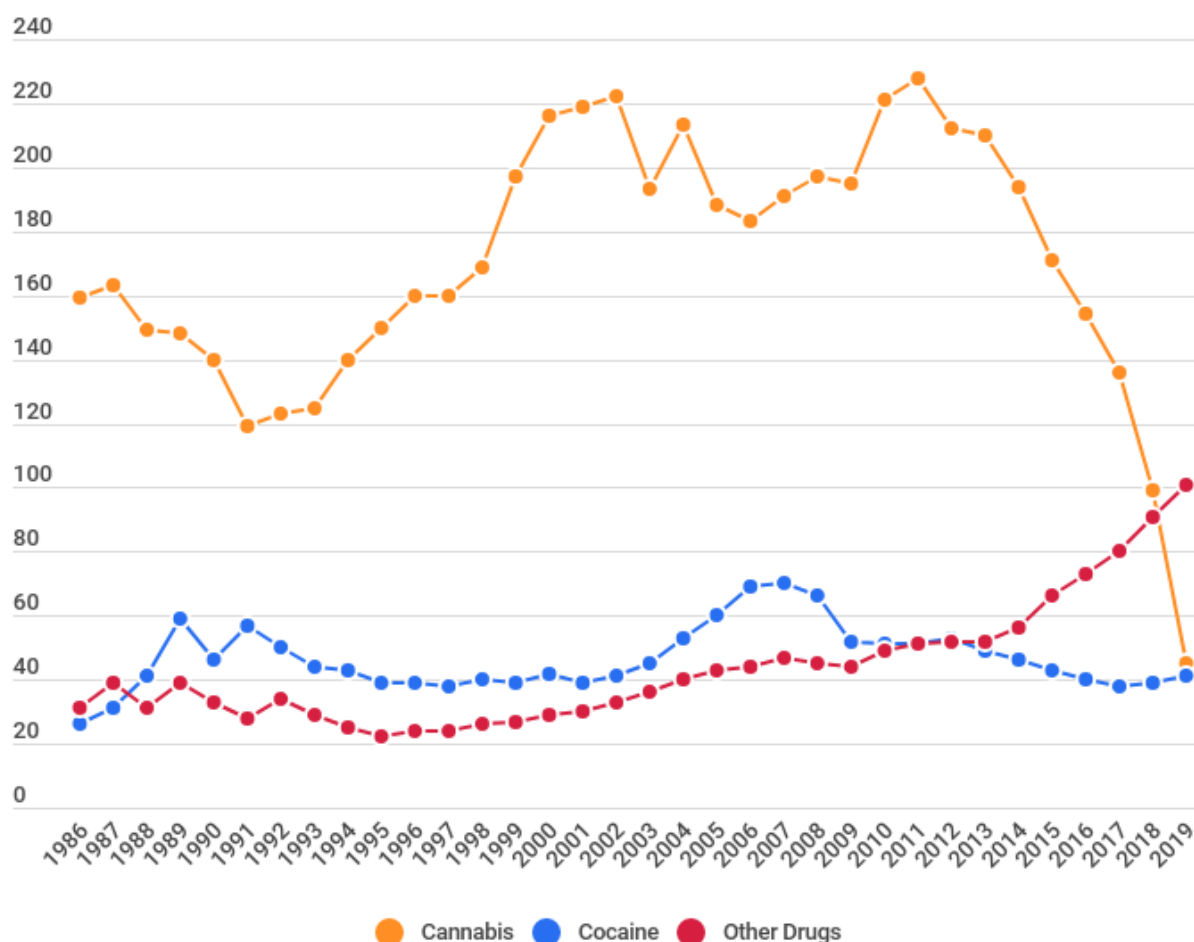
- Obtain, offer to obtain, alter or offer to alter cannabis
- Cultivate, propagate or harvest cannabis by adult
- Cultivate, propagate or harvest cannabis by youth or organization

Other:

- Possess, produce, sell, distribute or import anything for use in production or distribution of illicit cannabis
- Use of young person in the commission of a cannabis offence

A proper assessment of the extent to which public safety goals have been achieved is hampered by many factors. First and foremost, data on criminal activity related to cannabis production, distribution and consumption is scant. Secondly, legalisation happened within the context of a steep drop in the policing of cannabis use across Canada. According to StatCan, *“Police-reported rates of all cannabis-related drug offences declined for the seventh consecutive year in 2018.”* The chart below details how police-reported offences for cannabis began a steep decline around 2013, while offences for cocaine or other drugs either remained stable or increased.

Drug offences, police reported rates, Canada, 1986 - 2019
(per 100,000 population)



There was effectively a gradual process of de-policing of cannabis offences in Canada for several years before federal legalisation was even a political possibility (2015-), and it accelerated once the prospect of national legalisation was confirmed in 2017. The decline in the rate of cannabis possession cases for youth (aged 12-17) was especially stark – dropping by over a third (36%) between 2017 and 2018 (under the superseded CDSA law), and by 60% overall in the prior decade (2008-2018).⁵⁶ Cannabis offences since legalisation have, unsurprisingly, dropped significantly. Just under 16,000 adults were charged for cannabis possession in 2016; in 2020, only 486 adults had been charged with possession in violation of the new penalties in the *Cannabis Act*.⁵⁷

Cannabis-impaired driving

One major public safety issue surrounding the legalisation of cannabis concerns rates of cannabis-impaired driving. MADD Canada considers impaired driving through alcohol to be a more serious issue because of the nature of the intoxication effect and the larger numbers of people who drink and drive, however the additional impact on driver perception and reaction time from recent cannabis use, and especially cannabis use combined with alcohol use, is a cause of concern that the public in Canada seem to share.

As many as 80% of Canadians in October 2018 were concerned that cannabis-impaired driving would increase as a result of legalisation⁵⁸ – one year after legalisation, 71% of Canadians reported a concern for its impact on road safety.⁵⁹ Data from police-reported incidents and coroner's reports also suggests that the number of drug-impaired driving incidents has increased steadily since 2008 as a proportion of all impaired driving incidents.

The *Cannabis Act* was accompanied by further legislation which established new federal laws and penalties around driving under the influence of cannabis and other drugs. Previous legislation had allowed for the policing of drug-impaired driving through the Standardised Field Sobriety Tests and the Drug Recognition Evaluation to be conducted at the police station by a certified Drug Recognition Expert. The parallel legislation, known as Bill C-46, authorised police to use “approved drug screening equipment” such as oral fluid tests; facilitated the use of blood tests of drivers by police; and introduced three new criminal offences prohibiting certain THC blood concentrations for drivers. The federal government also committed \$161 million over five years to support the new laws on drug-impaired driving across Canada.⁶⁰

A number of factors make the accurate measurement of frequency of cannabis-impaired driving very difficult. First and foremost, the national police-reported statistics for drug impaired driving are not broken down by substance, so measuring the change in cannabis-impaired driving is not possible. Second, neither urine nor oral fluid are capable of measuring actual and active concentration of THC and therefore impairment – blood remains the sole way of accurately measuring impairment. Coroners' data, moreover, is suspect to

⁵⁶ [Table 15 Police-reported youth crime for selected drug offences, Canada, 2017 and 2018 \(statcan.gc.ca\)](https://www150.statcan.gc.ca/n1/pub/25-001-x/2019001/article/00001-eng.htm)

⁵⁷ [Incident-based crime statistics, by detailed violations, Canada – StatCan.gc.ca](https://www150.statcan.gc.ca/n1/pub/25-001-x/2019001/article/00001-eng.htm)

⁵⁸ [8 in 10 Canadians Concerned About Impaired Driving With Cannabis Legalization: IBC Calls for Strict Penalties and Increased Consumer Education Programs – IBC.ca](https://www150.statcan.gc.ca/n1/pub/25-001-x/2019001/article/00001-eng.htm)

⁵⁹ [Canadians Indicate Growing Concern About Road Safety at One-Year Anniversary of Recreational Cannabis Legalization, New Survey Finds – Newswire.ca](https://www150.statcan.gc.ca/n1/pub/25-001-x/2019001/article/00001-eng.htm)

⁶⁰ [Annual National Data Report to Inform Trends and Patterns in Drug-Impaired Driving – PublicSafety.gc.ca](https://www150.statcan.gc.ca/n1/pub/25-001-x/2019001/article/00001-eng.htm)

bias where drug testing is based on suspicion of drug use and is not routinely performed on all drivers. Moreover, where drivers are not killed instantly, metabolism will continue to change intoxication levels in the body. Furthermore, police activity is an incomplete measure since – as discussed above – many jurisdictions do not specify what drug caused the impairment.

An additional issue is that police officers rarely push for a drug test once the presence of alcohol in a driver has already been established.⁶¹ This means that prosecutions for driving while impaired by alcohol potentially involve drivers who were also impaired by cannabis. A comparison of toxicology reports of injured drivers to police collision reports found that police identified only 6% of drivers who tested positive for THC.⁶² The sum consequence of these complications is that the impact of legalisation on cannabis-impaired driving remains very hard to decipher.

Police-reported data

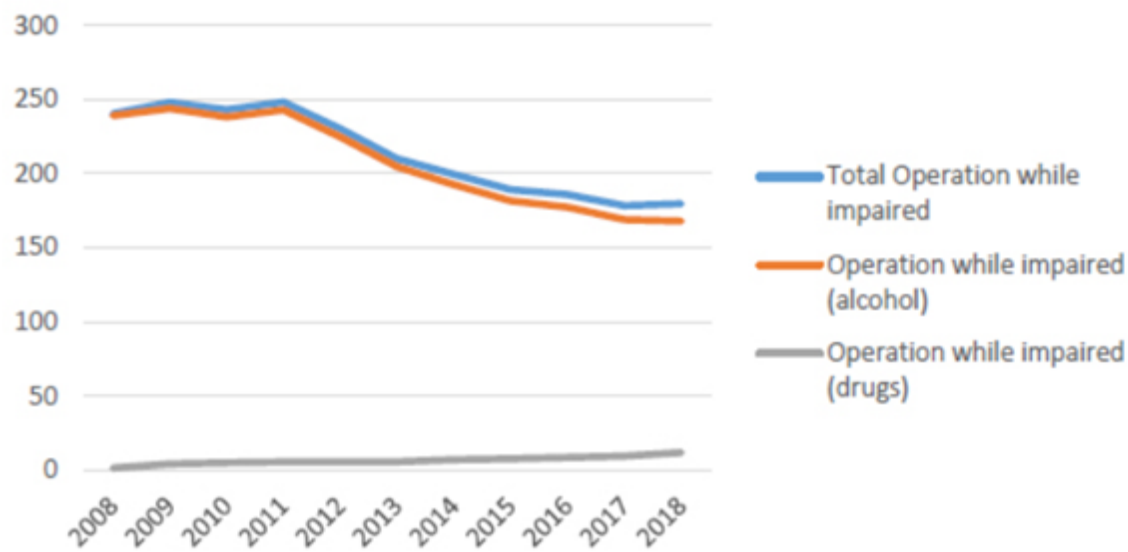
Despite its limitations, the police-reported data is still of some interest. In general, it shows that drug-impaired driving offences have risen starkly in comparison to alcohol-impaired driving incidents over time. From 2009, when drug-impaired driving incidents were first reported as an individual statistic, to 2019, drug-impaired driving incidents increased from 2% of all impaired driving incidents to 8%. Atlantic provinces reported the highest rates of drug-impaired driving incidents among the ten provinces.⁶³

⁶¹ [Annual National Data Report to Inform Trends and Patterns in Drug-Impaired Driving – PublicSafety.gc.ca](https://publicsafety.gc.ca)

⁶² J. Brubacher et. al., “[Epidemiology of drug driving: protocol from a national Canadian study measuring levels of cannabis, alcohol and other substances in injured drivers](#)” (2020)

⁶³ [Annual National Data Report to Inform Trends and Patterns in Drug-Impaired Driving – PublicSafety.gc.ca](https://publicsafety.gc.ca)

Trends in police reported impaired driving incidents in Canada (total, alcohol, and drugs)⁶⁴



Survey data: driving within 2 hours of cannabis consumption

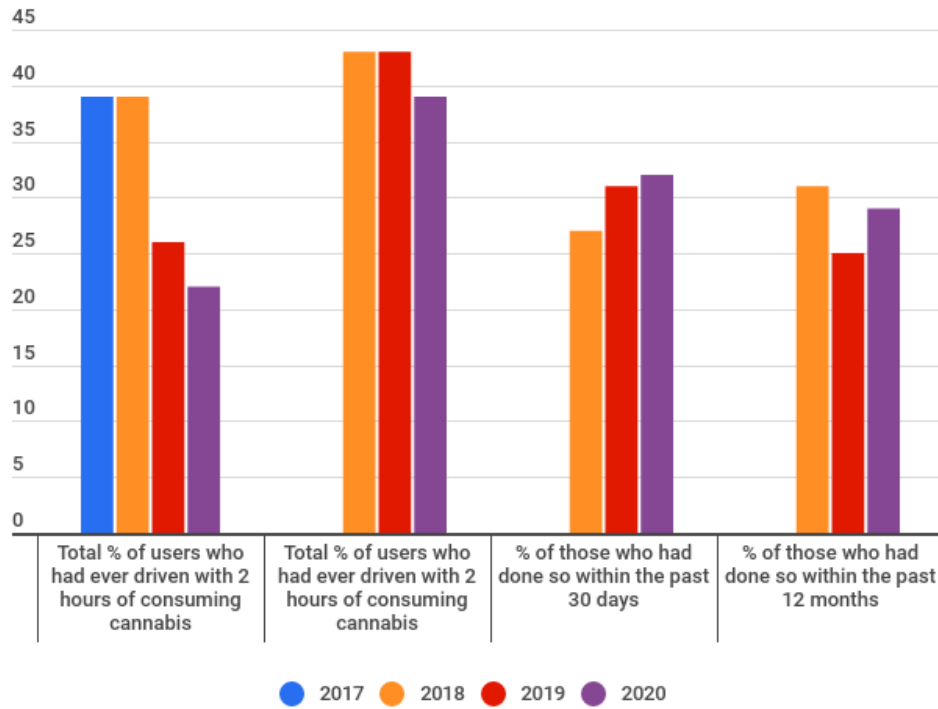
Because of the issues with police-reported statistics, survey data remains a valuable resource for measuring impaired driving despite its serious limitations. The NCS has infrequently published data on the number of cannabis users reporting driving within 2 hours of use (when the impairment risk is highest). Amongst those who had used cannabis within the past 3 months, 14% of those with a driver's license reported driving within two hours of consuming cannabis in Q1, Q2, and Q3 of 2018. This rose slightly to 15% for the combined period of Q4 of 2018 and Q1 of 2019. The NCS has unfortunately not published any data on the subject since Q1 of 2019.

The CCS also collects data on the percentage of cannabis users who had driven within 2 hours of cannabis use. The CCS appears to paint a success story – 39% of those who had used cannabis in 2017 reported having ever driven a vehicle within 2 hours of using cannabis; in 2020, this figure had shrunk to 22%. This could potentially be a consequence of an increased awareness of the dangers of driving under the influence of cannabis following public health campaigns begun since legalisation, which could have affected both respondent behaviour and likelihood to admit driving after cannabis consumption. It is notable that CCS figures are considerably higher than NCS ones. This appears to be because the NCS asks whether or not respondents have driven after consuming cannabis within the last 3 months. The CCS, on the other hand, asked whether or not respondents had “ever” driven within two hours of using.⁶⁵

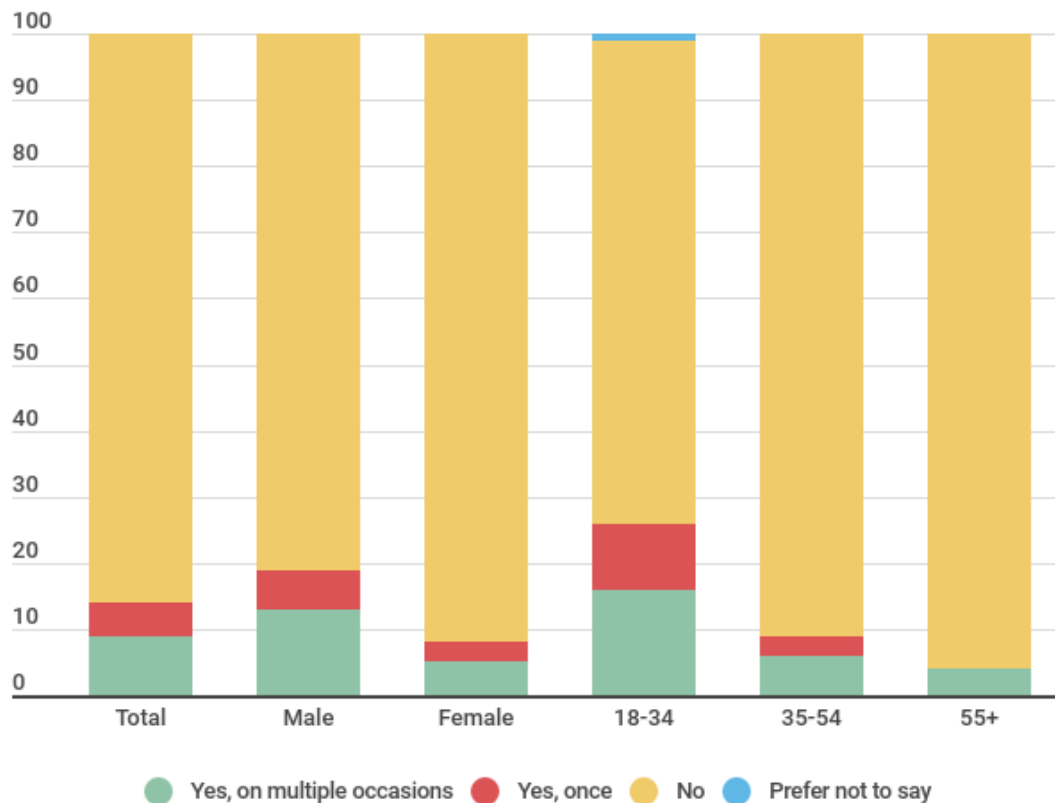
⁶⁴ [Annual National Data Report to Inform Trends and Patterns in Drug-Impaired Driving – PublicSafety.gc.ca](#)

⁶⁵ [National Cannabis Survey – StatCan.gc.ca](#); [Canadian Cannabis Survey 2020 Summary – Canada.Ca](#)

% of cannabis users (within past 12 months) who had operated a vehicle within two hours of using cannabis



At anytime in the last year, have you driven a vehicle after consuming any amount of cannabis (i.e. within the same two-hour period)?
Only those who have ever used cannabis



Public First's survey in Q2 of 2021 also asked Canadians whether they had, in the past year, driven within 2 hours of consuming cannabis. Our survey found that 14% of those who had ever used cannabis had in the past year driven a vehicle within 2 hours of using. Though the figures are not directly comparable – CCS asks about whether users had ever driven within 2 hours of using – it is possible that this represents a further decrease in the amount of Canadians driving after the consumption of cannabis.

