

Partnerships for Cannabis Policy Evaluation Annual Workshop

WHAT WE HEARD: KNOWLEDGE EXCHANGE INTERIM REPORT

Date: Nov. 22, 2021

Time: 1 p.m. to 4 p.m. (EST)

Funding for the Partnerships for Cannabis Policy Evaluation funding opportunity was provided by:



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Also available on the Web in PDF and HTML formats © Her Majesty the Queen in Right of Canada (2022) Cat. No. MR4-103/2022-1E-PDF ISBN 978-0-660-42499-6

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Introduction

OVERVIEW

When the *Cannabis Act* came into force in October 2018, it created a strict national framework that regulated the production, possession, distribution and sale of cannabis in Canada.

Cannabis-related policies across jurisdictions have the potential to impact the health of Canadians. Therefore, a robust, coordinated evaluation is required to monitor the health impacts of these policies — both positive and negative — to maximize benefits and minimize harms for all people in Canada.

To meet the need for research evidence to inform current and future policy and regulatory models for non-medical cannabis use, the *Canadian Centre on Substance Use and Addiction* (CCSA) and the *Canadian Institutes for Health Research Institute of Neurosciences, Mental Health and Addiction* (CIHR-INMHA) created the *Partnerships for Cannabis Policy Evaluation (PCPE) funding opportunity.* The program, funded by CCSA, was developed under CIHR's *Integrated Cannabis Research Strategy*.

The PCPE program supports projects that evaluate and monitor the implementation and impact of cannabis-related policies at the provincial and territorial levels, toward identifying best practices from public health and public safety perspectives. This research also intends to inform both the ongoing policy and regulatory dialogue occurring across jurisdictions and the mandated legislative review of the *Cannabis Act, anticipated in 2022*.

On November 22, 2021, CIHR and CCSA hosted a knowledge exchange workshop for the five projects funded through the PCPE program. Research teams, currently in their second year of funding, presented interim findings from their projects. More than 90 researchers, policy and decision makers, people with lived and living expertise (PWLLE), partners and other *knowledge users* participated in the workshop.

This report summarizes the interim findings presented by the teams and the perspectives shared by a panel of policy and decision makers, knowledge users and PWLLE.

DISCLAIMER

The following information intends to summarize what we heard at the workshop. CIHR has made every effort to share this text with project participants and panelists for their review. Any errors or omissions are unintentional. This report should not be taken as a definitive account of interim research findings. Readers are advised to follow up directly with grant recipients for the most current information on their projects.



Workshop Objectives

The primary objectives of the workshop were to:

- present project updates and interim findings from the Partnerships for Cannabis Policy Evaluation funding opportunity
- · support engagement among research teams and stakeholders to increase research and policy impact
- identify opportunities for broader application of outcomes to inform policy and regulatory dialogue on cannabis-related policies across Canada



Agenda | November 22, 2021

Partnerships for Cannabis Policy Evaluation Annual Workshop

Meeting Co-Chairs: Rita Notarandrea, CEO, Canadian Centre on Substance Use and Addiction (CCSA) Samuel Weiss, Scientific Director, CIHR Institute of Neurosciences, Mental Health and Addiction (CIHR-INMHA)

Time (EST)	Item	Speakers
1:00 p.m. to 1:15 p.m.	Welcome, Event Overview and Introductions	Co-Chair: Rita Notarandrea CEO, CCSA
1:15 p.m. to 2:55 p.m.	Research Updates and Q&A	Moderator: Nina Cluny Assistant Director, CIHR-INMHA
1:15 p.m. to 1:35 p.m.	Evaluating the impact of local, provincial, and national cannabis policies among youth in the COMPASS system	Scott Leatherdale
1:35 p.m. to 1:55 p.m.	Triangulating evidence to evaluate the impact of cannabis policy in Ontario	Tara Elton-Marshall, Lin Ying Lin, Robert Schwartz, Shawn O'Connor
1:55 p.m. to 2:15 p.m.	The impact of provincial cannabis policy on impaired driving	Jeffrey Brubacher, Yue Yuan, Patrick Byrne
2:15 p.m. to 2:35 p.m.	Cannabis policy evaluation in Ontario	David Hammond
2:35 p.m. to 2:55 p.m.	An integrated process and outcomes evaluation of cannabis legalization policies in Newfoundland and Labrador to examine public health and safety impacts of sales, consumption and enforcement regulations	Jennifer Donnan, Debbie Curtis
2:55 p.m. to 3:00 p.m.	Health Break	



