

# Cannabis, Mental Health and Substance Use Health

Research Knowledge  
Exchange Event

March 1, 6 and 7, 2023

Summary Report



Mental Health  
Commission  
of Canada

Commission de  
la santé mentale  
du Canada



Canadian Centre  
on Substance Use  
and Addiction



This document was published by the Canadian Centre on Substance Use and Addiction (CCSA).

Suggested citation: Mental Health Commission of Canada & Canadian Centre on Substance Use and Addiction. (2023). *Cannabis, mental health and substance use health research knowledge exchange event: March 1, 6 and 7, 2023, summary report*. Ottawa, Ont.: Canadian Centre on Substance Use and Addiction.

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This event and the research presented were made possible through a financial contribution from Health Canada. The views expressed herein do not necessarily represent the views of Health Canada.

This document can also be downloaded as a PDF at [www.ccsa.ca](http://www.ccsa.ca)

Ce document est également disponible en français sous le titre :  
Cannabis, santé mentale et santé liée à l'usage de substances. Rencontre d'échange des connaissances sur la recherche sur le cannabis, 1<sup>er</sup>, 6 et 7 mars 2023, compte rendu.

ISBN: 978-1-77871-088-9

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## ACKNOWLEDGEMENTS

The Canadian Centre on Substance Use and Addiction (CCSA) and the Mental Health Commission of Canada (MHCC) would like to express their gratitude to all event participants, whose generous sharing of expertise, research and insight formed the basis of this report. The event was made possible through the work of our planning committee – Sandra Gosling, Shea Wood, Zaineb Chouhdry and Cléo Edgington – who helped shape the focus and design of the knowledge exchange sessions in an intentional and experiential way. This event and the research presented was made possible through a financial contribution from Health Canada.

We respectfully acknowledge that the offices of CCSA and the MHCC are located on the traditional, unceded and unsurrendered territory of the Algonquin Anishinaabe people, who have been present on this land and its stewards since time immemorial. As national organizations, we also acknowledge that we work on the traditional lands of many distinct nations, including Métis (settlements) and Inuit (Inuit Nunangat, homeland). We are humbled to have the opportunity to be present on these territories.

We pay our respects to and honour all First Nations, Métis and Inuit as distinct Peoples and as sovereign Traditional Knowledge Keepers. We are humbled to have the opportunity to be present in these territories.

In the spirit of reconciliation with First Nations, Métis and Inuit Peoples in Canada, we are committed to contributing to making positive changes in our relationship with Indigenous Peoples and to honour the Truth and Reconciliation Commission of Canada's Calls to Action and the United Nations Declaration on the Rights of Indigenous Peoples.

“The research has made a significant contribution to increasing our knowledge and understanding of how legalization and use of cannabis affects people living in Canada.”

— Pamela Kent, Interim Director, Research, CCSA



## INTRODUCTION

In 2018, Canada became the second country in the world to legalize non-medical cannabis. That same year, Health Canada allocated funds to both CCSA and the MHCC to advance research on cannabis use and investigate the risks and benefits of cannabis on mental health and substance use health. The findings emerging from this research will help develop new policies and support people in making more informed choices around cannabis use.

Early investigation revealed that while some research exists on cannabis use, significant knowledge gaps remain around its risks and benefits, the lived experience of people who use cannabis, and the relationship between cannabis and mental health in various populations. There are also significant gaps in the knowledge of clinical applications of cannabis regarding different disorders, forms of use and age groups. Finally, there is a crucial need to monitor and evaluate the effects of legislative changes to avoid negative impacts on the health and safety of people living in Canada.

### Cannabis Legalization and Regulation In Canada

The 2018 *Cannabis Act* provides a legal and regulatory framework to control the production, distribution, sale and possession of cannabis in Canada. The Act is intended to promote public health by restricting youth access, establishing quality and safety standards, and enhancing public awareness of the health risks associated with cannabis use.

With the funding from Health Canada, CCSA and the MHCC supported approximately 70 research teams to explore the potential benefits, harms and risks cannabis poses to substance use health and mental health. The research teams worked on topics related to cannabis use, including the effects of legalization on perceptions and patterns of cannabis use, the impacts of legalization on mental health and wellness, the lived experiences of equity-deserving populations, and many more.

The methodological approaches were diverse, ranging from clinical trials and systematic reviews to community-based projects and mixed-method approaches. The work of these research teams has contributed to increasing knowledge and understanding of how the legalization and use of cannabis are affecting people living in Canada.

Funding for this research project ended on March 31, 2023. The knowledge exchange event brought together the research teams to share their findings and observations. In doing so, it has helped pave the way for evidence-based policies, practices and interventions that can help reduce substance use harms while achieving the objectives of the *Cannabis Act*.

### Learn more about the funded research projects at:

[ccsa.ca/research-cannabis](https://ccsa.ca/research-cannabis)

and

[mentalhealthcommission.ca/mental-health-and-cannabis-research/](https://mentalhealthcommission.ca/mental-health-and-cannabis-research/)

“We hope this event will be an opportunity to build on and continue to strengthen the community of practice formed around cannabis and mental health research.”