A relevant factor could be the expansion of convenient direct-to-consumer sales. Changes introduced following the onset of the COVID-19 pandemic, have allowed for more home delivery options in the legal market – either from provincial online stores offering guaranteed delivery schedules, or directly from local retail shops – which together might be expected to reduce the number of cannabis consumers who need to drive to purchase their cannabis.

Roadside surveys

Roadside surveys provide some of the most statistically robust data on impaired driving frequency, but are costly and therefore very limited. The Canadian Council of Motor Vehicle Administrators compiled a synthesis of provincial roadside surveys conducted from 2016 to 2018 in Manitoba, Ontario, British Columbia, Yukon and Northwest Territories. This found that 10.2% of drivers tested positive for drugs (compared to 4.4% for alcohol); 7.6% tested positive for cannabis, and that drug use was most prevalent among drivers aged 20 to 24.⁶⁶

Coroner's toxicological data

Toxicological data from coroner's reports since legalisation is not widely available. Additionally, as in the case of police-reported statistics, data gleaned from coroner's reports is marred by the fact that many coroners stop analysis of a fatally injured driver's blood if alcohol is found. Some key data has been released by Saskatchewan Coroners' service for 2018 and 2019. Out of 49 driver fatalities in 2018, 67% tested positive for alcohol and 22% for THC. In 2019 these numbers, respectively, were 44% and 27%.⁶⁷

These figures might validate the concern of MADD Canada – that there may now be more drivers impaired by both alcohol and drugs at the same time – presenting an especially serious risk to public safety that needs further study. Policy-makers and legislators will want to monitor these trends closely as even a minority of frequent cannabis users admitting to driving within 2 hours of consuming may pose a public safety risk and additional measures to detect and prevent such behaviour may need adopting.

⁶⁶ [Annual National Data Report to Inform Trends and Patterns in Drug-Impaired Driving – PublicSafety.gc.ca](#)

⁶⁷ [Annual National Data Report to Inform Trends and Patterns in Drug-Impaired Driving – PublicSafety.gc.ca](#)

CHAPTER 3: Legal sales & Canada's illicit market

Retail store roll-out

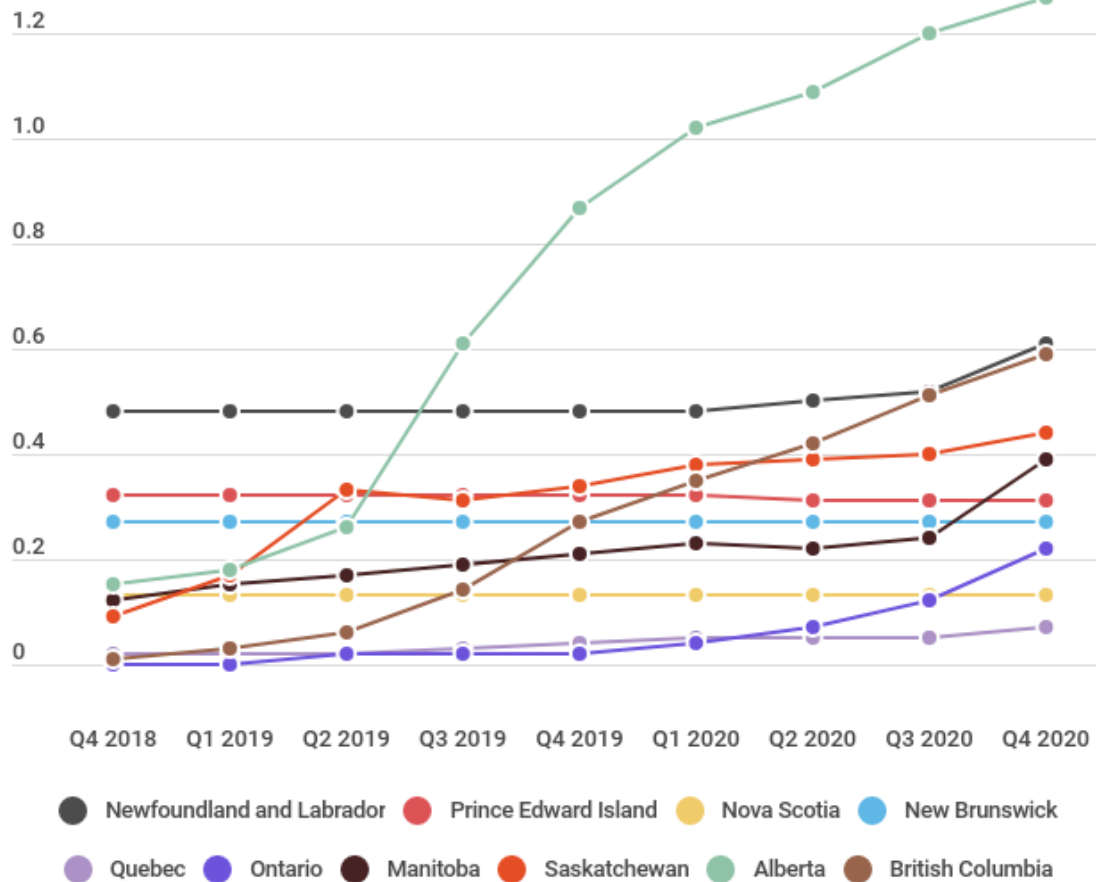
When cannabis was legalised in October 2018, the approach taken towards retail store licensing varied dramatically from province to province. The Atlantic provinces all opted for a strategy which prioritised immediate wide-spread coverage – 90% of all licensed cannabis retail outlets in the region opened in Q4 of 2018. Saskatchewan, Quebec and Manitoba, by contrast, have increased the number of stores in their provinces at a steady rate since legalisation.

Alberta began with a high number of licensed stores but adopted a consistently permissive licensing policy which saw this number grow rapidly across all quarters. Finally, Ontario and British Columbia began with very few licensed stores, but eventually saw a huge increase – in British Columbia, from Q3 of 2019 onwards; in Ontario, from Q1 of 2020 (the graph below does not capture the recent uptick in retail stores in Ontario which has brought the total store count to 613).⁶⁸ British Columbia did however have the most well established grey market of dispensaries that predated federal legalisation and in cities like Vancouver, these had even matured into being quasi-legal storefronts that paid business rates and were publicly subject to no active police enforcement. Before 2018 when provincial laws created a retail licensing scheme to enable the new legal market created by the Cannabis Act, individual cities like Victoria and Vancouver had created specific business licensing regimes (and permit charges) for these dispensaries, even though they were trading an illicit drug from unknown sources.

By Q4 of 2020, Alberta had far and away the highest number of stores per capita, followed by Newfoundland and Labrador and British Columbia. Quebec had proportionally the fewest stores, followed by Nova Scotia and Ontario – though Ontario has embarked upon a clear upward trend following a long-awaited opening up of licensing. **There were on average 0.43 retail stores per 10,000 people at the end of 2020 but this varied widely by province.** By Q4 of 2020, Alberta had the highest numbers of stores per capita (1.27), followed by Newfoundland and Labrador and British Columbia. Quebec had proportionally the fewest stores (0.07), followed by Nova Scotia and Ontario – though in 2020–21 Ontario has shown an aggressive upward trend following the acceleration of retail store licensing there.

⁶⁸ [Rotermann, "Looking Back" – Appendix Figure 1](#)

Number of legal cannabis stores per 10,000 inhabitants each quarter by jurisdiction, Q4 2018 - Q4 2020



69

Growth of the legal retail market

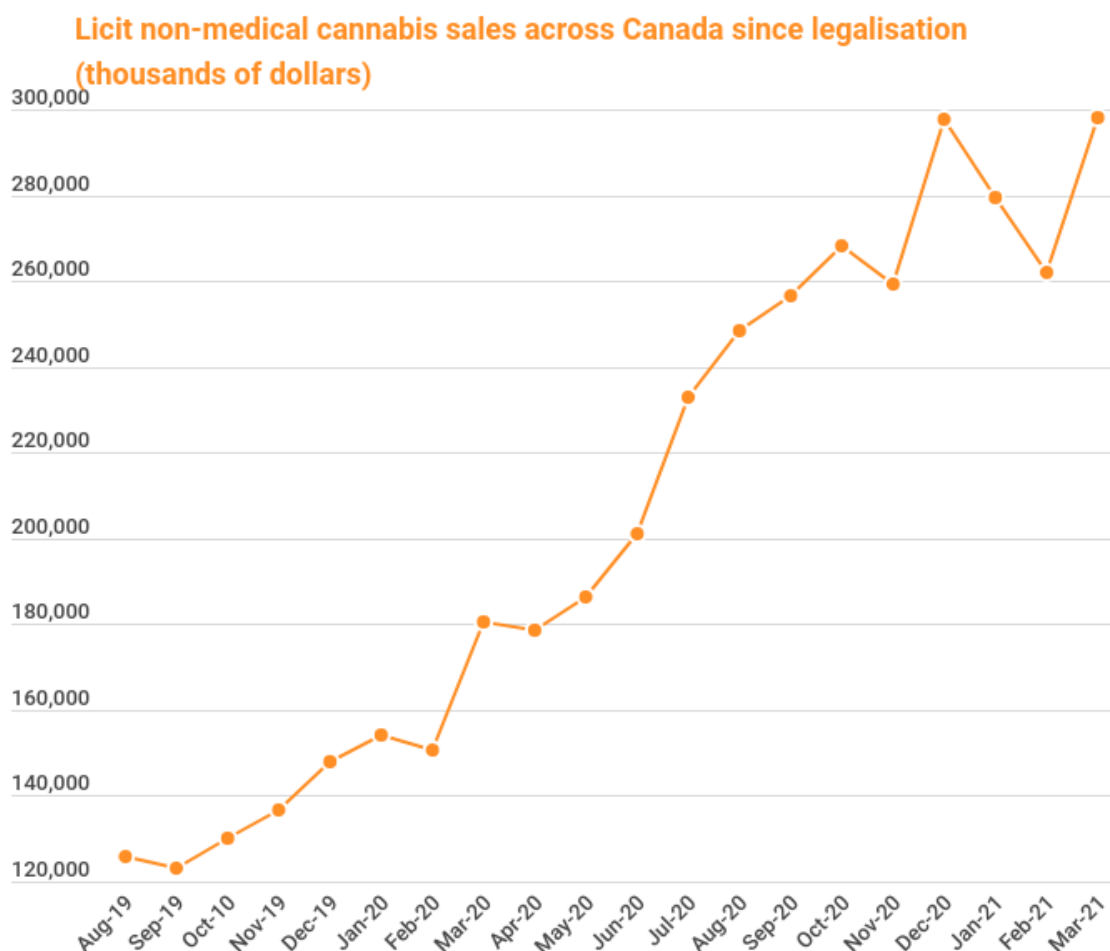
Analysis of the retail market in cannabis is focused on the provincial data because the provinces control this aspect of the legal market. As of Q2 2021, many provinces have yet to release their provincial sales data and there is no standardised format. Provinces are obligated to make data returns to the federal government but what they publish locally and how often is at their discretion. Furthermore, much existing data is based on estimates, although some provinces (Ontario, Alberta) have released good quality data.

Federal Licensed Producers of cannabis report monthly data to their respective designated agency (such as Alberta Gaming, Liquor and Cannabis) who pass data on to the Cannabis

⁶⁹ [Rotermann, "Looking Back" – Appendix Figure 1](#)

Tracking System operated by Health Canada. As of Q2 2021, however, Health Canada has yet to publish much of this market data. So far, only national sales volumes have been published, without a breakdown by province. Compared to US jurisdictions such as Colorado and Washington who proactively disclose cannabis market data, provincial governments in Canada have disclosed very little recreational sales data so far.⁷⁰

The main source of cannabis retail figures is therefore estimates based on the data published by the Monthly Retail Trade Survey, which surveys businesses across Canada. This shows that cannabis sales across Canada have steadily increased since legalisation – though the COVID-19 pandemic and subsequent lockdowns clearly had an impact in 2020 and early 2021.



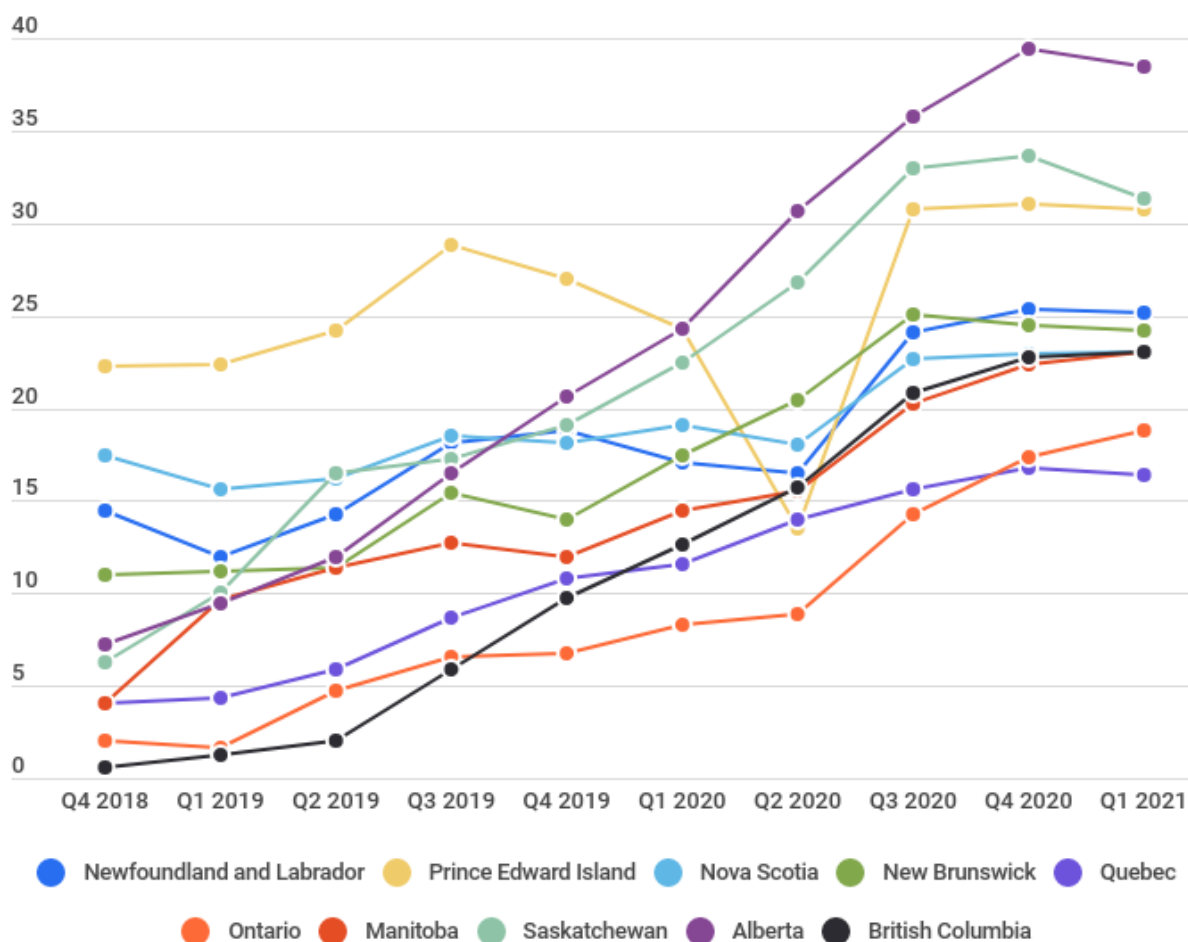
The impact of different approaches to retail store roll-out can be clearly seen in per capita sales of licit cannabis since legalisation. Prince Edward Island's strategy of achieving immediate widespread coverage put it in the lead for quite some time, only to be overtaken

⁷⁰ M. Armstrong, ["Canada's Provinces and Territories should disclose cannabis data to support research" \(2021\)](#)

by Alberta. It is worth noting that the closure of cannabis stores in Prince Edward Island during the Covid-19 pandemic caused a stark drop in legal cannabis sales, indicating that many users would rather buy from illicit sources than shop legally online.