Time (EST)	Item	Speakers
3:00 p.m. to 3:50 p.m.	Panel Reflections and Open Discussion Themes:	Moderator: Rebecca Jesseman Director – Policy, CCSA Panelists: Paul Boase Manager, Multi-Modal and Road Safety Programs, Transport Canada Michelle Fry Tobacco, Smoking, Vaping & Cannabis Program, Provincial Population Public Health, Alberta Health Services François Gagnon Specialized Scientific Advisor, National Public Health Institute of Quebec (Institut national de santé publique du Québec) Kira London-Nadeau Co-Chair, Canadian Students for Sensible Drug Policy Michael Nurse Board Member, Canadian Association of People who Use Drugs
3:50 p.m. to 4:00 p.m.	Closing Remarks	Co-Chair: Samuel Weiss Scientific Director, CIHR-INMHA



Research Updates and Q&A

In this session, five research teams provided updates on their Partnerships for Cannabis Policy Evaluation projects and workshop participants asked questions of the teams. Nina Cluny, CIHR-INMHA, moderated the Research Updates and Q&A session.

EVALUATING THE IMPACT OF LOCAL, PROVINCIAL, AND NATIONAL CANNABIS POLICIES AMONG YOUTH IN THE COMPASS SYSTEM

Presenter: Scott Leatherdale (principal investigator)

The objectives of this study are to:

- understand how ongoing real-world changes to local, provincial or national cannabis-related interventions are related to changes in cannabis use among youth over time (e.g., frequency of use, modes of use)
- examine how changes in cannabis use outcomes are related to the co-occurrence of other major modifiable risk factors for chronic disease and mental health among youth over time

Using an existing data infrastructure provided by the *COMPASS prospective cohort study*, the team is evaluating the impact that cannabis-specific program, policy and resource changes in and around schools, provincially and nationally, are having on youth cannabis-related behaviours and outcomes.

Midterm findings show that cannabis use among youth in Quebec, Ontario, Alberta and British Columbia has plateaued, and even started to slightly decline. The team reported a slight increase in experimentation with cannabis immediately following legalization but no significant changes in youth cannabis use over time. Since legalization, many schools have implemented programs and policies designed to impact student cannabis use. Evaluations of those programs and policies suggest that they have not significantly impacted cannabis use among youth.

The team identified a drastic decline in youth cannabis use in the sample group since the onset of the COVID-19 pandemic. Current research is showing cannabis use is starting to rebound to pre-pandemic norms. The prevalence of youth cannabis use remains high in Canada compared with other countries, including the United States and Australia.

The COVID-19 pandemic has impacted the project's data collection (for example, questions on varsity sports, intramurals, vending machines on campus are no longer applicable). The availability of COVID-19 indicators has led to a new stream of research examining the impact of the early stages of the pandemic period on youth cannabis use.

To date, the team has already published 15 peer-reviewed papers (see Appendix for a list of selected knowledge mobilization products). The team highlighted engagement with five knowledge users: *Public Health Agency of Canada* (PHAC), *National Collaborating Centre for Methods and Tools, Public Health Ontario* (PHO), *Ophea*, and *Homewood Research Institute*. Collaborations with *Partnerships for Cannabis Policy and Evaluation* teams colled by Dr. David Hammond and Dr. Jennifer Donnan, and the *Health Behaviour in School-aged Children study*, are ongoing.

In the upcoming year, the team will follow up on the most recent waves of data, including youth solitary cannabis use during COVID-19, alcohol and polysubstance use, and the mediating role of vaping. They will also engage with knowledge users to meet evidence needs, seek renewal funding for operational research activities, and continue with PHAC graduate student placements that provide experience within a federal agency.