— Mary Bartram, Director, Policy, MHCC



## ABOUT THIS EVENT

In March 2023, CCSA and the MHCC co-hosted the Cannabis, Mental Health and Substance Use Health Research Knowledge Exchange Event. An end-of-grant celebration, it provided research teams with an opportunity to share and discuss their findings, methods and experiences. It also included a discussion of next steps for knowledge mobilization and putting research into action.

This event was held virtually on March 1, 6 and 7, 2023. Each day had a unique thematic focus and was structured for small and large group reflections and sharing highlights from a few notable research teams and subject matter experts.

The event objectives were as follows:

1. Identify and disseminate key findings from the funded research on the effects of cannabis, mental health and substance use health.
2. Build relationships among those who do cannabis-related research, looking at the effects of cannabis on mental health and substance use health.
3. Identify gaps and priorities to inform future research, policy and practice related to the effects of cannabis on mental health and substance use health.

The event was designed to provide meaningful opportunities for the cannabis research community to share their findings and research experiences, including collective and unique challenges, and opportunities discovered along the way. It provided a space to discuss future priorities to fill knowledge gaps and how the teams' findings could be mobilized for key audiences to shape policy and practice.

The research teams bring a variety of perspectives and worldviews to their work, and there was a wide range of opinions expressed around cannabis that have subsequently been included and summarized in this report. The opinions included in this report do not necessarily represent the opinions or views of CCSA, the MHCC or Health Canada.



“Cannabis is widely used in Canada – yet there are still so many misconceptions.”

– Kathleen Larose, panellist



## DAY 1 – WHAT WE KNOW: RESEARCH FINDINGS

Four research teams kicked off the event with presentations on their findings, along with the implications and applications that have emerged from their projects. The four presentations provided a valuable snapshot of some of the diverse research that has been conducted in Canada since the legalization of non-medical cannabis in 2018.

### **CARMHA: Cannabis as Relief in Mental Health and Addiction**

**Lisa Elford**, *Principal Consultant, Habitus Collective*

**Kathleen Larose**, *Executive Director, Alberta Alliance Who Educate and Advocate Responsibly*

A peer-led research project co-ordinated by the Habitus Collective and the Alberta Alliance Who Educate and Advocate Responsibly, Cannabis as Relief in Mental Health and Addiction (CARMHA) looked at the impact of cannabis use on the mental health of at-risk populations (e.g., people who use substances, people who are unhoused, people who face considerable challenges meeting their basic needs). Despite widespread use of cannabis in Canada, there are still many misconceptions surrounding it. The participants' intersecting experiences of consuming cannabis while also experiencing at-risk conditions, such as having a mental illness, being houseless or being a member of an equity-deserving population, compound their experiences in the healthcare system. It creates additional barriers to accessing care and further adds to their unmet needs.

In general, research often focuses on the potential negative outcomes of cannabis use and tends to lack insights into the factors that shape it. Using a mixed methods approach, CARMHA instead explored the larger systemic factors contributing to cannabis use and how at-risk conditions compound people's experiences with mental health and cannabis. CARMHA found that there are significant systemic failures – rather than personal failures – around unmet health and social needs that people who use cannabis need to cope with. Thus, cannabis use shines a light on where systems need to be shifted and adapted. The project used surveys, co-led interviews, journey-mapping sessions and peer outreach to gain greater awareness of the relationship between cannabis use and mental health within larger systemic factors. The findings included a need to advocate for more compassion for at-risk populations.

## Lifting the Pipes: Understanding Natural Laws in the Context of “Medicine,” Mental Health and Cannabis

**Sharon Goulet**, Indigenous Relations Strategist, City of Calgary

**Suzanne McLeod**, Project Lead Researcher, University of Manitoba

### Understanding Natural Law

According to Indigenous ways of knowing, natural law is a way to define and understand ways of life. Natural laws come from the Creator and are sacred. It is understood that:

- Natural laws define how things are ordered,
- Natural laws exist in original stories, and
- Medicines were given and guided by natural laws.

To better understand cannabis's current role and the role it could play in positively affecting the mental health and wellness of Indigenous people, *Lifting the Pipes* involved consulting with Elders and Indigenous communities to learn more about what is not accessible through Western knowledge systems and academia.

A decolonized and participant-led approach revealed a greater need for education and dialogue. Through an ethics and advisory group, engagement circles and storytelling, the project generated complex discussions. For example, Elders were hesitant to endorse cannabis due to its absence from Indigenous practice and traditional way of life. Some community members voiced concerns over its potential to interfere with traditional healing methods, such as prayer and ceremony. But they did cautiously acknowledge the plant's potential to support mental health and wellness. For cannabis to be considered an appropriate medicine, a cultural language around cannabis with protocols and guidance from Elders and traditional knowledge holders must be developed.

## Online Promotion of Non-Medical Cannabis Products: A Pan-Canadian Portrait

**Antoine Fournier**, Scientific Advisor, Institut national de santé publique du Québec

Many studies show that exposure to online advertisements encourages the consumption of psychoactive substances. When non-medical cannabis was legalized in 2018, a regulatory framework for commercial production and distribution was also established. However, online promotional practices of non-medical cannabis products remain inconsistently regulated and inadequately analyzed.