Provinces that were slow to license stores, like British Columbia and Ontario, have only seen their per capita sales numbers increase at a slow rate. By the end of 2021, Quebec saw the lowest per capita sales, presumably reflecting its status as the province with the lowest proportion of regular cannabis users⁷¹

Quarterly Licit Cannabis Sales per capita by province (dollars)



72

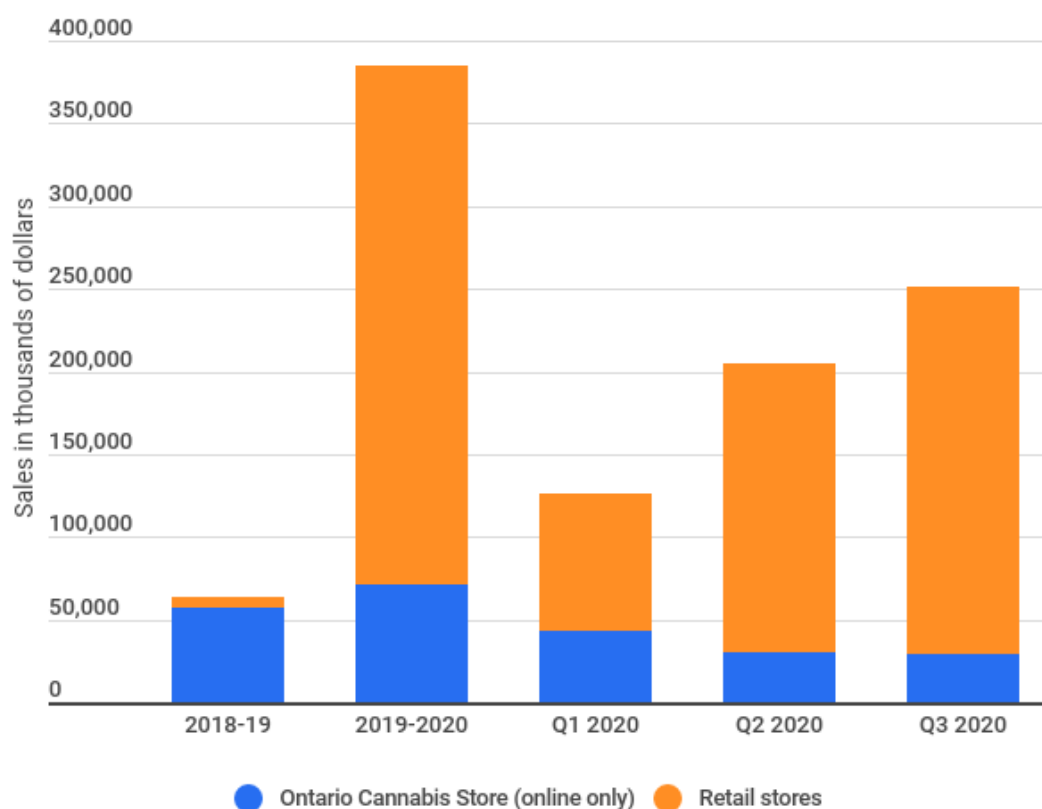
⁷¹ [Retail trade sales by province and territory – StatCan.gc.ca](https://www150.statcan.gc.ca/n1/pub/28-263-x/2020001/article/00001-eng.htm)

⁷² [Retail trade sales by province and territory – StatCan.gc.ca](https://www150.statcan.gc.ca/n1/pub/28-263-x/2020001/article/00001-eng.htm); [Population estimates, quarterly – StatCan.gc.ca](https://www150.statcan.gc.ca/n1/pub/28-263-x/2020001/article/00001-eng.htm)

Alberta leads the way in per capita spend on legal cannabis, followed by Prince Edward Island and Saskatchewan. Quebec has the lowest per capita sales by quite some margin.⁷³

A separate source for cannabis market data exists in the form of annual or quarterly reports from provincial cannabis agencies, which cover sales data in varying degrees of detail. Of these, the quarterly reports released by Ontario Cannabis Store and Alberta Gaming, Liquor and Cannabis are among the most detailed. These reports provide us with the best available data on the proportion of cannabis sold online versus in retail stores, as well as the types of products most commonly purchased.

Licit cannabis sales in Ontario since legalisation, Retail and Online



74

⁷³ [Retail trade sales by province and territory – StatCan.gc.ca](https://www150.statcan.gc.ca/n1/pub/25-001-x/2020001/article/00001-eng.htm)

⁷⁴ [Quarterly Review October 1 – December 31 2020, Ontario Cannabis Store](#)

Reflecting the pattern nationwide, the vast majority of cannabis in Ontario is bought in physical stores. Even in the first quarter of 2020 when, as a consequence of the Covid-19 pandemic, stores were shut for extended periods of time, retail sales far surpassed online sales. In 2020 as a whole, 17.8% of OCS's cannabis sales in Canadian dollars were online. In Alberta – a province with far greater retail store coverage than Ontario – this number was considerably lower at 1.6%.⁷⁵ In Quebec it was 8.2%.⁷⁶ Data published by StatCan a year after legalisation shows a clear trend between store roll-out and a decrease in the percentage of consumers buying online – the proportion of legal cannabis sales occurring online dropped from 43.4% in October 2018 to 5.9% in September 2019.⁷⁷ Data from those provinces which have released more detailed retail figures reveal a dominance of dried flower as the preferred cannabis product. In Alberta, large growth was seen in pre-roll products, and after October 2019, vapes became the best-selling of the new categories of product, however together these accounted for less than 5% of total sales.

Table 13: Per cent (%) of total cannabis by type, AGLC 2019–2020⁷⁸

Cannabis sales by type	2018–2019	2019–2020
Dried Flower	72.10%	63.46%
Milled Flower	4.36%	0.51%
Pre-Roll	5.97%	23.62%
Oils/Spray	11.57%	5.18%
Capsule/Soft Gel	5.69%	2.49%
Seed	0.31%	0.06%
Extracts	Not yet legal	0.13%
Vapes	Not yet legal	3.30%
Edibles	Not yet legal	1.05%

⁷⁵ [AGLC Annual Report 2019–2020 – AGLC.ca](#)

⁷⁶ [SODC, Annual Report 2020](#)

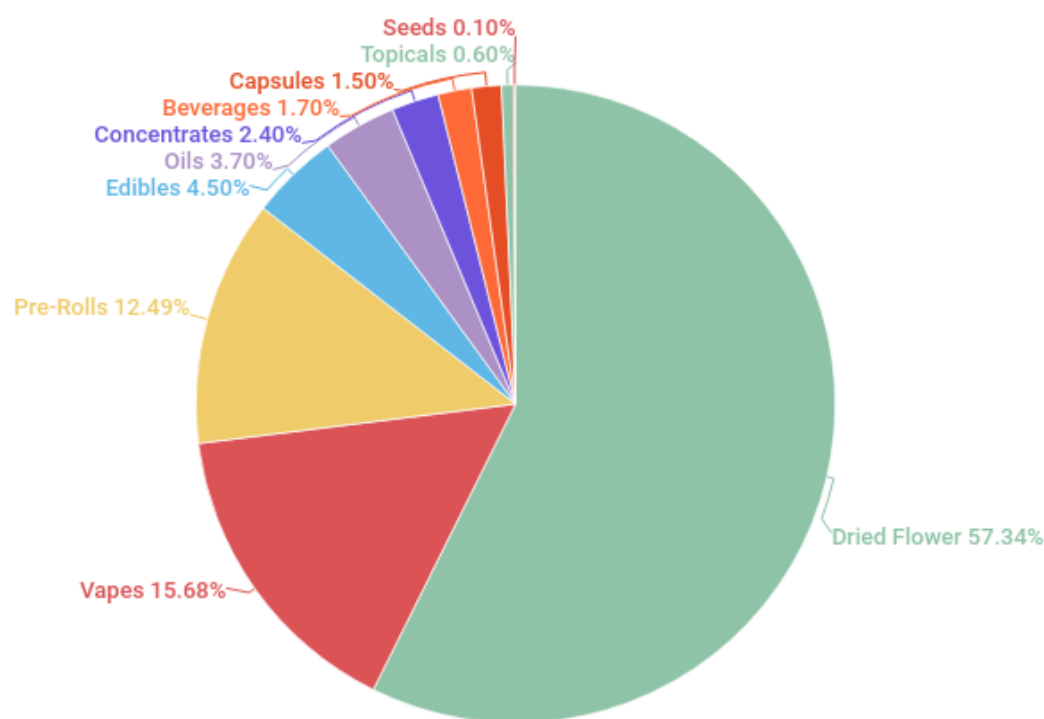
⁷⁷ [The Retail Cannabis Market in Canada: A Portrait of the First Year – StatCan.gc.ca](#); M. Armstrong, “Legal Cannabis Market Shares during Canada’s first year of recreational legalisation”.

⁷⁸ [AGLC Annual Report 2019–2020 – AGLC.ca](#)

Beverage (Non-Liquid)	Not yet legal	0.20%
-----------------------	---------------	-------

Although dried flower and pre-rolls make up the vast majority of cannabis sales in Alberta, this data was compiled only shortly after the legalisation of edibles and other cannabis products in October 2019. Data from the national cannabis surveys indicate that edibles use is rising amongst cannabis consumers, and so we can reasonably expect the total proportion of cannabis sales coming from these categories to change significantly in future years. Data from Ontario indicates a similar predominance for dried flower in total cannabis retail sales, but also taken from a more recent period in 2020, suggests that consumers are increasingly choosing vapes and edibles, over smokeable flower.⁷⁹ This is important because much of the policy discussion about how best to regulate cannabis use assumes that it is mostly a product that is smoked.

% of cannabis sales by category, Ontario cannabis store, 2019-2020

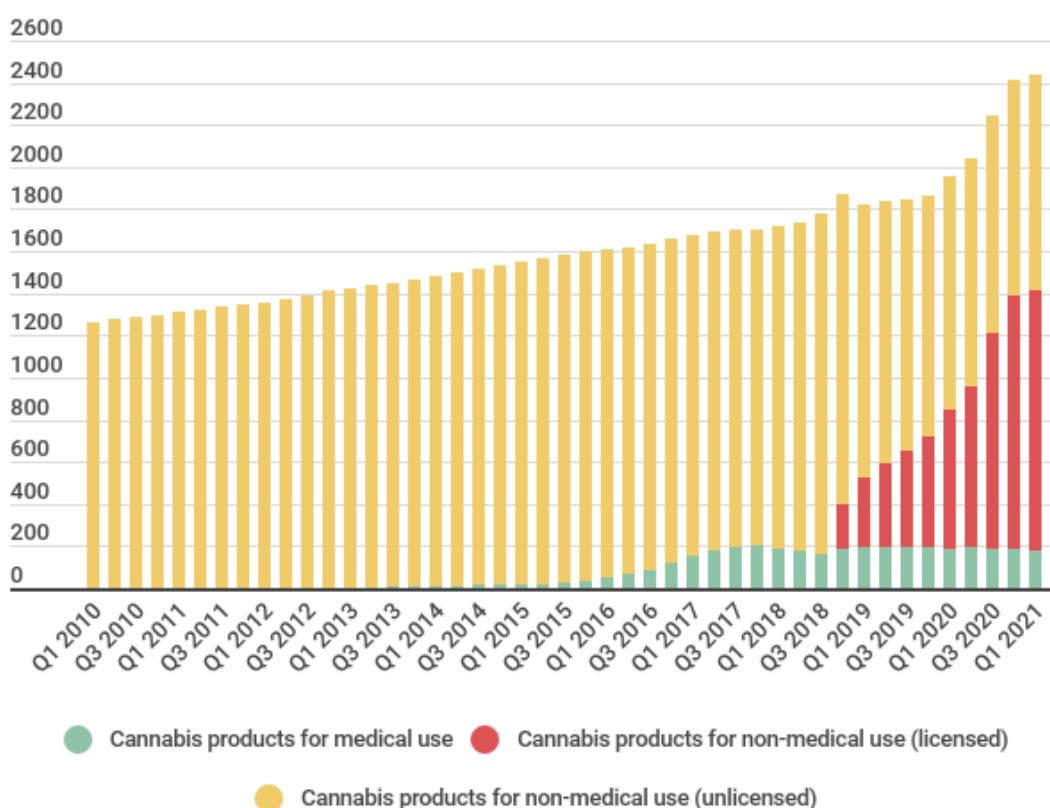


⁷⁹ [Quarterly Review October 1 – December 31 2020, Ontario Cannabis Store](#)

Estimates for national average household spend on cannabis products have also been compiled from the National Gross Domestic Product by Income and by Expenditure Accounts. These accounts draw on a broad range of survey and administrative data sources to provide a picture of the production and consumption of goods and services in Canada.⁸¹

Estimated household spending on cannabis had risen consistently for at least 8 years prior to legalisation. It is worth noting, moreover, that the increase of overall cannabis consumption did not dramatically accelerate with legalisation in Q4 of 2018, but rather did so only in Q1 of 2020, presumably once the roll-out of stores across provinces began to have an effect on cannabis availability. The data also reveal a consistent sharp increase in the proportion of cannabis expenditure captured by the legal market.

Canadian Household Final Consumption Expenditure on Non Medical Cannabis (\$M, 2012 Constant Dollars)



⁸⁰ [Quarterly Review October 1 – December 31 2020, Ontario Cannabis Store](#)

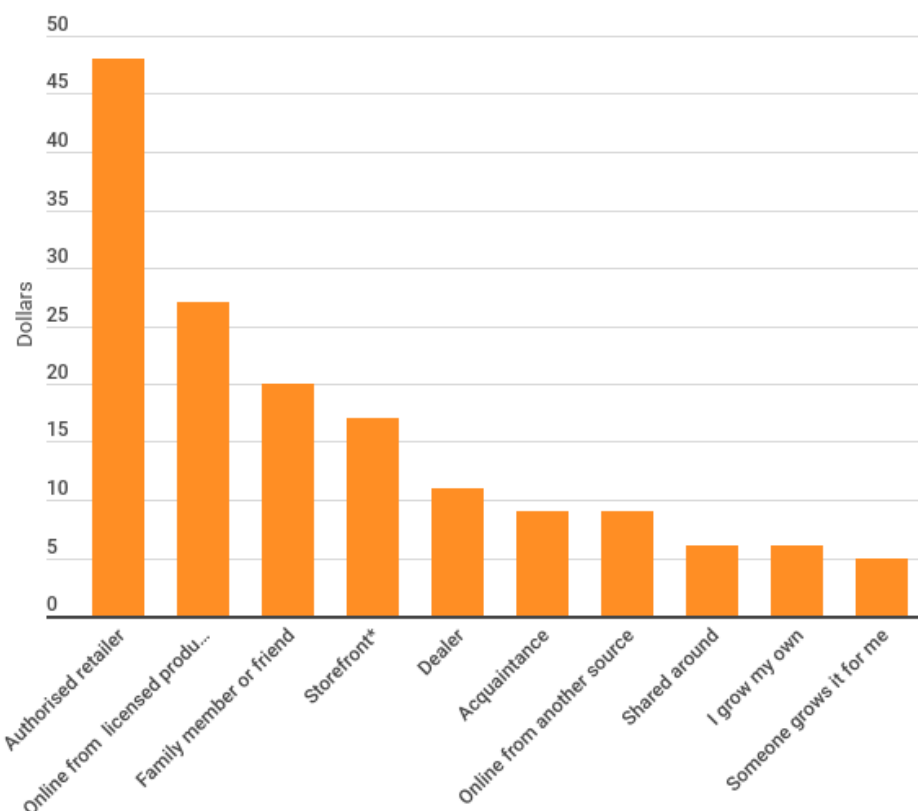
⁸¹ [National Gross Domestic Product by Income and by Expenditure Accounts – StatCan.gc.ca](#)

Sources of cannabis

Both the National Cannabis Survey and the Canadian Cannabis Survey have tracked the source from which consumers have obtained their cannabis. One consequence of the *Cannabis Act* is that the percentage of users sourcing their cannabis from the legal market has steadily increased since legalisation. The NCS records that 22.9% of cannabis users reported obtaining cannabis from a legal source just before legalisation in 2018 (although such an act was technically not possible for non-medical consumers). In Q1 of 2019, the figure had risen to 47.4%, before rising again to 68.4% in 2020. Over the same time period, the number of users sourcing their cannabis from an illegal supplier dropped from 51.3% to 35.4%.⁸³

Most recently, the survey conducted by Public First in Q2 of 2021 revealed that 66% of respondents who had consumed cannabis had obtained it from a legal source – only 11% reported acquiring it from a dealer.