TRIANGULATING EVIDENCE TO EVALUATE THE IMPACT OF CANNABIS POLICY IN ONTARIO

Presenters: Tara Elton-Marshall (principal investigator), Lin Ying Lin (knowledge user), Robert Schwartz (principal investigator), Shawn O'Connor (team member)

The main objective of this study is to evaluate the intended and unintended impacts of cannabis policies in Ontario on the following outcomes:

- consumption of cannabis (patterns and cannabis use disorder) and other psychoactive substances, cannabis-related harm to others, and impacts on mental health
- impact on the health care and treatment systems
- cannabis-impaired driving and injuries
- how policy implementation may mitigate the negative consequences or enhance the positive consequences of cannabis use

This study is analyzing and triangulating findings from multiple data sources, including surveys led by the *Centre for Addiction and Mental Health* (CAMH), a longitudinal cohort study of young adult cannabis users, informant interviews, and a point of sale study examining the implementation of retail policies and documenting the advertising and promotion of cannabis products.

Findings published in the *2019 CAMH Monitor e-Report* show that the percentage of Ontario adults who used cannabis in the past three months and reported cannabis use problems increased significantly from 5.8% in 2004 to 13.6% in 2019. Among past year cannabis users, estimates of cannabis use problems significantly increased from 47.2% in 2004 to 57.9% in 2019. These increases were evident among both men and women aged 30 years and older. Past year driving after cannabis use increased across time (from 2002 – 2019), from 1.5% in 2010 to 3.1% in 2019 of respondents reporting driving after consuming cannabis. During the COVID-19 pandemic, cannabis consumption among users increased; approximately 55% of cannabis users reported using more during the pandemic.

Informant interviews revealed that the COVID-19 pandemic delayed cannabis policy implementation and enforcement efforts. There was concern that corporations are finding ways to market cannabis products, despite relatively stringent marketing restrictions in the policies. Interviews indicated the need for increased education in storefronts regarding proper use (e.g., lower-risk guidelines). Interviews also noted increased education for vaping, particularly among youth aged 18+ who are not familiar with safe use guidelines and are purchasing from the black market. Education that distinguishes between medical cannabis use and recreational cannabis use is also needed, as the two are often conflated.

The Retail Point of Sale study, which has not yet been completed, will look at product, promotion, price and sales, social media engagement and youth access. The study will also address how closely regulations are being followed.

The COVID-19 pandemic impacted several aspects of this study, including informant interviews and the longitudinal survey of young cannabis users, which has not yet been launched.

Collaborations with the Ontario Ministry of Health's Addiction and Substances Policy and Programs Unit, the project's primary knowledge user, and Dr. Jefferey Brubacher's team are ongoing (see Appendix for a list of selected knowledge mobilization products).

Next steps for the team include developing a cannabis user cohort of young adults with lived expertise of cannabis use (CAMH Youth Advisors), working with other open-source data to avoid duplication of work, and conducting further data analysis to leverage findings to inform the development of public education on cannabis use and other policy initiatives in Ontario.





THE IMPACT OF PROVINCIAL CANNABIS POLICY ON IMPAIRED DRIVING

Presenters: Jeffrey Brubacher (principal investigator), Yue Yuan (co-investigator), Patrick Byrne (principal investigator and knowledge user)

The main objectives of this project are to:

- report the prevalence of impairing substances in injured drivers and passengers from British Columbia and Ontario
- evaluate the impact of British Columbia and Ontario traffic policy on driving under the influence of cannabis
- describe and contrast driving under the influence of cannabis-relevant traffic policy in British Columbia and Ontario
- explore evidence of a substitution effect: Will people substitute cannabis for alcohol when cannabis becomes more readily available; will there be a decrease in alcohol-related collisions?

The approach taken in this study includes toxicology testing (cannabis, alcohol and other drugs) of blood samples from injured drivers and passengers from six participating hospital emergency departments (four from British Columbia and two from Ontario). Prevalence will be reported (how many positive tests [with quantified results] for cannabis, alcohol and other substances in drivers and passengers) and compared (drivers vs. passengers and drivers vs. general population). The team is analyzing collision reports pre- and post-cannabis legalization to determine the effect of cannabis legalization on alcohol-related collisions.

The COVID-19 pandemic has significantly impacted the project and delayed the ability to view charts, collect blood samples in hospitals and get robust passenger data.

Preliminary toxicology results from January 2018 to the present show that tetrahydrocannabinol (THC), the main psychoactive compound in cannabis, is the single most detected substance in drivers in British Columbia and Ontario. However, most THC-positive drivers had low levels (≥2 nanograms THC per millilitre blood), which does not necessarily reflect the recent use of cannabis or impairment. Researchers noted the number of drivers with THC levels ≥5 ng/mL is lower in British Columbia than in Ontario; the team will be investigating the statistical importance of this data.

In both provinces, it is common for injured drivers to test positive for polysubstance use (alcohol, THC, antihistamines, recreational drugs, opiates, impairing medications).

Data comparing THC levels in passengers to drivers in British Columbia signal that passengers have higher levels of THC than drivers, indicating legislation may deter people from driving after recent cannabis use.

Knowledge products include national and provincial reports summarizing the prevalence of various substances in drivers and an interactive data dashboard (see Appendix for a list of selected knowledge mobilization products). Collaborations with Dr. Tara Elton-Marshall's team are ongoing.

In the summer of 2021, the team launched a national stakeholder survey. Policy makers, law enforcement and injury prevention groups indicated they would use the study to inform road safety policies or develop educational and road safety campaign materials. The Ontario Ministry of Transportation, the project's primary knowledge user, will also be using findings from the study to evaluate the effectiveness of drug driving policies (e.g., road safety risks of zero tolerance exemptions for those using medical cannabis).

For next steps, the team will be analyzing collision data from British Columbia and Ontario and conducting an analysis examining how cannabis legalization specific to road safety has been covered in the media.



CANNABIS POLICY EVALUATION IN ONTARIO

Presenter: David Hammond (principal investigator)

The main goal of this project is to monitor the impacts of cannabis policies in Ontario. The study is focussing on:

- prevalence and patterns of use
- · purchase sources and price
- risk behaviours and problematic use
- policy-relevant outcomes (illegal vs. legal sources, advertising exposure, public education campaigns, product labelling, product standards and price)

This study is using two main data sources: Canadian data from the International Cannabis Policy Study (ICPS) and a national scan, conducted twice a year, from 1,000 retailers and more than 200,000 products looking at product price, THC levels, and number of stores. The study is committed to open data access.

In the past year, the team has expanded its surveys from Canada and the United States to Australia and New Zealand, which provide a point of comparison with jurisdictions that have not legalized cannabis for non-medical use. The team will be expanding data collection to the Canadian territories and the United Kingdom in the upcoming year.

Data from the 2020 Ontario Cannabis Report shows that the cannabis product market is transitioning quickly and adding more products (e.g., vapables, edibles). Despite the vast proliferation of different cannabis products, smoking dried flower remains the dominant form of use among people who have used cannabis in the past 12 months. However, there was a decline from 82% in 2018 to 72% in 2020 of dried flower use. All other forms of use have been increasing in the same time period (e.g., edibles up to 59% from 43%, orally-ingested drops up to 33% from 24%, vape oils up to 27% from 24%).

Midterm findings show a dramatic shift in where people are sourcing their products. People who report they acquired cannabis from informal sources (e.g., family members, friends) or from an unlicensed dealer have decreased post-legalization, and purchases from stores and internet mail order acquisitions have increased.

Estimates of how many consumers are sourcing their products from a legal, licensed retail store increased, with 63% of Canadian consumers buying two-thirds of their products from a legal source in 2020 up from 51% in 2019.

Across Canada, one in 10 cannabis consumers said they purchased from a store on a First Nations Reserve. The team noted the importance of considering Indigenous communities and business owners in terms of partners, and how they fit relative to off-reserve cannabis retail.

The team reported differences among respondents who notice cannabis ads and promotions across jurisdictions. While Ontario is close to the Canadian average, noticing cannabis ads was higher in Alberta, which has a privatized model of stores, and substantially lower in Quebec, which is public-run and has more comprehensive provincial marketing restrictions (e.g., minimum age of 21, no home cultivation or home growing, rules prohibiting certain products).