Sources of cannabis in the past 3 months amongst legal age users, Q2 of 2021



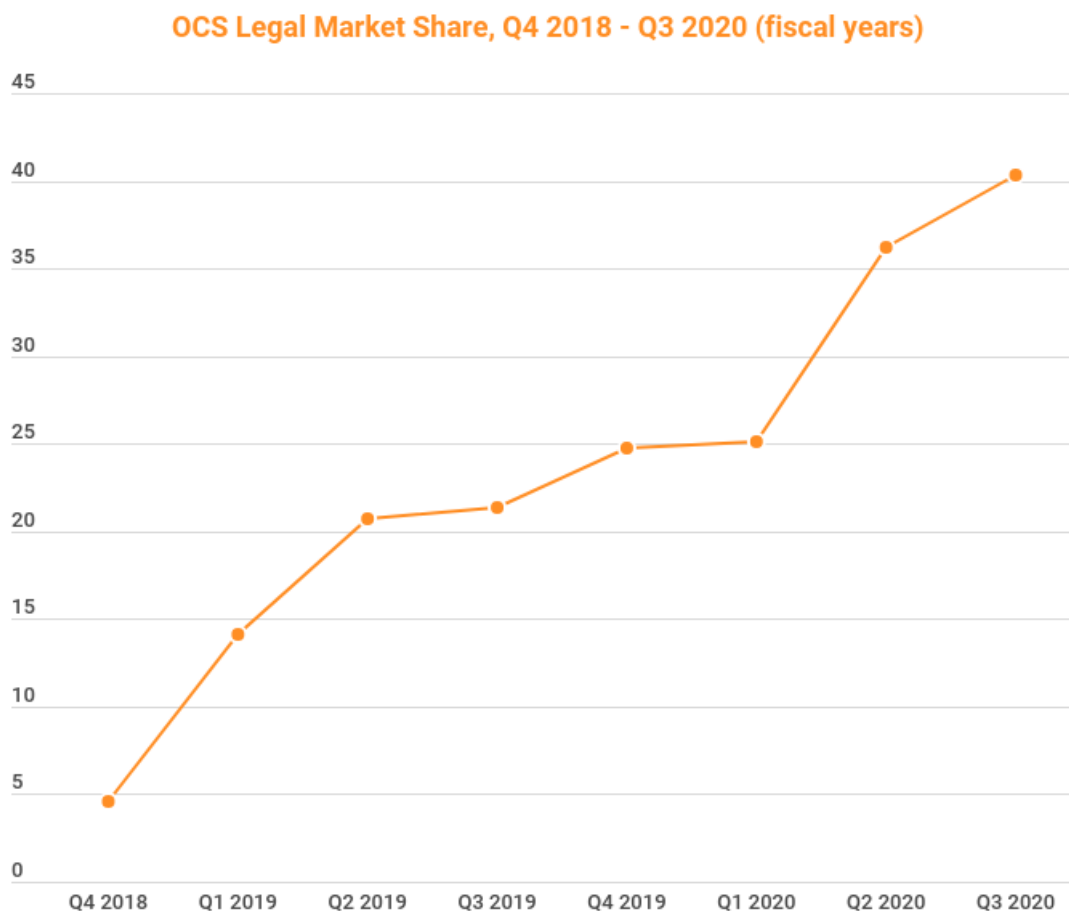
⁸² [Detailed household final consumption expenditure, Canada, quarterly - StatCan.gc.ca](https://www150.statcan.gc.ca/n1/pub/28-263-x/2021001/article/00001-eng.htm)

⁸³ [Rotermann, "Looking Back"](#)

Eliminating the illicit market

Undermining the illicit market in cannabis and directing money away from organised crime was a major policy aim of the *Cannabis Act*. After an erratic start in 2018, hampered by both supply constraints and retail licensing issues in numerous provinces, the legal retail market has begun to make progress in capturing the cannabis market. As Health Canada has yet to publish the vast majority of data collected through the National Cannabis Tracking system, however, estimates of legal market share are difficult to calculate.

The annual reports of Ontario and Quebec's respective cannabis agencies provide estimates of the share of the total provincial cannabis market captured by legal sales, working from published StatCan data. The figures provided by OCS's annual reports are shown in the graph below. Progress has been substantial, and licit retail has gone from supplying just 4.6% of the market in Q4 of 2018 to 40.3% by Q3 of 2020 (note that OCS reports in fiscal rather than calendar years).



84

SQDC's own figures estimate they have captured over 30% of the illicit market in cannabis.⁸⁵ Additional estimates of the share of the total cannabis market captured by legal retail are those produced by Michael Armstrong at Brock University in Ontario. Working backwards from Health Canada estimates of total national cannabis consumption and estimates of total provincial cannabis production by province, Armstrong has painted a picture of the proportion of the total cannabis market captured by legal retail in each province as well as nationally. Armstrong's figures suggest that by September 2019 Quebec had already captured a far larger portion of the illicit market – 54% – than the figures provided by SQDC suggest. Prince Edward Island, which achieved great coverage early on, captured by far the most at 70% of the total market share, and Ontario captured the least at just 13%.

Overall, these figures suggest that the degree to which provinces have successfully captured the illicit market corresponds quite highly to the average distance of a consumer from a retail cannabis store.⁸⁶

Tax Revenue

Cannabis is taxed in Canada as a legal consumer product attracting a federal excise duty and a provincial sales tax at point of sale. Canada's Ministry of Finance has not published accounts detailing the revenue gained from cannabis sales since legalisation. The only published data relates to the first five and a half months of legalisation, in which federal and provincial governments collected an estimated \$186m from excise taxes and general taxes on goods and services directly related to the sale of cannabis. Excise sales tax and adjustments account for \$19m of this collected by the federal government, and \$79 million collected by provincial governments. A further additional \$36 million was collected by federal general taxes on goods and services, and \$53 million from direct provincial general taxes on goods and services.⁸⁷

Some provincial budgets have also included projections of income from cannabis sales. Ontario's 2021 provincial budget projected that for 2021-2022 the province would claim a \$245m share of the federal cannabis excise duty, with a further \$170m in revenue from the Ontario Cannabis Store.⁸⁸ This represents a significant increase on the projected total of \$145m of federal cannabis taxes for 2020-21.⁸⁹ Quebec's cannabis agency, Société québécoise du cannabis (SQDC), calculated a total contribution of \$26.3m to the province in 2020, the majority of which will be used for research and education on the harmful effects of cannabis.⁹⁰

Prices

There is a lack of good quality data on the price of legal and illegal cannabis, though some provincial cannabis agencies have published data on the average price of cannabis sold in

⁸⁵ [SQDC 2020](#)

⁸⁶ M. Armstrong, "[Legal cannabis market shares during Canada's first year of recreational legalisation](#)"

⁸⁷ [At a Glance: Government revenues from the sale of cannabis: March 2019 – StatCan.gc.ca](#)

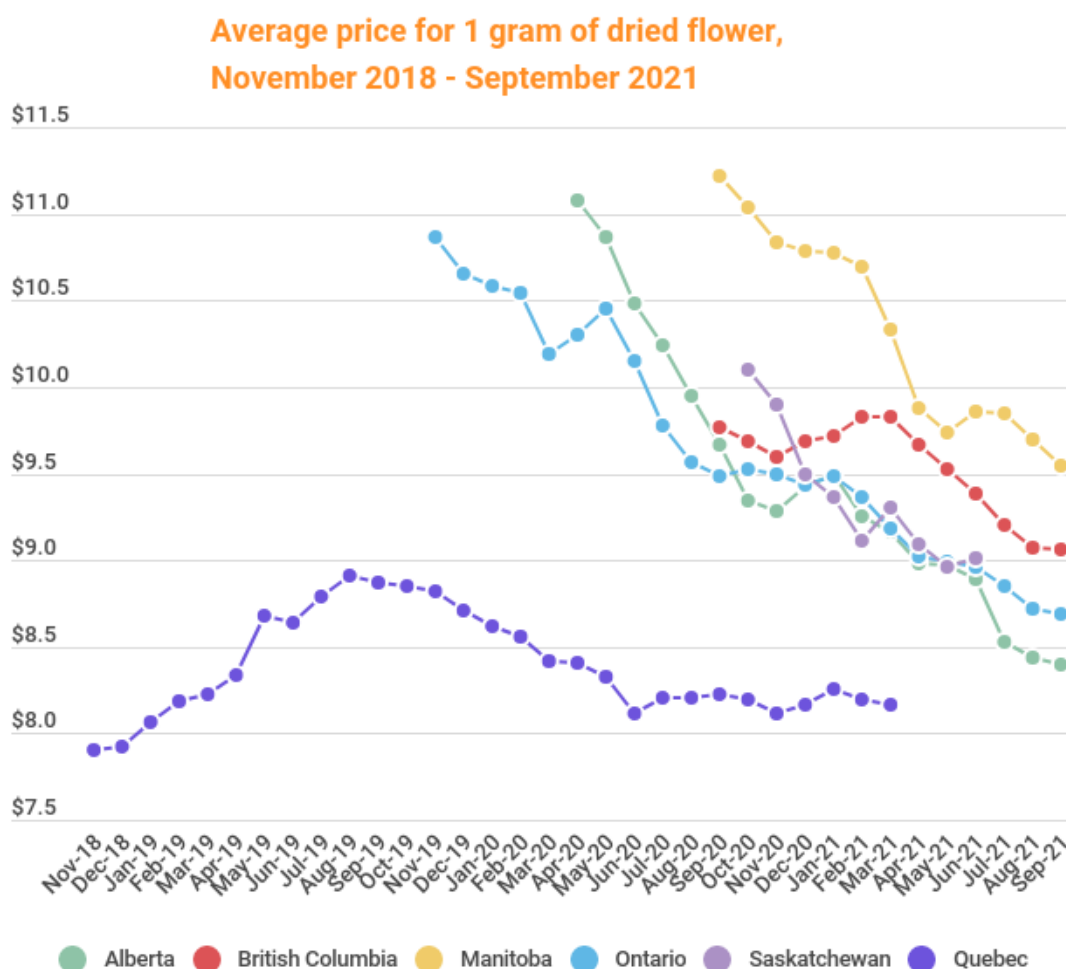
⁸⁸ [Ontario's Action Plan – Protecting People's Health and our Economy \(2021 Ontario Budget\) – Ontario.ca](#)

⁸⁹ [Ontario Ministry of Finance – 2020-2021 First Quarter Finances – gov.on.ca](#)

⁹⁰ [SQDC Annual Report 2020](#).

their retail stores and online.⁹¹ StatCan's own figures for the price of illicit cannabis rely heavily on entirely anonymous crowdsourced data. The other largest aggregator of illicit cannabis prices is Weedmaps, which has also been cited widely, although it is not comprehensive.

Drawing on data collected by CannStandard, which tracks cannabis markets around the world using a combination of primary research and machine-learning, however, the authors were able to create the following graph of the average price per gram of legal cannabis across several provinces in a number of periods since legalisation (it is worth noting that the Quebec figures are drawn only from the SQDC's online store, whereas the other figures are taken from both online and brick-and-mortar stores).⁹²



⁹¹ S. Mahamad et. al, [“Availability, retail price and potency of legal and illegal cannabis in Canada after recreational cannabis legalisation” \(2020\)](#)

⁹² Private correspondence with CannStandard. CannStandard collected daily prices from publicly facing listings. Store counts across the date range were as follows: Alberta – 181 stores; British Columbia – 61; Manitoba – 27 stores; Ontario – 674 stores; Saskatchewan – 7 stores.

Quebec continues to offer the lowest prices for cannabis, although other provinces are rapidly approaching it in price. Of the provinces tracked by CannStandard, Manitoba has the highest per gram price.

Price reductions in the legal market have made cannabis from the illicit market less competitive than at the start of legalisation. However, the arrival of a legal regulated market has not eliminated the illicit market, and though estimates vary, the continued operation of the illegal cannabis market is officially acknowledged. British Columbia's cannabis agency said in their 2019-20 annual report - *"The cannabis production industry has seen tremendous expansion and contraction, as producers work to overcome regulatory requirements and try to meet forecasted output and consumer need. The sector is struggling to remain competitive with illicit producers and retailers on price point."*

The illicit market continues to adapt to stay competitive and their prices have fallen as a result. According to the Ontario Cannabis authority: *"Retail stores had a decrease to an average of \$9.13 per gram, while prices found on the illegal market through analysis of online sellers also decreased, to \$7.76. The growth of value-priced, bulk offerings at 28 and 30 grams gave consumers access to quality cannabis at prices that were competitive or below the price paid on the illegal market."*

The majority of respondents to our survey indicated that they were acquiring cannabis legally, either through online purchasing, home grow, or from legal retail stores. However, a significant proportion were still sourcing their cannabis in a variety of unregulated ways, and the price is likely to be a major deciding factor.

Sales revenue

Data on sales revenue is not routinely published by provinces however surveys conducted by CannStandard - a market intelligence platform - has gathered data at sufficient scale to provide indicative numbers for monthly sales volumes, value of monthly sales by province, and estimated revenue per retail store. This data is published online and updated periodically (with some provinces like Quebec excluded).

CHAPTER 4: Comparing two provinces – retail in Alberta vs. Quebec

The distinct approaches to regulating cannabis sales across Canadian provinces allow for the retail and distribution models to be compared. Two provinces with large populations but different political cultures adopted contrasting approaches that provide some insight into the impact of legalisation, and the extent to which the proliferation of licensed retail stores may impact use.

We compared two provinces with markedly different approaches to retail licensing and store roll-out: Quebec and Alberta. Alberta has a predominantly private sector retail model, with a provincial licensing body and distributor, and no government-owned stores. This reflects the province's more conservative political climate and support for private enterprise. Quebec by contrast has a public sector model where the province owns and operates all stores and no private retail is permitted, reflecting its long history as a more corporatist or 'European' jurisdiction with less support for free market mechanisms.

We considered these two provinces specifically because of the difference in their approach to cannabis store roll-out and licensing, and because their respective governments adopted a policy approach to the sales of legal cannabis that offer two distinctive paths – one favouring a lean distribution model that keeps prices competitive, and the other favouring a high level of retail access, but higher prices for consumers.

Our investigation finds that Quebec's approach was achieved via a tightly controlled, government-managed retail model with higher setup costs, and ultimately far fewer stores, but generally lower operating overheads and more targeted population coverage, delivering the lowest price per gram in Canada by 2020. Alberta's approach was achieved by the supply and distribution being controlled by the province, but where licensing of all stores is a market mechanism and demand-led, where private sector applicants absorb the upfront costs of entering the cannabis retail sector, but are able to open stores wherever they choose, so long as they meet all the application requirements (for ownership, design and security), and comply with local municipal rules on zoning (and provincial rules on distance to schools etc).

Our analysis shows that since October 2018:

- Alberta's approach is less efficient at delivering the optimum number of stores in the most efficient location to reach the maximum population coverage. Consumers in Alberta must absorb higher prices from a less efficient supply chain where a 'middle-man' wholesale distributor controls the supply from licensed producers.
- In Quebec, consumers benefit from lower prices that flow from having a leaner distribution model where the province can negotiate as a single buyer supplying directly to its own stores. However, the trade off is that there are fewer stores and these stores are often further from where residents live (on average).

- Contrary to expectations however, the population coverage provided by the retail model in Quebec is almost as good as the private model in Alberta, even though Alberta has 10 times as many stores (and 18 times as many on a per capita basis). This shows that Quebec's state-run model which proactively identified the best locations proved efficient at locating new retail stores where they were needed, and the lower supply chain costs were able to support generally lower wholesale prices that kept the price of legal products falling over the period 2018-20.
- Alberta by contrast was able to make efficiencies and reduce average end-product prices over the same period, but they remain higher than similar products in Quebec - reducing the competitive advantage with the illicit market. The large growth in retail stores was driven by applications, not by design, so some parts of Alberta have an over-supply of stores relative to the local resident population.