Knowledge mobilization products include a special report for Ontario's Ministry of the Attorney General — the project's primary knowledge user. Additional information, methods and surveys are available at www.cannabisproject.ca (see Appendix for a list of selected knowledge mobilization products).



AN INTEGRATED PROCESS AND OUTCOMES EVALUATION OF CANNABIS LEGALIZATION POLICIES IN NEWFOUNDLAND AND LABRADOR TO EXAMINE PUBLIC HEALTH AND SAFETY IMPACTS OF SALES, CONSUMPTION AND ENFORCEMENT REGULATIONS

Presenters: Jennifer Donnan (principal investigator), Debbie Curtis (knowledge user)

This study follows a citizen and stakeholder engagement approach. The team reported progress on seven priorities identified from a stakeholder and partner needs assessment:

- describe cannabis use, knowledge and perceptions in Newfoundland and Labrador
- examine the unique four-tiered hybrid retail model in Newfoundland and Labrador (both retailer and consumer perspectives)
- impact of cannabis legalization on youth in Newfoundland and Labrador
- access to information on cannabis for medical purposes
- · impact of cannabis legalization on Indigenous populations in Newfoundland and Labrador
- public education awareness and behaviour change
- intended and unintended health consequences of cannabis legalization

The provincial survey describing cannabis use, knowledge and perceptions in Newfoundland and Labrador is unique in its focus on provincial initiatives and priorities. Data from the Atlantic provinces are often combined and so knowledge users are interested in regional data from Newfoundland and Labrador.

The examination of the cannabis retail model, has been divided into two research projects to explore the perspectives of both retailers and consumers. To capture retailer perspectives there is a media content analysis that is nearing completion and qualitative interviews planned for the Spring of 2022. To capture consumers perspectives, a deep look at consumer preferences is underway including a systematic review, qualitative interviews, and a discrete choice experiment. Two manuscripts have been published with several others planned (see Appendix for a list of selected knowledge mobilization products).

A major focus for the team is to examine the impact of cannabis legalization on youth in Newfoundland and Labrador. A needs assessment revealed concern that there is more access to cannabis and problematic use among youth, yet no youth voices were engaged in the needs assessment. Through youth focus groups, the team therefore examined youth knowledge and perceptions on cannabis legalization. There are seven planned publications in this research area.

The team identified the need for cannabis education with a harm reduction focus for youth within schools. Researchers are collaborating with partners on a new youth education strategy titled the Directed Education on Cannabis for Youth Decision Empowerment (DECYDE). DECYDE involves in-school and out-of-school education, training for educators, parent resources, and social media. Findings from the project's qualitative work will inform this strategy.

Data revealed that patients who are consuming cannabis for medical purposes are experiencing stigma from health care providers and that health care providers report a lack of comfort in supporting patient choices. The team will be studying barriers and facilitators that prescribers face when supporting patients.

Collaborations with Dr. David Hammond's team on graduate student projects and Dr. Scott Leatherdale's team with the DECYDE project and COMPASS renewal are ongoing. Researchers are also looking to engage partners and collaborators to understand how cannabis legalization is impacting the health and safety of Indigenous populations in Newfoundland and Labrador and explore their access and education needs.

The team's next steps include data collection and analysis, completing the provincial survey, and moving forward with DECYDE.





Panel Reflections and Discussion

In this session, a panel of policy makers, knowledge users and people with lived and living expertise of cannabis use reflected on the research updates presented by the five teams. A panel discussion followed. Rebecca Jesseman, CCSA, moderated the session.

Michael Nurse, Board Member, Canadian Association of People who Use Drugs

The data presented in this workshop focused on regulating cannabis and managing health concerns and is intended for professional, academic and policy audiences. It is important to balance that with data that speaks to people who use cannabis and the public.

Kira London-Nadeau, Co-Chair, Canadian Students for Sensible Drug Policy

Caution should be taken around discussions that look at youth cannabis use as a catch-all measure for risk associated with youth consumption. Many people, including young people, use cannabis and might benefit from cannabis use. We have not heard much about the benefits in today's workshop. A nuanced and fulsome view of cannabis use should include benefits. Traditionally, young people have been used as a reason to uphold prohibition. When talking about research and looking at different measures and outcomes for youth, it is essential to differentiate between the negative consequences that youth are experiencing versus use in general, and perceptions of risk.

Paul Boase, Manager, Multi-Modal and Road Safety Programs, Transport Canada

As the research is ongoing, we have a lot to learn. Driving was a significant issue raised in several projects, reflecting its relevance. There is also a lot of regional data and regional work, which is important. Some remaining challenges include: creating national databases to compare provinces (e.g., Quebec rules vs. British Columbia rules or Atlantic Canada rules); and informing policy and increasing public awareness to improve safety on the road in an environment when cannabis use is as high as it is.

François Gagnon, Specialized Scientific Advisor, National Public Health Institute of Quebec (Institut national de santé publique du Québec)

Public health organizations are responsible for conceptualizing and managing risks associated with cannabis use, as well as other substances such as tobacco and alcohol. While there are benefits from cannabis use, overall, we look at populations and risks. It will be important to compare Quebec with what is happening in other provinces to better understand what is working and not working.

Michelle Fry, Tobacco, Smoking, Vaping & Cannabis Program, Provincial Population Public Health, Alberta Health Services

Things are very different across the country. The policy structure has created some interesting comparisons when looking at different communities and provinces that we can learn a lot from. It is still early days in terms of what we're going to see regarding how that policy landscape has influenced youth in different communities and different age groups, and driving. We have seen an impact around the COVID-19 pandemic. The timing of COVID-19 coinciding with expanded product availability of edibles, extracts and topicals following their initial legalization in October 2019 is noteworthy. It will be challenging to separate these two legalization events from the onset of the pandemic.





Discussion (all participants)

Panelists were invited to comment on the kind of information that is important to share with the public. What should the *Partnerships for Cannabis Policy Evaluation* research teams consider as they move into their final year of funding and knowledge mobilization becomes a larger focus?

Many types of information need to be shared with the public. Regional public health authorities and ministries of health communicate the benefits and risks of products (for example, lower-risk guidelines) and information to guide people to access and use cannabis products.

People who use cannabis find themselves in a changing market developed outside of their information and input. The process of making cannabis available and accessible to users has been removed. People who use cannabis no longer have ownership of the system. For example, product packaging restricts buying cannabis based on texture and smell. The choices of people who use cannabis are subject to the rules of big business, government and service agencies. Research questions that need to be asked include: is the current way of providing cannabis the best for people who use cannabis? Is this system working? Is the system meeting the expectations and needs of people who use cannabis (e.g., safe supply, criminalization of the involvement of people in the illicit cannabis market in an environment where the legal and illegal market co-exist)?

For youth, practical information (e.g.,lower-risk guidelines) is helpful. Easy to understand harm reduction messages, and advice that does not refer to delaying or reducing cannabis use is also effective (e.g., how to manage dosage when making edibles). It is essential to answer the following question: What is valuable information for people already using or who intend to use cannabis? For example, the *Get Sensible* campaign is a program led by young people where youth can get information and advice about cannabis use. While large-scale studies provide a general portrait of cannabis use, community-based spaces offer individuals the opportunity to get the information they need. Research and public health advice from events like today's workshop should reach community-based spaces.

During the COVID-19 pandemic and the second cannabis legalization phase, Alberta experienced a spike in *cannabis hyperemesis*. Research projects should consider how the pandemic and legalization have impacted youth and those over the legal age for cannabis use. How are people coping with mental health concerns, such as isolation or boredom? People who use cannabis are reporting more use. Physical and mental health impacts will be important in terms of recommendations for health authorities, mental health practitioners and those working in the post-COVID era.

We know that cannabis impairment negatively impacts the ability to drive safely, but we do not know how that relates to cannabis and the amount of THC in the blood. One of the challenges when looking at cannabis in blood or oral fluid from hospital records or studies is that there is no direct link to impairment in the same way we have for alcohol. Building a solid database across jurisdictions where some level of impairment can be attributed to injuries is essential. We are getting closer to understanding what is considered impaired driving and narrowing down possibilities for second-hand exposure. It is important that policies do not penalize people for being exposed to cannabis second-hand. Making that link with cannabis and effectively packaging credible information is key to changing policy and behaviour.