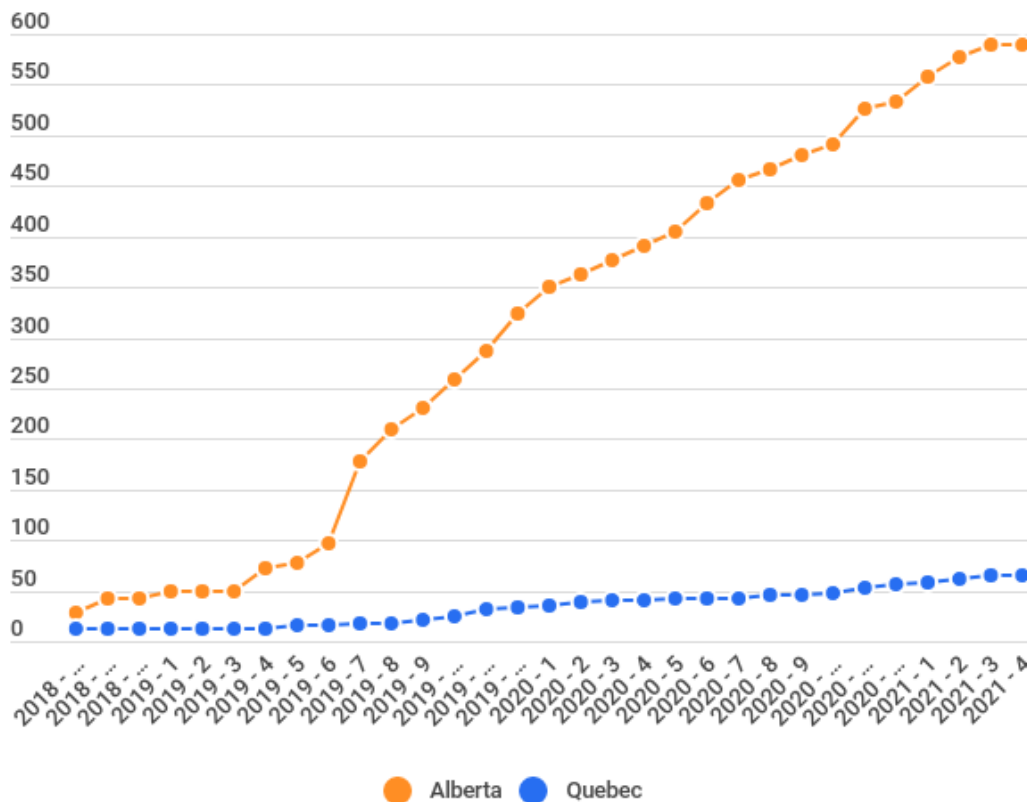
Methodology

We identified all existing stores in Alberta and Quebec on the 18th March 2021. We then estimated the dates these stores opened on. In Alberta, we used the initial effective date of the store licensing for this, which can be found from the AGLC website. These may be slightly inaccurate as some stores may open after receiving their license, although this is expected to be the best available indication of store opening. In many instances we expect that stores will have attained the license for their opening date.

For Quebec, this was more challenging, as the SQDC does not make opening dates available through their website. As there were fewer stores, this was instead handled manually, finding out the opening dates of stores through local media and the SQDC's official social media channels. There were 2 stores which were impossible to identify exact opening dates for, so the latest possible date of opening was used in these instances based on the more general indications of opening date that we could identify (e.g. Winter 2021).

From these estimates we can see the following:

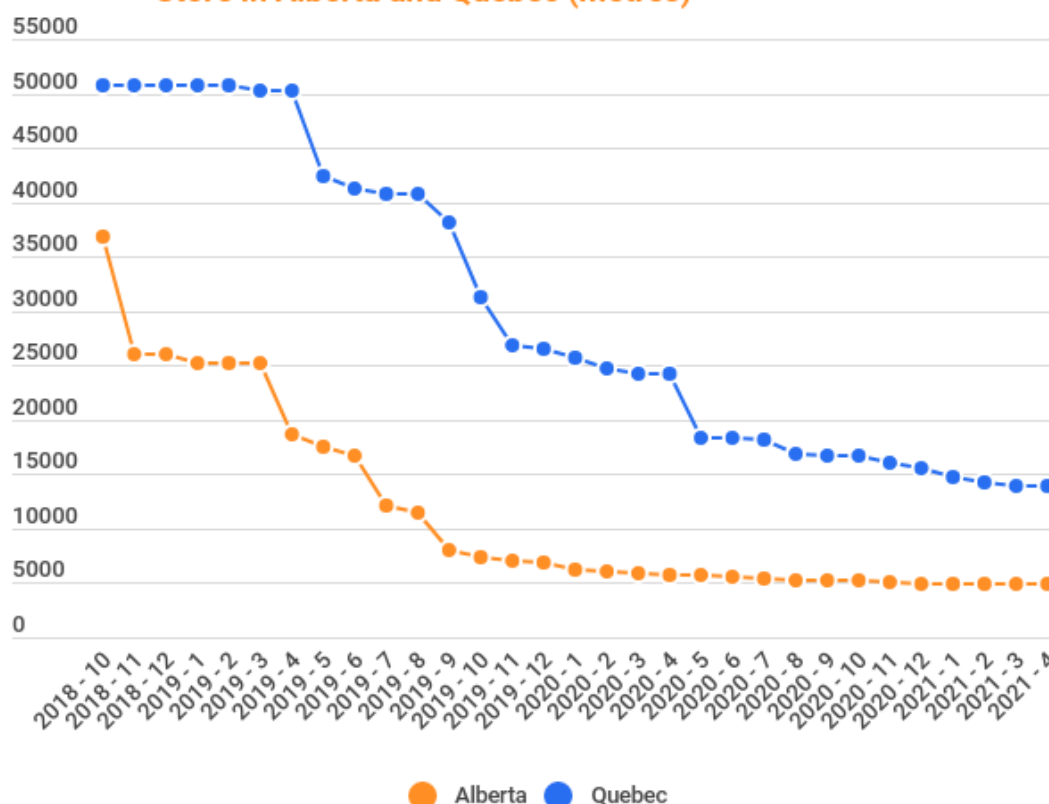
Store Counts in Alberta and Quebec since legalisation



Alberta began with 2.4 times as many stores as Quebec, but now has 9 times as many stores. This is despite having half the population of Quebec. In order to look at the placement of stores, we took the post code of each store and mapped it onto a latitude and longitude estimate through Google Maps. We then took Dissemination Areas, including the representative latitude and longitude points from Statscan Geographic Attributes File. Using the haversine formula, we calculated distances between each Dissemination Area, and each store, within Alberta and Quebec. From this we generated some estimates of how close people in the two provinces now live to cannabis stores, and how this has changed over the first few years since legalisation.

Firstly, we estimate a weighted average distance for residents of Quebec and Alberta in each month since October 2018.

Weighted Average Distance from nearest Cannabis Store in Alberta and Quebec (metres)

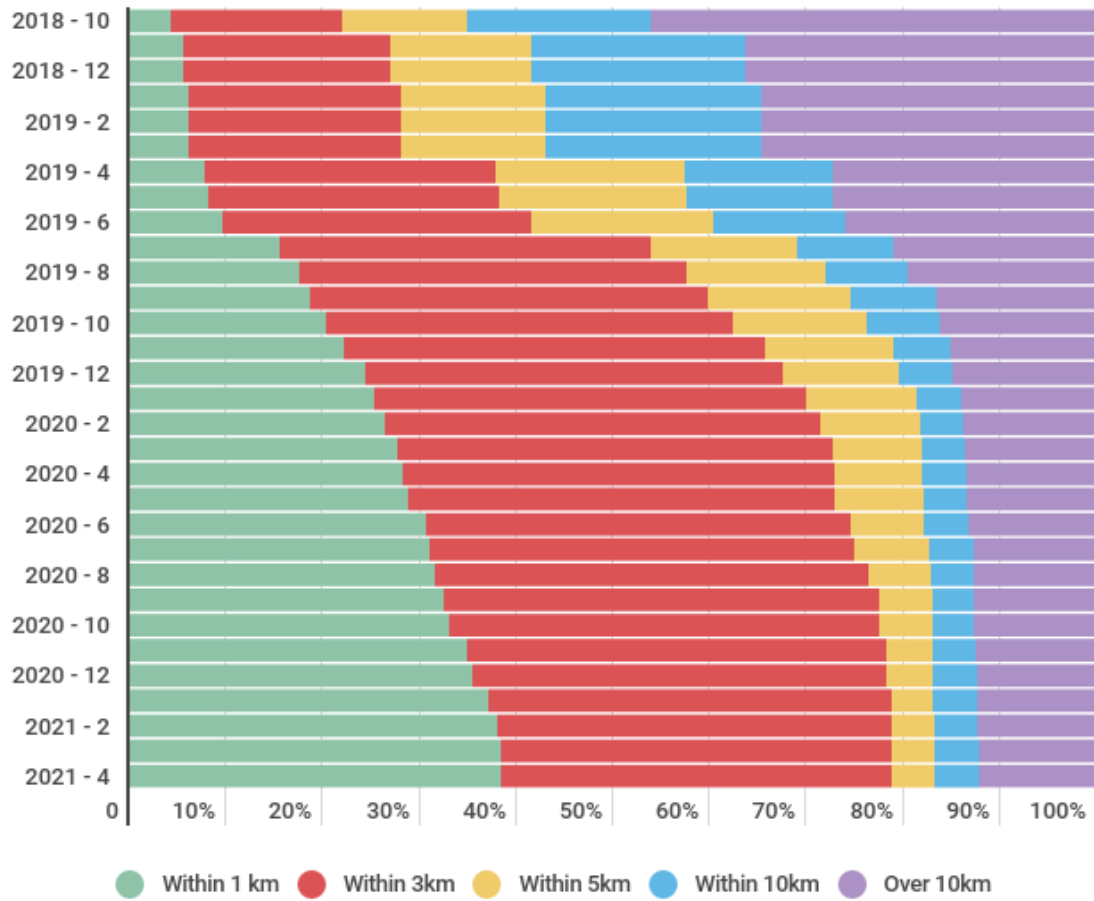


These calculations showed that on the day of legalisation someone in Alberta was on average 37km from a store, whilst in Quebec they would be 51km. Over the last few years these numbers have dropped respectively to 5km in Alberta and 14km in Quebec.

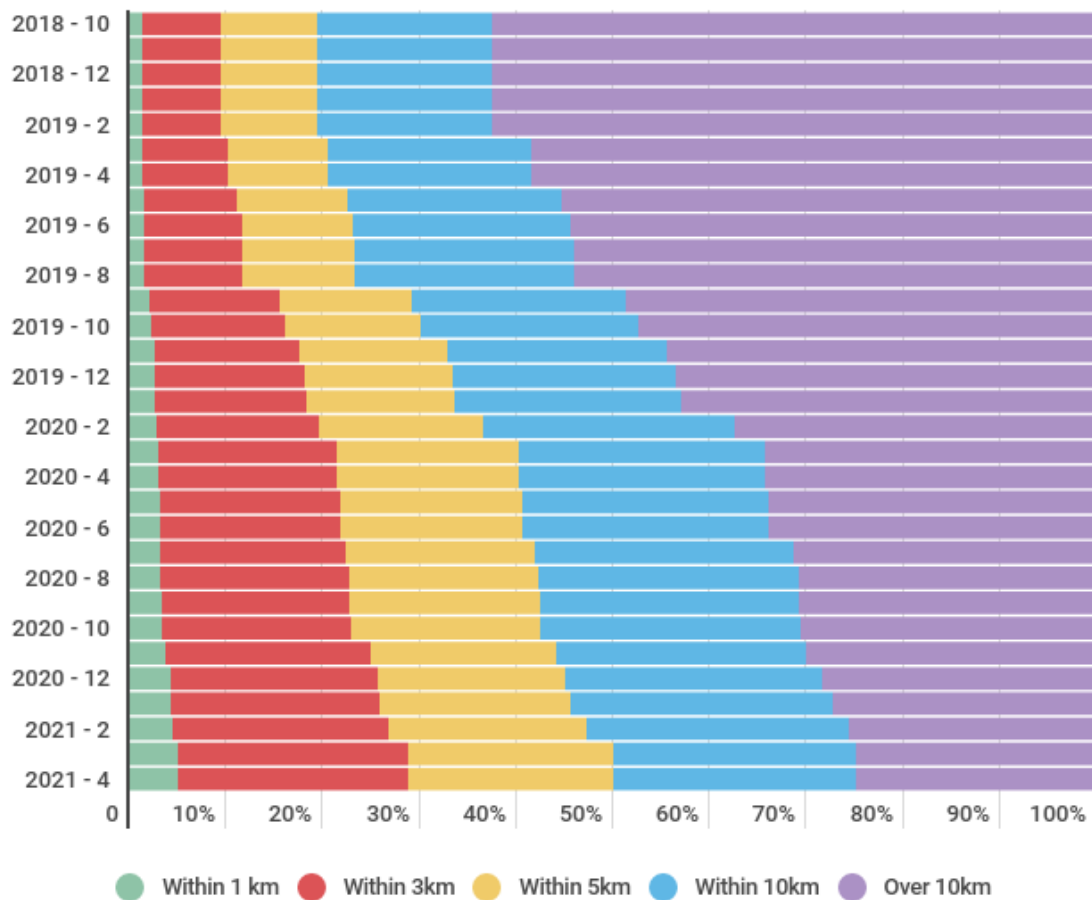
As it stands, we estimate that 38% of Alberta residents live within 1km of a store, and 79% within 3km. In Quebec we estimate this to be 5% and 29% respectively. 88% of those in Alberta live within 10km, while in Quebec this was 75%.

When we look at the trends in store proximity over time, we can see that Alberta has seen much more growth in the proportion living within 1km and 3km of a store. This has had the effect of reducing the proportion who are within 10km but more than 3km from a store. In Quebec the change has been different; there has been steadier growth among all the proximity bands. In other words, the growth among those within 3km of a store has been accompanied by growth in those who live more than 3km but less than 10km from a store.

Alberta Store Proximity



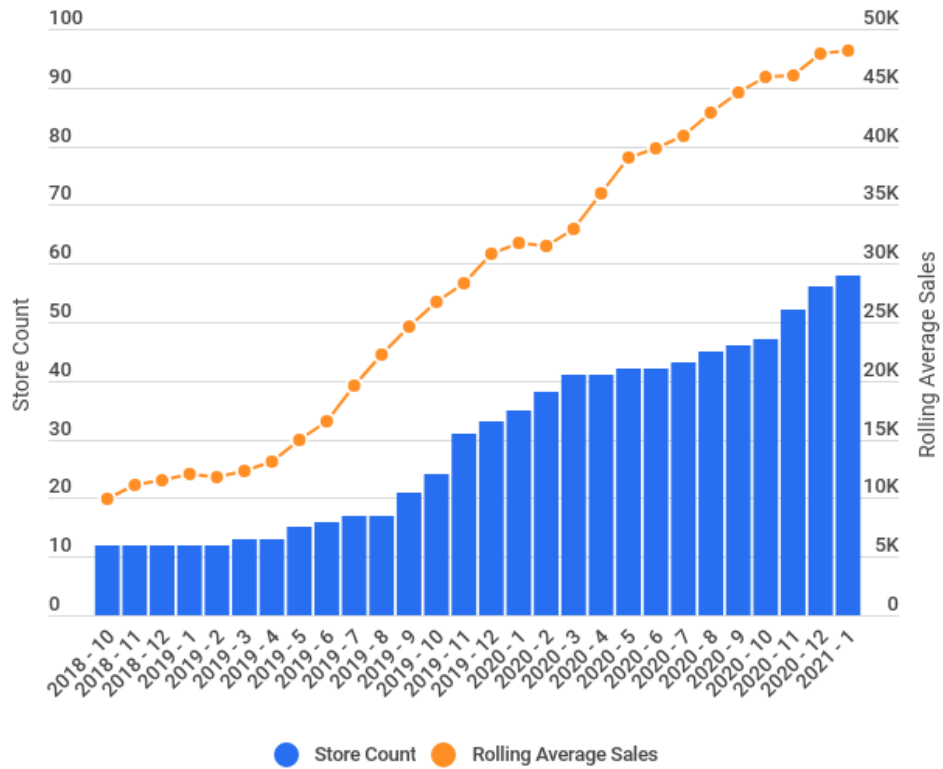
Quebec Store Proximity



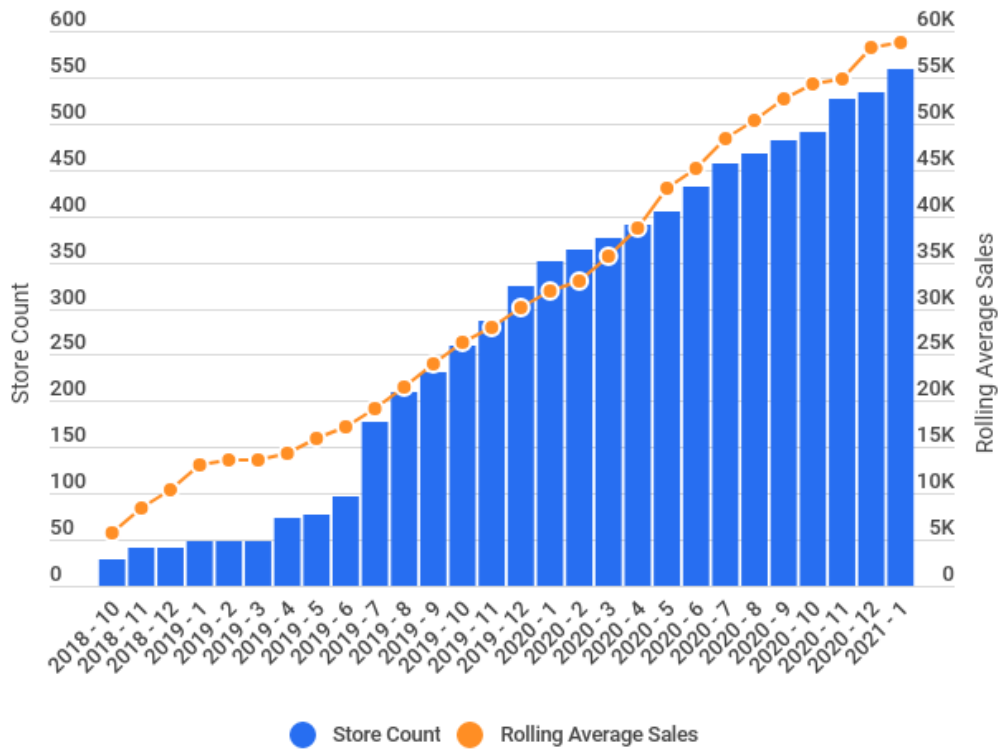
The likely reason for this is that stores in Alberta have concentrated mainly into urban areas. A store opening in Quebec is more likely to represent the first store opening in a specific town, allowing access to a new group of individuals who live relatively close. In Alberta, there is clustering so stores are often opening up in areas with stores already nearby, which means many more people are now in close proximity to stores.