There needs to be a shift in how cannabis use policy is developed. People who use cannabis should be involved in guiding this process and the focus should move beyond risks and safety. Other substances are being used, and there should be a broader focus on what impairment looks like in real life. We should also consider who is being harmed and who is benefiting. There should be a focus on human rights, along with a focus on health.



Conclusion

SUMMARY

The *Partnerships for Cannabis Policy Evaluation* Annual Workshop featured presentations from five projects, panel reflections and an open discussion with researchers, policy and decision makers, knowledge users and people with lived and living expertise of cannabis use.

Some of the overarching themes that emerged from the workshop include:

- The meaningful involvement of people with lived and living expertise of cannabis use is essential in research and for the development and implementation of services and interventions for cannabis use-related harms. This involvement includes the process of knowledge mobilization and the creation of products and activities.
- Likewise, **youth are central to the discussion on cannabis**. Researchers are encouraged to recognize the complexity and diversity of youth populations and understand the culture and context of cannabis use in youth. Including youth in the research design process, knowledge mobilization and sharing of information could help increase the impact and relevance of research findings for this population.
- There are vast differences in cannabis policies across jurisdictions and comparing these policies may
 yield valuable insights into the effectiveness of different approaches. To do this, data from across Canada
 needs to be shared and accessible.
- It is **difficult to measure cannabis impairment accurately**. Currently, there is no direct link to show that cannabis impairment puts the community at risk. Researchers are getting closer to measuring cannabis impairment and linking it to risks to society.
- The COVID-19 pandemic has had an impact on research projects and on cannabis use in Canada.
 Researchers noted significant delays in recruitment and data collection, informant interviews and challenges with pivoting to online methods. People who use cannabis reported increased use during the pandemic, but more research is needed to fully understand the impact of COVID-19 on cannabis use in Canada.
- Authoritative, credible and consistent messaging related to cannabis use is needed for all people in Canada. This includes communicating the benefits and risks of cannabis use, educational material and information outlining access and use of cannabis products. Community-based dissemination strategies may be more effective than federal top-down approaches to ensure that knowledge gets to the people who need it.

FOR MORE INFORMATION

The meeting book for this workshop is available to the public upon request. Requests can be directed to the CIHR Contact Centre: *support-soutien@cihr-irsc.gc.ca*.

Project summaries presented at the Strengthening Workshop held in June 2020 can be found here. Additional information about the research projects can be found *here*.

More information on CIHR's initiatives for research in substance use can be found at *cihr-irsc.qc.ca/e/50927.html*.





Presenters List

Meeting Co-Chairs

Rita Notarandrea

Chief Executive Officer, Canadian Centre on Substance Use and Addiction

Samuel Weiss

Scientific Director, CIHR Institute of Neurosciences, Mental Health and Addiction

Moderators

Nina Cluny

Assistant Director, CIHR Institute of Neurosciences, Mental Health and Addiction

Rebecca Jesseman

Director – Policy, Canadian Centre on Substance Use and Addiction

Panelists

Paul Boase

Manager, Multi-Modal and Road Safety Programs, Transport Canada

Michelle Fry

Tobacco, Smoking, Vaping & Cannabis Program, Provincial Population Public Health, Alberta Health Services

François Gagnon

Specialized Scientific Advisor, National Public Health Institute of Quebec (Institut national de santé publique du Québec)

Kira London-Nadeau

Co-Chair, Canadian Students for Sensible Drug Policy

Michael Nurse

Board Member, Canadian Association of People who Use Drugs

Research Team Presenters

Jeffrey Brubacher

Associate Professor, Department of Emergency Medicine, Faculty of Medicine, University of British Columbia

Patrick Byrne

Team Lead, Ontario Ministry of Transportation

Debbie Curtis

Provincial Mental Health and Addictions Consultant, Government of Newfoundland

Jennifer Donnan

Assistant Professor, School of Pharmacy, Memorial University of Newfoundland

Tara Elton-Marshall

Independent Scientist, Institute for Mental Health Policy Research, Centre for Addiction and Mental Health