It is clear from StatsCan estimates of cannabis sales that increasing store count has come hand-in-hand with increases in sales. Perhaps the most obvious indicator of this is in Quebec where sales were relatively stable in the first 5 months after legalisation while store-count stayed at 12, but then began to increase alongside the opening of new stores.

Quebec Store Count and Rolling Average Sales



Alberta Store Count and Rolling Average Sales



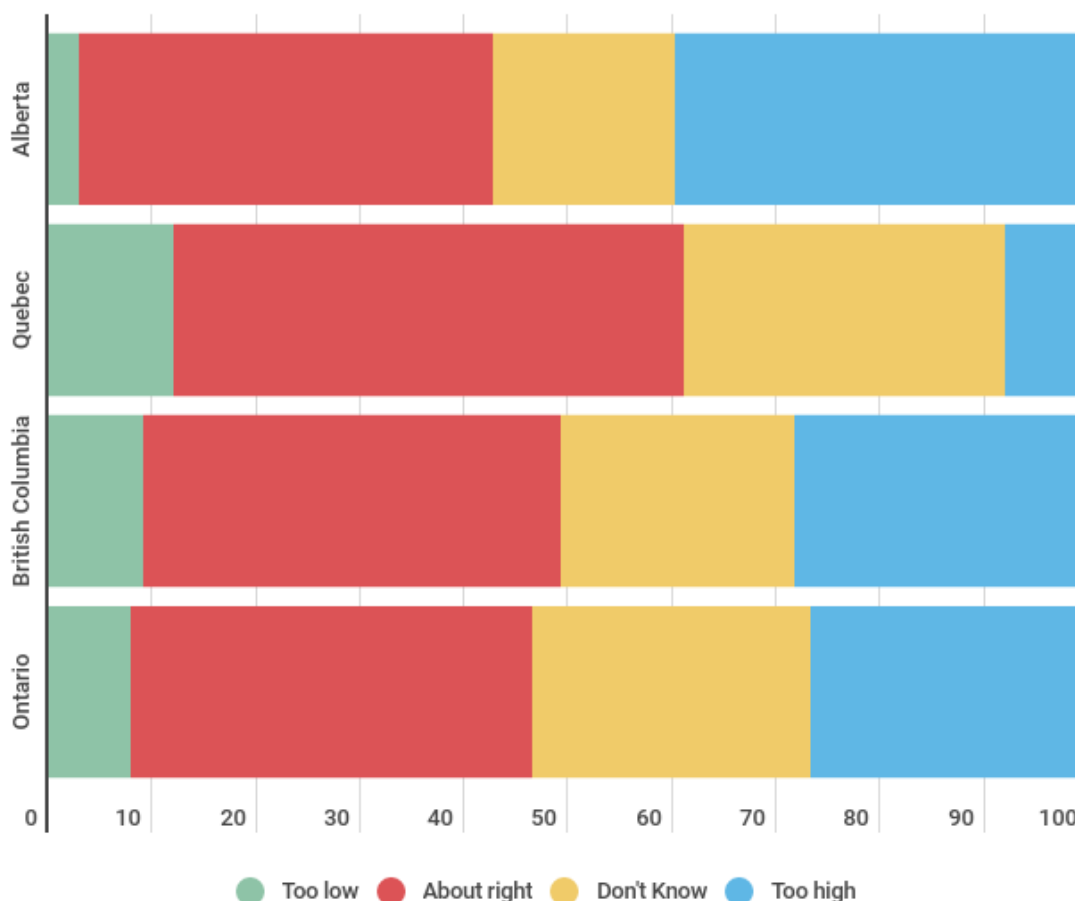
The results of our polling within Alberta and Quebec reflect the findings of this analysis.

	Alberta		Quebec	
	Estimated from census data	From survey	Estimated from census data	From survey
% within 1 km	38%	32%	5%	8%
% within 3 km	79%	62%	29%	28%
% within 10 km	88%	84%	75%	56%
Weighted average distance (km)	5	5.4 – 3 outlier responses removed at 1000, 2200, and 8000	14	10.24 – No outlier responses removed
Note: The figures from the survey include only those who knew where their nearest store was.				

The Public First polling results align relatively well with the census data, particularly on the proportions within 1km, which is where we would hope to align most accurately given this group is the most likely to be aware of where their nearest shop is. As we first asked if respondents knew where their nearest store is located, we find that the gap between the proportion in Alberta who know this (74%) and the proportion in Quebec (56%) is quite indicative of the impact of Alberta's broader roll-out.

While our analysis through the census data is likely to give us stronger estimates of these distances, the quantitative sample allows us to see what impact (if any) these different retail approaches have had on consumer opinions towards licensed stores. The clearest impact is when we ask whether respondents feel the number of cannabis stores in their community is too low or high, or about right. Alberta had the highest rate of people saying that there were too many stores at 40%, the same as the number saying it was about right. While Quebec has slightly higher rates who said the number was too low (12%), a large proportion did not know (31%) and therefore only 8% said the number was too high.

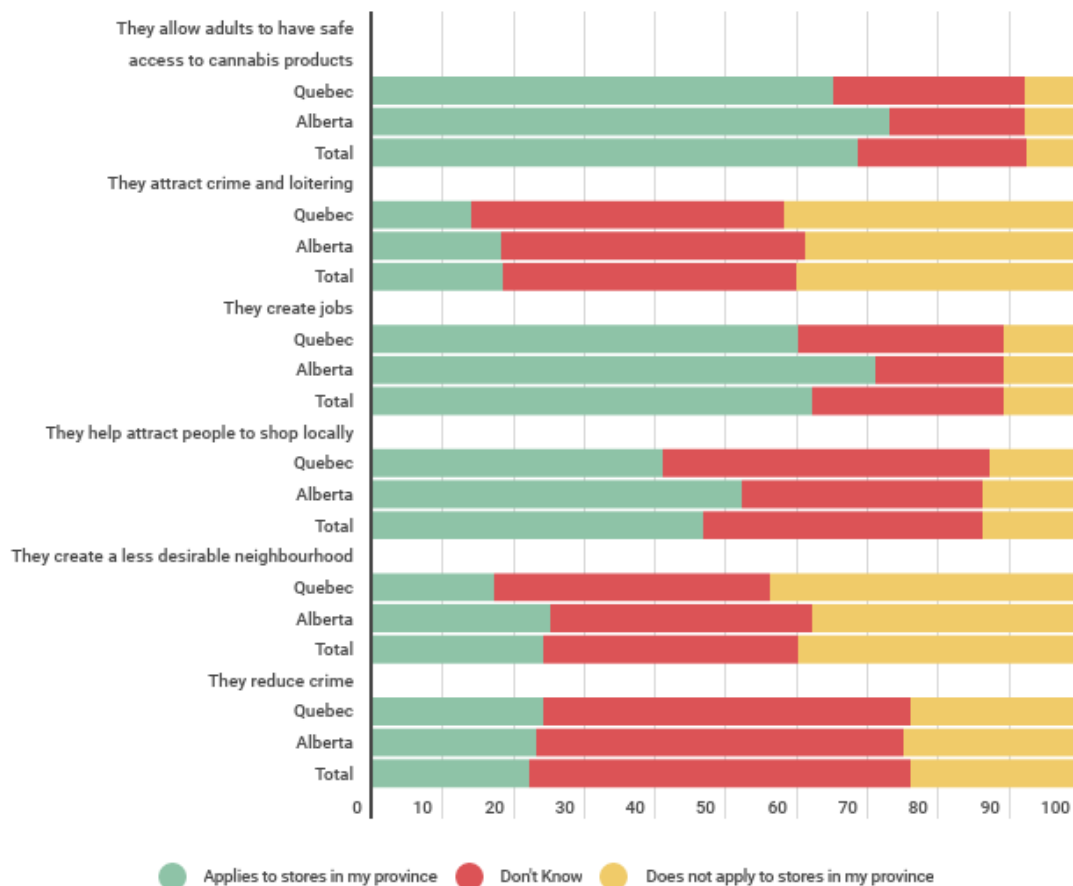
Do you feel the number of cannabis stores in your community is...



This replicated when we asked the subtly different question of whether people would prefer for there to be more stores in their local area, or fewer. In Alberta, 42% of respondents wanted there to be fewer stores, 38% felt the amount was right, and 5% wanted there to be more. In Quebec, 19% wanted fewer, 45% felt the number was right, 14% wanted more. This gives a clear indication that the rate of growth of the legal cannabis market in Alberta is meeting with some objection from Alberta residents.

The same survey found that those in Quebec are more likely to believe that the cannabis sold in their province is of a high quality (51%) than those in Alberta (40%). This perception was consistent across both those who had used cannabis before (where 72% in Quebec said high quality compared to 59% in Alberta) and those who had not (23% said high quality in Alberta, 34% in Quebec).

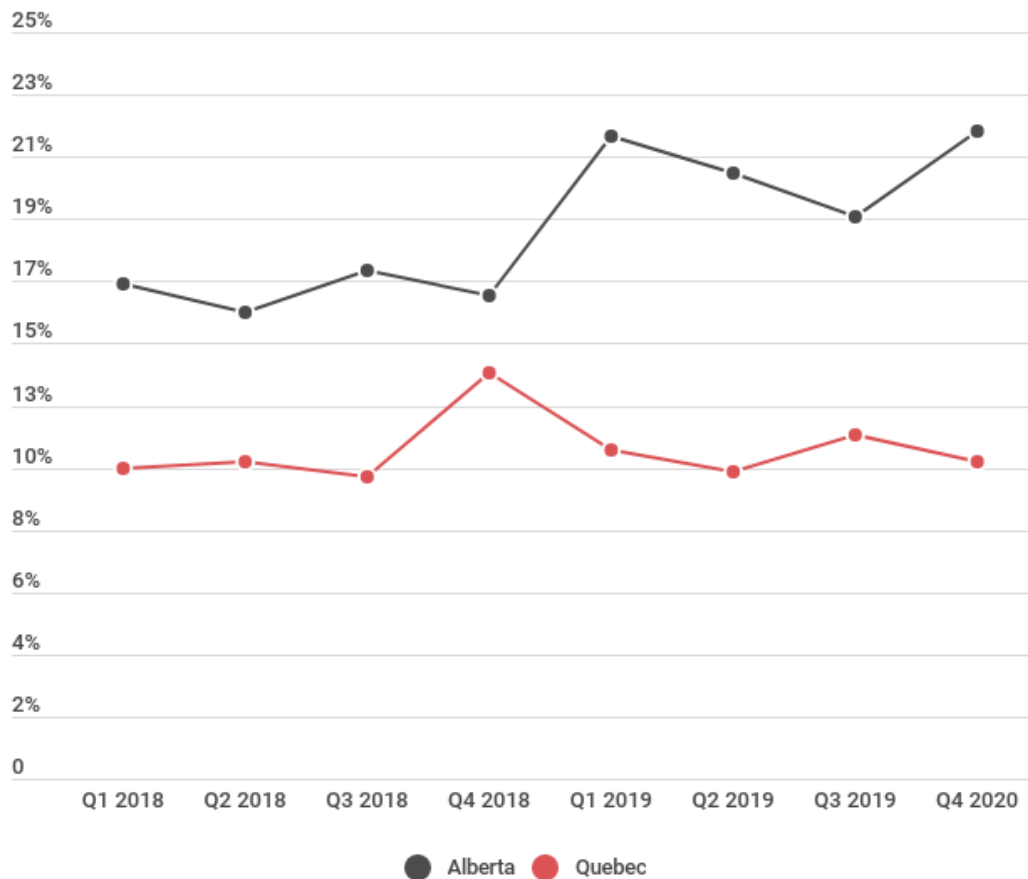
For each of the following, please indicate if they apply or do not apply to cannabis stores in your province



We find similar proportions in both provinces who feel that the cannabis sold in their province is safe, and who say it is expensive. Those in Quebec are less likely to say that the stores in their area create a less desirable neighbourhood (25% of those in Alberta say they do, 38% say they do not, compared to 17% and 44% in Quebec). There were some areas where Alberta opinion towards local stores performed better than in Quebec. For example, those in Alberta were slightly more likely to feel that the stores in their area allow adults to have safe access to cannabis products (73% to 65%) although largely due to a higher rate of “Don’t Know” responding in Quebec. Similarly those in Alberta were more likely to feel that the stores in their area create jobs (71% compared to 60%), and attract people to shop locally (52% vs 41%). Opinions on legalisation were typically consistent between the two provinces.

Finally, legalisation appears to have had more of an impact on the prevalence of cannabis use in Alberta than in Quebec. Whereas cannabis use within the past 3 months in Quebec has – after a brief rise in Q4 of 2018 – returned to around pre-legalisation levels, cannabis use in Alberta has risen by several percentage points.

% of Canadians aged 15 and over who had consumed cannabis within the past 3 months - Alberta and Quebec (National Cannabis Survey)



Unfortunately, historical data on provincial use does not extend beyond the beginning of 2018, so it remains unclear whether the upward trend in cannabis use in Alberta is related specifically to legalisation. Data on the frequency of cannabis use in each of these provinces is also sporadic, as the major surveys have typically not had large enough sample sizes to report results.

CHAPTER 5: Public attitudes to cannabis & legalisation

Polling for this project explored whether public attitudes to legalisation has shifted since the *Cannabis Act* and also examined the level of support among Canadians for potential changes to the legal regime for cannabis.

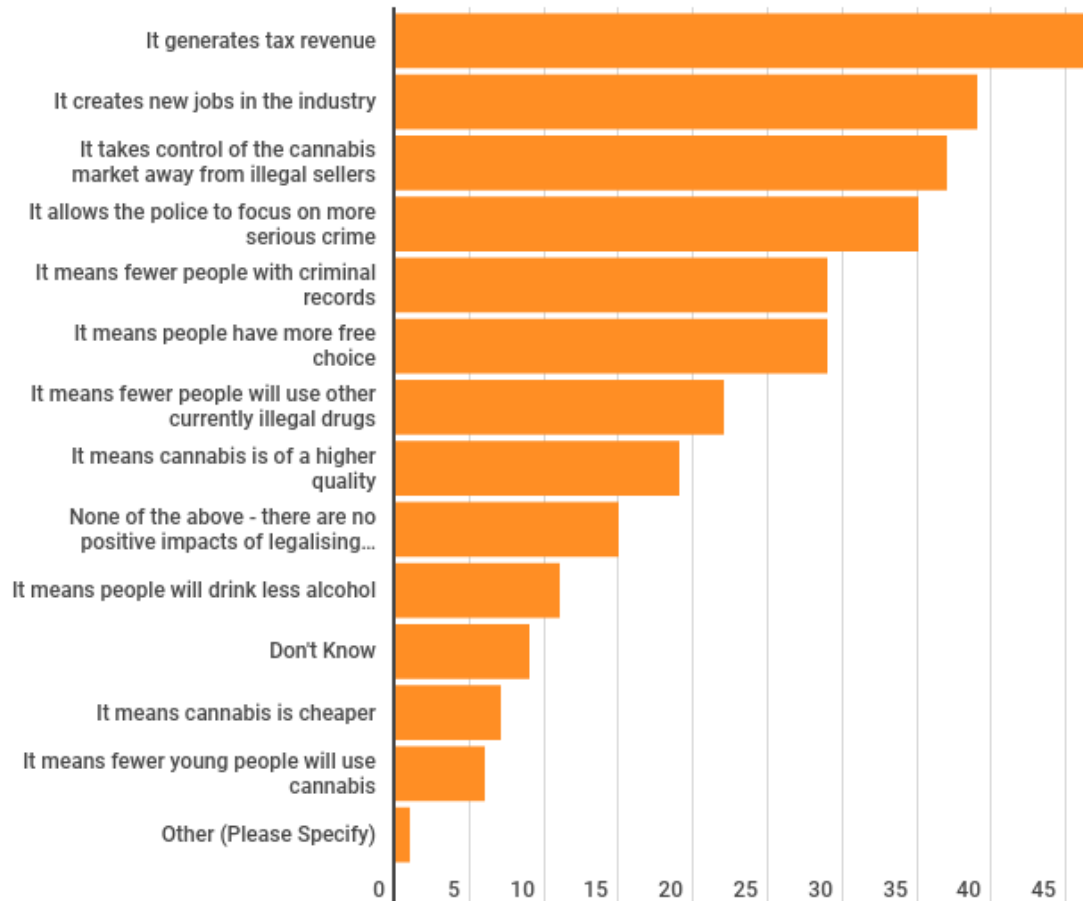
Attitudes to legalisation

Support for the legalisation of cannabis has grown a small amount since October 2018. Whereas about 46% of Canadians supported legalisation on the eve of legalisation with 30% opposing it, our survey found that 53% of respondents approved of legalisation now, and only 18% opposed it. As many as 49% Canadians thought legalisation had gone well overall – only 15% thought it had gone badly. The remaining respondents either did not know or considered legalisation to have gone neither well nor badly. A total 40% of Canadians thought that other countries should follow Canada's example and also legalise the drug in their jurisdiction, with only 20% disagreeing.

Canadians were asked a number of questions about the impact they thought legalisation had had. People were clearly sceptical about some of the public health rationales of legalisation – 54% of respondents thought that more people were using cannabis as a result, and only a small majority of respondents thought they had learned more about the health risks of cannabis since legalisation.

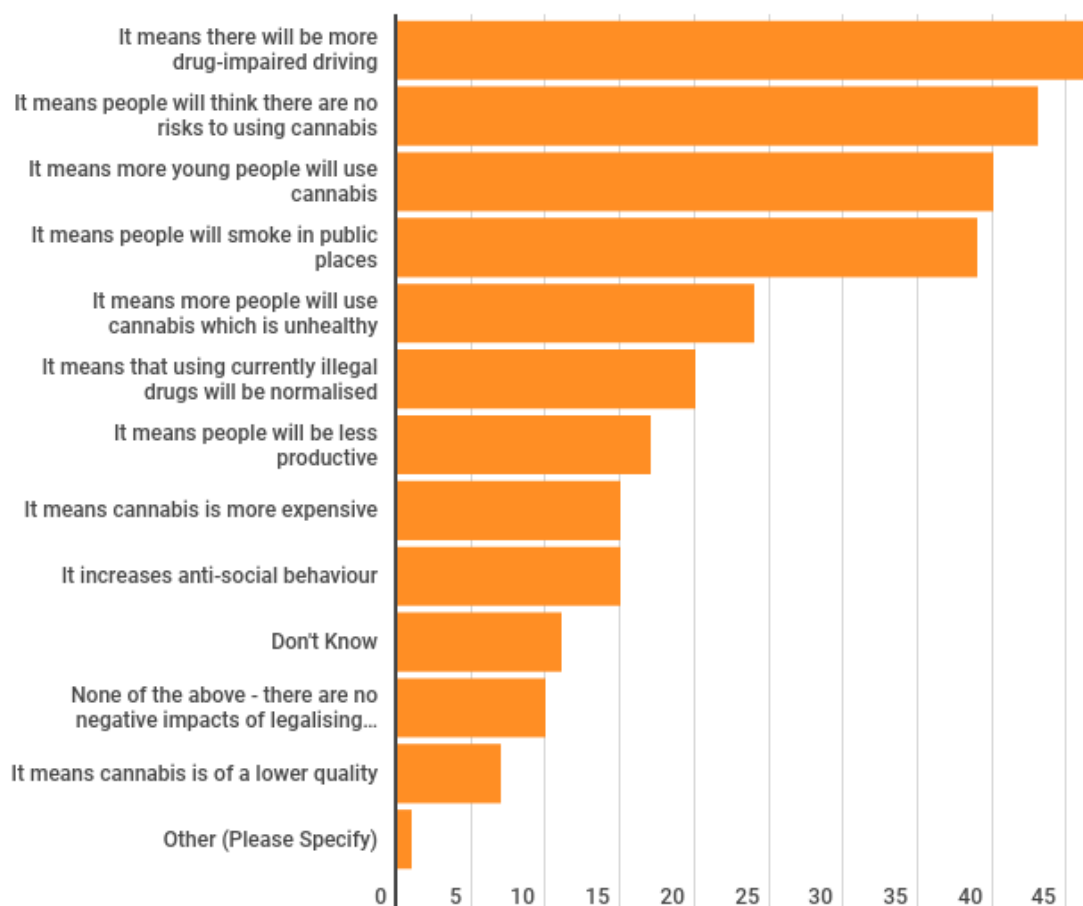
Respondents were resolutely practical in their consideration of the impact of legalisation. By some margin, respondents considered the generation of tax revenue to be the most positive consequence of legalisation. The creation of new jobs was also a popular response, followed by the elimination of the illicit market and the prospect that police could focus on more serious crime. Only 6% of respondents thought that decreasing use among youth was one of the positive impacts of legalisation, despite it being a key goal of Bill C45.

What would you say are the positive impacts of legalising cannabis, if there are any? Please select any which apply



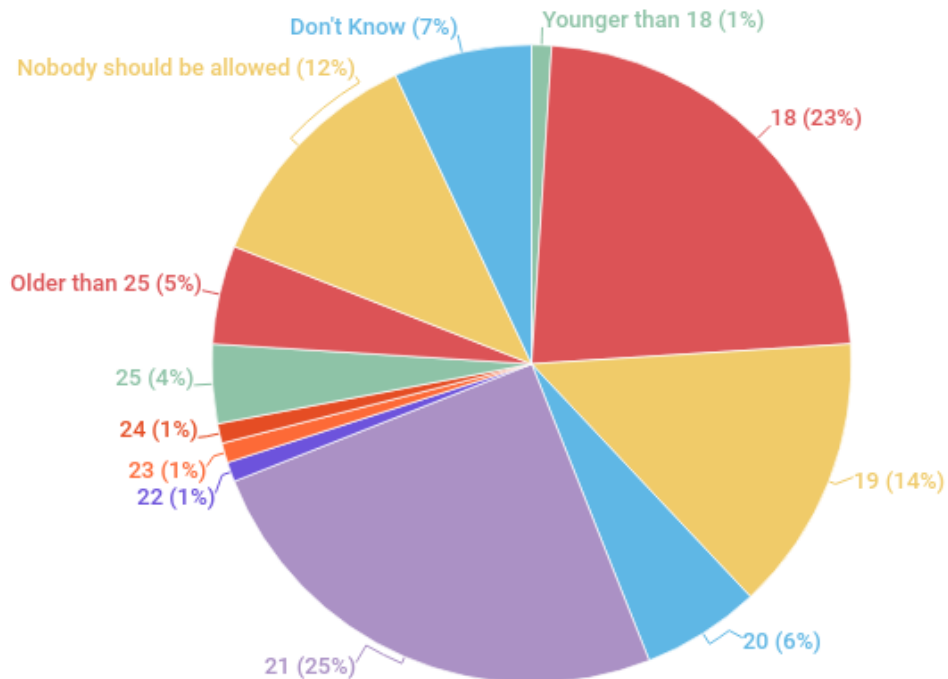
When it came to the negative impacts of legalisation, the prospect of increased drug-impaired driving worried respondents the most, followed by the possibility that people would believe cannabis to be harmless, that more young people would use cannabis, or that more people would smoke in public.

What would you say are the negative impacts of legalising cannabis, if there are any? Please select any which apply



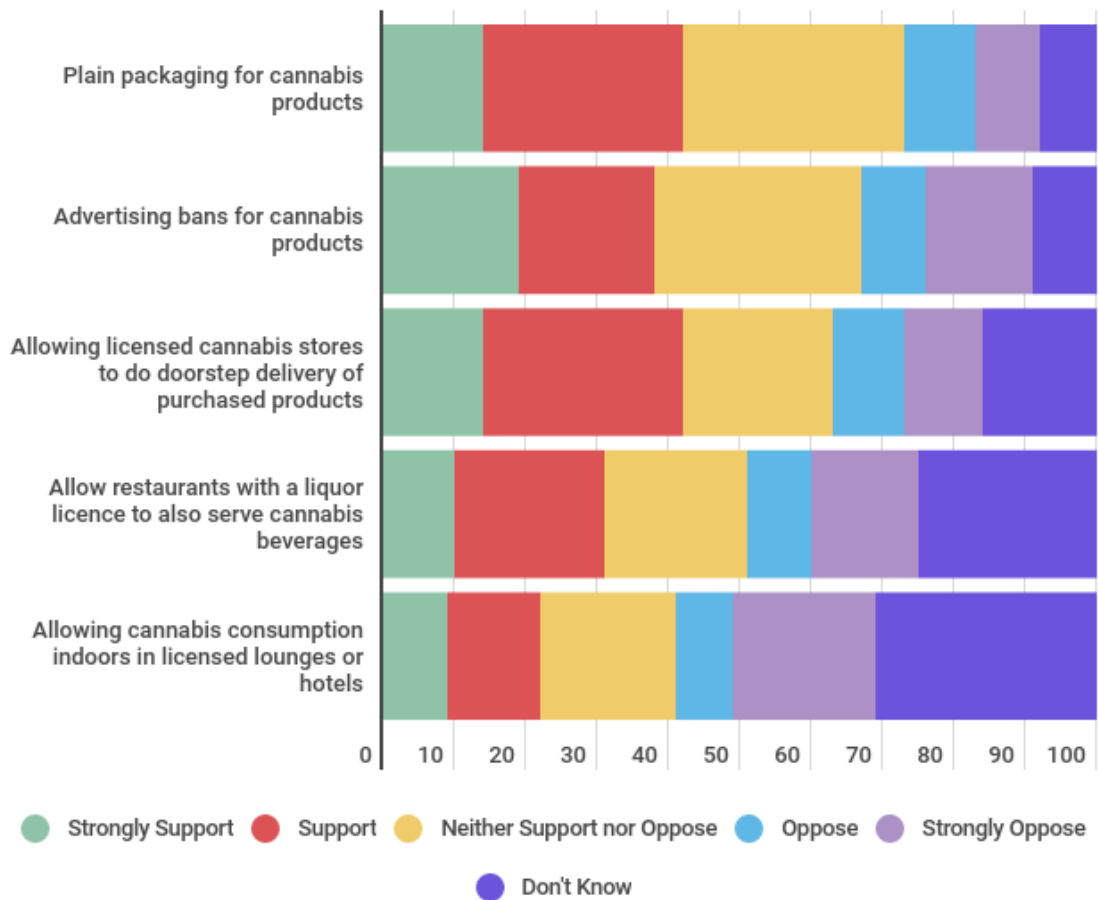
The legal age of consumption for cannabis remains a contested issue. 18 or 21 proved to be the most popular contenders, each receiving support from around a quarter of Canadians. A further quarter, however, either think that cannabis should be available only to those older than 21 or that no one should be able to buy cannabis. Excluding those who thought no one should be allowed to purchase cannabis, 49% of respondents thought there should be a higher minimum age than the legal age in most provinces (19).

What do you think is the right age to be legally able to purchase and use non-medical cannabis?



We also asked respondents for their views on the specifics of cannabis regulation. Overall, the Canadian public are strongly in favour of the current restrictions around cannabis advertising. Support was strong for the propositions that cannabis companies should be restricted from advertising in the same manner as tobacco companies and that cannabis products should have plain packaging. Overall support also existed for the proposition that cannabis should be made cheaper to encourage users to switch to buying legal cannabis, and also for an outright ban on advertising cannabis products.

Would you tend to support or oppose the following?



In terms of how the legal market might evolve, some current proposals being debated in the Canadian media are in response to industry arguments that legal cannabis is still unable to meet consumer needs or to compete fairly with the illicit market (or established industries like alcohol). On these the survey showed a mixed reaction. Respondents generally supported doorstep delivery of cannabis by licensed retailers – now becoming established in provinces like Ontario after the trial during the COVID-19 pandemic – but respondents opposed the sale of cannabis beverages by restaurants with a liquor license and strongly opposed permitting the consumption of cannabis in licensed hotels or lounges. This indicates that further liberalisation of the regulations governing legal cannabis sales may not meet with public approval in Canada at this time.

Conclusion

Canadian adults have had access to cannabis as a legal, regulated product country-wide since 17 October 2018. The move to make an illicit drug market in a controlled drug into a legal, regulated market is a process not an event. By replacing a system of prohibition based on criminal penalties, with a regulated legal market, the Canadian government by implication conceded that adults will consume cannabis, and should be free to do so from a range of domestic producers who are licensed to supply consumers as part of a quality-assured and inspected supply chain. That process is still underway, almost three years since the first legal sales started. However, the reform was implemented without major disruptions and the market is now fully functioning, providing all Canadian adults with access to this newly legal product, and providing governments with additional tax revenues.

Winning over Canadians

An overall conclusion from the survey commissioned for this report is that Canadians are largely at ease with the decision to legalise non-medical cannabis, and support for legalisation has grown since it came into effect. Although some voter groups – primarily older Canadians – remain sceptical, the way in which legalisation was done has broadly reflected public priorities around protecting health and avoiding the commercial excesses seen in some other US markets with fewer controls. The model appears to satisfy the demands of many Canadians to access a legal product, without exceeding the public tolerance among non-users in the broader community.

Respondents were not in favour of wider liberalisation or normalising the public consumption of cannabis by permitting it in traditional settings like bars and hotels, and neither were they keen on having cannabis stores near their own homes, indicating that some stigma is still associated with the trade, despite the legal status. The polling also indicates that the risks inherent in legalising an intoxicating drug – for example, from impaired driving – are perceived as real, and this warrants further study. If this survey accurately reflects the amount of driving under the influence of cannabis that is happening on Canadian roads, then policy-makers may need a more coherent and impactful public education and law enforcement response.

The survey also suggests that Canadians have clear preferences for how the dividend from legalisation – namely the tax revenue – should be used, and there is a broad consensus in favour of using it to fund more and better education to young people about the health risks of cannabis. Therefore one over-arching interpretation of this survey is to regard Canadians as pragmatic about cannabis, not naïve about the risks, and generally supportive of the new legal market, but preferring to see cannabis use as a private indulgence that is best hidden from view, and not an activity to encourage or promote, whilst simultaneously not favouring a return to prohibition.

Legalisation top down

Legalization of non-medical cannabis in the United States got a foothold through bottom-up ballot initiatives, which generally had little or no input from public health or regulatory experts. In contrast, Canada pursued legalisation top-down, with more premeditation, and after

reviewing the evidence for different regulatory approaches and the advice of an expert taskforce. This enabled extensive parliamentary debate about legalisation's aims and the proposed framework, before the law was passed and the new regulated market came into being. This allowed Canada to avoid some of the mistakes that US states have experienced – for example around product type, and taxation regimes – and to proactively embrace a more coherent legalisation approach.

On almost every measure, Canada's is a more restrictive legalisation model than any US state and one that gives a higher priority to protecting public health. The tight controls on marketing and the more limited opportunities for branding, product innovation and trade mean that the legal cannabis industry in Canada is less profitable, and has weaker commercial potential in terms of consumer loyalty, than operators in many American states. As a result, the Canadian cannabis sector has not been able to commercialise cannabis to the same degree, **and legalisation is less 'visible', despite the steady increase in the number of physical stores.** Consequently, generating profits from enticing new consumers and encouraging consumption among heavy users has been more difficult, although it is still possible in the private marketplace that now exists. Compared to the advertising, brands and general level of visibility seen in places like Oregon and California, this model has also enabled broader public acceptance of legalisation by the millions of Canadians who tell surveys they do not like cannabis and do not personally consume it.

Have the goals of legalisation been achieved?

At present a large and growing legal market for cannabis in Canada co-exists with an illicit market and it may be too early to expect the regulated marketplace to have eliminated the competition entirely (if it ever will). In fact, ongoing media reports in 2020 and 2021 of police seizures of unlicensed cannabis grows or of organised criminals caught trafficking cannabis at the US border is a reminder that the illegal market may have adapted but it has not disappeared.

To this end the many goals of legalisation are not yet achieved, but this report has attempted to illustrate what the published data can tell us about progress so far. The goal of undermining the illicit market shows clear signs of progress, but other goals seem further away. However, no legalisation model is introduced in jurisdictions without experience of cannabis or where there is not already a thriving illicit market. The law is changed, the illicit market continues and adapts, and the new legal market takes years to iron out practical difficulties to optimise supply and demand, such that it can successfully erode the market share of illegal players. The gradual nature of the roll-out and the slow evolution of this immature market is inherent in the policy agenda because human behaviour is complex and cannabis consumers are responding to the new context and adjusting to the legal model over a period of time. Despite what some reform advocates imply, moving away from prohibition is not akin to flicking a switch where the gains arrive instantly.