David Hammond

Professor, School of Public Health, Faculty of Health, University of Waterloo

Scott Leatherdale

Professor, School of Public Health, Faculty of Health, University of Waterloo

Lin Ying LIn

Policy and Program Advisor, Ontario Ministry of Health and Long Term Care

Shawn O'Connor

Senior Research Associate, Ontario Tobacco Research Unit

Robert Schwartz

Professor, Institute of Health Policy, Management and Evaluation, Dalla Lana School of Public Health, University of Toronto

Yue Yuan

Research Coordinator, Department of Emergency Medicine, Faculty of Medicine, University of British Columbia





Appendix: Selected Knowledge Mobilization Products

The following Selected Knowledge Mobilization Products listed in the Appendix have been provided by the research teams.

EVALUATING THE IMPACT OF LOCAL, PROVINCIAL, AND NATIONAL CANNABIS POLICIES AMONG YOUTH IN THE COMPASS SYSTEM

Title	Knowledge product type/description
Patterns of cannabis use among Canadian youth over time; examining changes in mode and frequency using latent transition analysis	Article
Substance-related coping behaviours among youth during the early months of the COVID-19 pandemic	Article
Associations between longitudinal patterns of substance use and anxiety and depression symptoms among Canadian secondary school students	Article
Developmental trajectories of cannabis and alcohol use among a longitudinal sample of secondary school students in Ontario	Article
Changes in cannabis use modes among Canadian youth across recreational cannabis legalization: data from the COMPASS prospective cohort study	Article
Examining the impact of the early stages of the COVID-19 pandemic period on youth cannabis use: adjusted annual changes between the pre-COVID and initial COVID-lockdown waves of the COMPASS study	Article
Bidirectional associations between cannabis, e-cigarette, and cigarette use among Canadian youth: findings from the COMPASS Study	Article
Cannabis use, screen time, and internalizing symptoms among Canadian youth: testing mediation pathways	Article
An examination of how age of onset for alcohol, cannabis, and tobacco are associated with school outcomes in grade 12	Article
Trends in youth cannabis use across cannabis legalization: data from the COMPASS prospective cohort	Article

THE IMPACT OF PROVINCIAL CANNABIS POLICY ON IMPAIRED DRIVING

Title	Knowledge product type/description
Cannabis legalization and detection of tetrahydrocannabinol in injured drivers	Article
'Arbitrary' cutoffs of THC levels make it difficult to measure impaired driving	Interview with NBC News
Dramatic increase in driving high after cannabis legalization	Interview with Medscape Medical News
After cannabis legalization, more THC detected in injured drivers	Interview with Medpage Today
Road Safety & Public Health Research	Website
Road Safety & Public Health Research	Twitter
National Drug Driving Study Infographic	Infographic
Drug Driving Study National Report	Report

CANNABIS POLICY EVALUATION IN ONTARIO

Title	Knowledge product type/description
International Policy Cannabis Study	Website



AN INTEGRATED PROCESS AND OUTCOMES EVALUATION OF CANNABIS LEGALIZATION POLICIES IN NEWFOUNDLAND AND LABRADOR TO EXAMINE PUBLIC HEALTH AND SAFETY IMPACTS OF SALES, CONSUMPTION AND ENFORCEMENT REGULATIONS

Title	Knowledge product type/description
Characteristics that influence purchase choice for cannabis products: A systematic review	Article
Drivers of purchase decisions for cannabis products among consumers in a legalized market: A qualitative study	Article
Cannabis-impaired driving: Here's what we know about the risks of weed behind the wheel	Article
Newfoundland and Labrador Cannabis Policy Evaluation: Needs Assessment Report	Report
Cannabis education should aim to normalize — not prevent — safe and legal use	Article
Cannabis Health Evaluation & Research Partnership	Twitter
Partnerships for Cannabis Policy Evaluation - Newfoundland and Labrador	Facebook
Cannabis crossroads: Growing knowledge and weeding out misinformation	Webinar
Cannabis research, safe production, legalization and medical usage	Radio – The Wahl Show
Impacts of cannabis legalization on youth and young adults	CCSA Webinar Series





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