This is a key reason why the progress of Canada's legalisation journey looks far from complete, three years after it began. Drawing firm conclusions on the issues explored in this report is difficult because much of the data needed to identify meaningful trends is absent or only likely to emerge some years from now. Remarkably, given the Canadian reputation for robust public policy informed by good evidence, there is a dearth of official data at a national level. For example, there is no useful national data in the public domain currently (as of summer 2021) on youth usage, emergency room visits, or tax revenue, and even provincial data is

absent. Furthermore established national datasets on issues like impaired driving are not sufficiently granular to disaggregate the cases of impairment of cannabis from that of drugs generally.

Nevertheless, even with the available data, some important insights are possible and there clearly remain challenges with Canada's legalisation experience so far. Three main challenges stand out at this time:

- **There are early signs that legalisation may have led to increased use, which for some cannabis consumers will become problematic.** This has happened despite limits on home-growing, personal possession and retail access, and especially noteworthy given the strict controls on marketing that Health Canada imposed. These dramatically limit the ability of for-profit cannabis companies to advertise and promote their products to existing users and they represent a key public health tool to moderate cannabis promotion in the market (measures that would be unconstitutional in the United States, given rights to free expression there). Despite all the constraints on how cannabis companies can reach consumers, rising rates of use are happening, with use gradually increasing and daily or almost daily use rising, both in official data and in our own survey conducted for this project. Although it is a reasonable assumption, it is not possible to attribute the rise in prevalence seen in Canada to legalisation itself, as more data will be needed to determine what is behind increased use, especially in certain provinces or among certain cohorts, like adult females. Given concerns about the long-term impact of heavy, regular cannabis use on the developing brain, and that these risks are greater in adolescents, more research is needed to understand this trend and to examine the factors driving increased regular consumption. Policy-makers can then consider what more might be done to discourage and delay the onset of cannabis use among adults, or to safeguard younger adults from enticement.
- **Rates of risky behaviour like driving within two hours of consumption (and potentially impaired) need to be monitored closely.** Cultural acceptance of driving under the influence of alcohol has diminished significantly since the 1980s but it remains widespread and still results in significant deaths and injuries each year in Canada. Driving under the influence of cannabis has not yet become acknowledged as a societal problem in the same way, and may be more widespread as a cause of accidents than official road incident mortality data suggests.
- **Taxation of legal cannabis is not aligned to wider public health goals and how much revenue is being raised and how proceeds are distributed is opaque.** The current taxation regime is raising hundreds of millions of dollars of revenue for the federal government and for provinces but it is tied to weight or to a percentage of the product sale price and so is not geared to discourage consumption of higher strength products and these are the ones that pose the most risks to public health. There is also a lack of visibility on what the sales and excise taxes are raising annually, and how cannabis tax revenues are being allocated, either federally or provincially, despite a clear preference from the public that they should be used to fund youth education services.

Stores matter

In other regulated sectors for addictive substances or activities like alcohol or gambling, retail access and proximity do influence consumption patterns. Although this report studied the retail coverage and store proximity question in detail for two provinces, it is not possible to

decisively attribute the larger rise in prevalence seen in Alberta – rising from 16.6% to 21.7% – to the greater density of stores there, compared to the slower and more targeted store roll-out in places like Quebec.

Nevertheless, it is possible to argue that given the marketing restrictions inherent in the Cannabis Act and the limits this places on the ability of Licensed Producers to directly promote their product and develop brand loyalty, combined with the habitual preference for cannabis consumers to buy their cannabis in-person from local stores rather than online channels, the number and proximity of stores does matter.

In the Canadian context, the licensed retail store in a local community essentially becomes the one and only marketing tool for the legal cannabis sector, and the more of them there are, the more awareness and enticement is possible, especially to new consumers and potentially younger adults without an established behaviour of buying from the illicit online market or the local street dealer in their neighbourhood.

For this reason alone, the retail dimension is one of the most interesting aspects of the legalisation experience to date in Canada and policy-makers should study it more closely once better data is available for the ten provinces. Conventional policy tools available to governments to address concerns about retail coverage driving up rates of use would be higher barriers of entry, such as fees for store licensing or stricter zoning controls, and even caps on the number of stores allowed to operate in a given locality.

Canada's influence on other jurisdictions

Canada's experience reveals familiar challenges to those experienced by state governments in the US, including policy objectives that are in tension. For example, how to maintain effective public health messaging for younger consumers when the product concerned has gone from being officially considered harmful (and therefore illegal) to the same product being openly sold by legal businesses conveniently located on the high street. There may be no 'right' answer to how this prohibited drug should move into the normal domain of a consumer recreational product available for open sale to adults but it is a shift that societies contemplating legalisation need to understand as a process involving many trade-offs and few quick wins.

The Canadian model has some distinctive elements that may not translate to the different political and legal context of other jurisdictions, even culturally similar ones like Britain, or Australia, including the government-owned retail store model and the provisions for home growing. However, the purpose of this report is to demonstrate that there is not one Canadian model, but several, and the ten provinces have had decisive roles in agreeing the sale and distribution approach for cannabis, such that the experience of legalisation in Canada is highly dependent on where Canadians actually live.

This study is relevant now because a federal review of the Cannabis Act is about to commence. That exercise, and the findings of this report, may offer inspiration and guidance about Canada's experience to other governments around the world considering how best to regulate cannabis in future – perhaps most importantly in terms of the international policy consensus, the federal government in the United States.

Different jurisdictions will take their own path and the release of better data over time will be crucial in judging Canada's experience. In fact, as countries around the world contemplate

the right approach to creating a regulated, legal cannabis market, their legislators and officials will devise different methods to achieve similar goals, and even prioritise some goals – like the protection of public health – far more than even a social welfare jurisdiction like Canada has.

Since Bill C45 became law, several other smaller nations have actively pursued non-medical legalisation plans, with the proposal developed in draft legislation but then rejected in a New Zealand referendum in 2020; however, similar measures are still under active consideration in Luxembourg, Switzerland and, most recently, endorsed again but not yet implemented in Mexico. The current presidential administration in the United States, though not in favour of federal legalisation, is under renewed pressure from commercial interests and some members of Congress to regularise the financial activities of state-authorized cannabis companies, and may yet revisit the ongoing prohibition. Behind this is American public opinion, according to national surveys showing majority support for legalisation across most voter groups, for instance in the recent Quinnipiac University Poll.⁹³

In the United States – if the federal government considers making national reforms – it will want to examine the relative merits of each state's approach, learn from the international evidence, and draw conclusions. Canada's experience as a neighbouring democracy operating a regulated model within a federal political setup should be instructive.

⁹³ [4/15/21 – Majority Support Stricter Gun Laws, Quinnipiac University National Poll Finds; Stark Divides On Views Of Police And Voting Issues | Quinnipiac University Poll](#)

ANNEX

Details of the Public First poll of Canadians (Summer 2021)

Public First carried out a poll online from the 28th May – 3rd June 2021. The sample was 1,148 adults in Canada, with an oversample in Quebec and Alberta. Results were weighted by interlocked age and gender, province and education to be representative of the population.

Full tables of the results can be found [here](#).

Questionnaire

- 1) Have you ever used cannabis before?
This includes smoking, vaping, and in food or drink
Please note this does not include CBD products
 - Yes, I have used cannabis before
 - No, I have never used cannabis before
 - Prefer not to say
- 2) During the past three months, how often did you use cannabis?
 - Not in the past three months
 - Once or twice
 - Monthly
 - Weekly
 - Almost daily
 - Daily
- 3) In the past three months, where did you get the cannabis you used?
Select any which apply
 - I grow my own (*Note: Not displayed in Quebec or Manitoba*)
 - Someone grows it for me
 - From an authorised retailer
 - From a compassion club, dispensary or storefront
 - Online from a licensed producer
 - Online from another source
 - It was shared around
 - From an acquaintance
 - From a family member or friend
 - From a dealer
 - Other (Please Specify)
- 4) In the past three months, which of the following methods did you use for cannabis most often?
 - Smoked

- Vaped (i.e. in a vape-pen)
 - “Dabbed”
 - Consumed in food or drink
 - Other
- 5) At anytime in the last year, have you driven a vehicle after consuming any amount of cannabis (i.e. within the same two-hour period)?
- Yes, on multiple occasions
 - Yes, once
 - No
 - Prefer not to say
- 6) When you buy non-medical cannabis products, how do you tend to purchase
- Mostly purchase online
 - Mostly purchase in-person
 - A mixture of both online and in-person
 - N/A - I have not purchased non-medical cannabis
 - Prefer not to say
- 7) Which of these statements best describes your own personal experience related to cannabis?
- I consumed cannabis in Canada before it was legal
 - I consumed cannabis in Canada only after it became legal
 - I have not consumed cannabis in Canada
 - Prefer not to say
- 8) *In October 2018, cannabis (also known as marijuana) was made legal and some cannabis products were available for sale across Canada.*
Overall, do you support or oppose this change in the law around cannabis use?
- Strongly support
 - Support it somewhat
 - Neither support nor oppose it
 - Oppose it somewhat
 - Strongly oppose it
 - Don't Know
- 9) What do you think is the right age to be legally able to purchase and use non-medical cannabis?
- Younger than 18
 - 18
 - 19
 - 20
 - 21
 - 22
 - 23

- 24
- 25
- Older than 25
- Nobody should be allowed
- Don't Know

10) Thinking back to before cannabis was legalised in October 2018, to the best of your recollection did you support or oppose the legalisation of cannabis?

- Strongly supported
- Supported
- Neither supported nor opposed
- Opposed
- Strongly opposed
- Don't Know

11) And, in your view has legalising cannabis in October 2018 worked out mostly well, or badly?

- The legalisation of cannabis has gone very well
- The legalisation of cannabis has gone well
- The legalisation of cannabis has neither gone well nor badly
- The legalisation of cannabis has gone badly
- The legalisation of cannabis has gone very badly
- Don't Know

12) Thinking about the last election and the Trudeau Government's domestic reforms, did the legalisation of cannabis in 2018 make you...

- More likely to vote for the Liberal Party in 2019
- Less likely to vote for the Liberal Party in 2019
- It made no difference to how I voted in 2019
- Don't Know

13) Please indicate if you support or oppose the following:

- Strongly Support
- Support
- Neither Support nor Oppose
- Oppose
- Strongly Oppose
- Don't Know

For:

- Cannabis should be made cheaper so more users will switch to the legal market
- Cannabis should be made more expensive to discourage people from using it and prevent people from using too much
- Cannabis companies should be free to brand their products and advertise just like alcohol companies

- Cannabis companies should be restricted from advertising just like tobacco companies
 - Cannabis is a healthier alternative to alcohol and should have fewer marketing restrictions than alcoholic beverages
- 14) Do you think cannabis legalisation has had a positive or negative impact on the economy in your local area, if it has had an impact at all?
- A very positive impact on the economy in my local area
 - A somewhat positive impact on the economy in my local area
 - Neither positive nor negative impact
 - A somewhat negative impact on the economy in my local area
 - A very negative impact on the economy in my local area
 - Don't Know
- 15) Overall, how do you think cannabis use in Canada has been affected by the legalisation of non-medical cannabis in October 2018, if at all?
- I think a lot more people are using cannabis
 - I think more people are using cannabis
 - I think the same number of people are using cannabis
 - I think fewer people are using cannabis
 - I think a lot fewer people are using cannabis
 - Don't Know
- 16) Do you feel the number of cannabis stores in your community is...
- Too low
 - About right
 - Too high
 - Don't Know
- 17) Which of the following most closely represents your views on legal cannabis stores:
- I would like more legal cannabis stores to open in my area
 - I would like the number of legal cannabis stores in my area to stay the same
 - I would like there to be fewer legal cannabis stores in my area
 - Don't Know
- 18) Since the legalisation of non-medical cannabis in October 2018, how often, if at all, do you visit cannabis stores in person?
- Multiple times a week
 - Weekly
 - Multiple times a month
 - Monthly
 - Once every 2-3 months
 - A few times a year
 - Yearly
 - Less often but still on occasion

- Never
- Prefer not to say

19) Do you know where your nearest cannabis store is?

- Yes
- No
- Don't Know

20) How far away is your nearest cannabis store in kilometers?

If you are not sure please give your best estimate

[Open response in km]

21) To the best of your knowledge, is cannabis sold by licensed stores in your province safe or unsafe?

- Very safe
- Safe
- Neither safe nor unsafe
- Unsafe
- Very unsafe
- Don't Know

22) To the best of your knowledge, is cannabis sold by licensed stores in your province of a high or low quality?

- Very High Quality
- High Quality
- Neither High nor Low Quality
- Low Quality
- Very Low Quality
- Don't Know

23) To the best of your knowledge, is cannabis sold by licensed stores in your province expensive or cheap?

- Very Expensive
- Expensive
- Neither Expensive nor Cheap
- Cheap
- Very Cheap
- Don't Know

24) Thinking about the store(s) which sell cannabis in your local area, would you say these stores are trustworthy or untrustworthy?

- Very Trustworthy
- Trustworthy
- Neither Trustworthy or Untrustworthy

- Untrustworthy
- Very Untrustworthy
- Don't Know

25) For each of the following, please indicate if they apply or do not apply to cannabis stores in your province

- Applies to stores in my province
- Does not apply to stores in my province
- Don't Know

For

- They allow adults to have safe access to cannabis products
- They attract crime and loitering
- They create jobs
- They help attract people to shop locally
- They create a less desirable neighbourhood
- They reduce crime

26) Would you tend to support or oppose the following:

- Strongly Support
- Support
- Neither Support nor Oppose
- Oppose
- Strongly Oppose
- Don't Know

For

- Allowing cannabis consumption indoors in licensed lounges or hotels
- Plain packaging for cannabis products
- Advertising bans for cannabis products
- Allowing licensed cannabis stores to do doorstep delivery of purchased products
- Allow restaurants with a liquor licence to also serve cannabis beverages

27) Which comes closest to your view...

Please select the option which comes closest to your view, even if neither is exactly right

- I would be more likely to support a party in the next federal election if they committed to tighter controls on legal cannabis sales and a higher minimum age for legal use
- I would be more likely to support a party if they committed to keeping cannabis regulation the same as it is now
- I would be more likely to support a party in the next federal election if they committed to looser control on legal cannabis and made the legal age for access 18 across all of Canada
- Don't Know

28) Do you agree or disagree with the following:

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree
- Don't Know

For

- There needs to be better education on the dangers of cannabis from an early age
- I would want a cannabis store to open near me
- I have been more interested in using cannabis since it was legalised
- I would be worried if someone in my family started using cannabis every day
- Other countries should follow Canada in legalising non-medical cannabis
- I have learned more about the health risks of cannabis since it was legalised
- Taxes from cannabis should be spent on more education for young people about the risks of cannabis
- I have learned more about the health benefits of cannabis since it was legalised

29) Have you seen or heard any adverts with information about cannabis and health in the last month on the following mediums?

Please select all which apply

- Radio
- Television
- Online
- Physical adverts / billboards / bus stops
- Pamphlets
- Other (Please Specify)
- No - I have not seen or heard any adverts like this
- Don't Know

30) What would you say are the positive impacts of legalising cannabis, if there are any?

Please select any which apply

- It generates tax revenue
- It creates new jobs in the industry
- It means fewer people with criminal records
- It allows the police to focus on more serious crime
- It takes control of the cannabis market away from illegal sellers
- It means cannabis is cheaper
- It means cannabis is of a higher quality
- It means fewer young people will use cannabis
- It means people have more free choice
- It means fewer people will use other currently illegal drugs
- It means people will drink less alcohol
- Other (Please Specify)
- None of the above - there are no positive impacts of legalising cannabis

- Don't Know

31) What would you say are the negative impacts of legalising cannabis, if there are any?
Please select any which apply

- It means more people will use cannabis which is unhealthy
- It increases anti-social behaviour
- It means there will be more drug-impaired driving
- It means cannabis is more expensive
- It means cannabis is of a lower quality
- It means more young people will use cannabis
- It means people will think there are no risks to using cannabis
- It means people will smoke in public places
- It means people will be less productive
- It means that using currently illegal drugs will be normalised
- Other (Please Specify):
- None of the above - there are no negative impacts of legalising cannabis
- Don't Know

32) Which of the following comes closest to your views on legalising non-medical cannabis?

- The positive impacts of legalisation outweigh the negative impacts
- Neither the positive or negative impacts outweigh one another
- The negative impacts of legalisation outweigh the positive impacts
- Don't Know

33) If you had to guess, which province would you say has the highest proportion of cannabis users?

- Alberta
- British Columbia
- Manitoba
- New Brunswick
- Newfoundland and Labrador
- Nova Scotia
- Ontario
- Prince Edward Island
- Quebec
- Saskatchewan

34) And if you had to guess, which province would you say has the lowest proportion of cannabis users?

- Alberta
- British Columbia
- Manitoba
- New Brunswick
- Newfoundland and Labrador
- Nova Scotia

- Ontario
- Prince Edward Island
- Quebec
- Saskatchewan

35) Finally, do any of the following apply to you?

Select ANY which apply

- I personally work in the cannabis industry (e.g. as a grower, at a shop)
- I have a relative who works in the cannabis industry
- I have a close friend who works in the cannabis industry
- I have an acquaintance or friend who works in the cannabis industry
- I do not know anyone who works in the cannabis industry
- Don't Know