This study aimed to fill the knowledge gap by identifying how producers and retailers navigate the legislative frameworks that set specific restrictions on the promotion of non-medical cannabis in Canada. Through an analysis of social media posts and website content from the nine largest producers and retailers of non-medical cannabis, the study produced the following preliminary results:

- The practices of public retailers are more mindful of public health guidelines than private retailers.
- Online promotion often trivializes cannabis by evoking associations of relaxation, pleasure, vitality and adventure.
- Youth audiences are targeted through the frequent use of targeted language and colourful visual elements.
- Visual presentations of cannabis deliberately evoke associations of natural wellness by either explicitly stating cannabis is organic or implicitly by setting the ad within nature.

Given these findings, the promotion of non-medical cannabis online must be carefully monitored. In the future, greater specificity should be applied when determining what is informative promotion and what is not.



## Impacts of Canada's Recreational Cannabis Legalization on Youth Cannabis Use and Medical Cannabis Consumption

**Hai V. Nguyen**, Associate Professor and a Canada Research Chair, Memorial University of Newfoundland

**Shweta Mital**, PhD, Memorial University of Newfoundland

### What Are Cannabinoids?

Cannabis is a plant that contains over 100 different chemical compounds called cannabinoids. The two most well-known cannabinoids are delta-9-tetrahydrocannabinol (THC) and cannabidiol (CBD).

THC is the main psychoactive component of cannabis and is responsible for the “high” feeling people may get when using cannabis. CBD does not produce a “high,” but it can cause drowsiness.

Cannabis products come in many forms, including as a dried herb and as oils, edibles, extracts and creams — all with variations of THC and CBD.

The legalization of non-medical cannabis raised questions about the impact on youth cannabis use. Previous research produced conflicting results and did not shed light on the dynamics behind changes in prevalence of use. In response to this knowledge gap, this study looked at prevalence in more depth. It analyzed whether increased access to cannabis contributed to people switching from medical cannabis to cannabis sourced from the recreational market. It also examined whether a higher legal age could affect prevalence of use among youth who use cannabis. Some of the findings included:

- Prevalence of cannabis use among youth aged 15 to 18 remained stable post-legalization, despite an increase in first-time cannabis use among this age group.
- In seven out of 10 provinces, medical cannabis use declined after legalization.
- A switch from the medical cannabis market to the recreational or illegal market could bring adverse health consequences because recreational products can have higher tetrahydrocannabinol (THC) and cannabidiol (CBD) content.
- In 2020, Quebec raised the minimum age for purchasing cannabis to aged 21 from 18. Subsequently, cannabis initiation and use declined among people aged 18 to 20 years who use cannabis compared to other provinces that did not raise the minimum age. However, no significant changes in use were observed among people aged 15 to 17 years.
- Additional policy measures must be put in place to curb increased first-time use among youth.

**“One of the most interesting themes that emerged in our research was the step-down in risk for people who displayed concerning substance use behaviour. Cannabis gave them a sense of control and helped them abstain from the other dangerous substances.”**

**— Participant**

## Breakout Group Discussions

Participants were invited to join a breakout group of their choice to discuss their key research findings and the potential implications of those findings. Groups were organized based on research topic and anticipated research outcomes. Several themes emerged from these conversations that have the potential to influence policy, programs and practice. The points listed below reflect findings from individual research projects within this initiative and do not necessarily reflect an exhaustive representation of literature on cannabis or the nuances of emerging evidence in this area of research.

### Impact of Legalization

Participants discussed how the legalization of non-medical cannabis in 2018 has not initiated a public health crisis and prevalence of use has remained relatively stable. They expressed concerns related to the increase in vaping and how the industry is bypassing regulations and policies (e.g., calling edibles “ingestible extracts”). However, not enough time has passed to evaluate the effects of cannabis legalization and regulation adequately and effectively.

### Impact on Mental Health

Cannabis and cannabinoids can have an impact on different mental health and substance use disorders, such as psychosis, opioid disorders and cannabis use disorders. Some epidemiological studies suggest cannabis can induce psychosis in youth more than any other substance. Other studies show that CBD may have the potential to help with anxiety, attention-deficit/hyperactivity disorder (ADHD), and depression among youth, but its efficacy is inconsistent and more research is needed.

Participants highlighted that different subsets of populations can experience different levels of stigma, risk and vulnerability relating to mental health disorders when consuming cannabis. For example, for people with intersecting experiences (e.g., mental health challenges and childhood trauma), cannabis can be a way to cope with these experiences, compounding their substance use. Participants also noted that the resulting demand for supports to deal with problematic substance use can often not be met, revealing significant systemic failures.

## Cannabis as a Harm Reduction Tool

Cannabis is reportedly being used to help people abstain from other substances considered to be more dangerous, including alcohol. However, court-ordered drug treatment programs often prohibit the use of cannabis, despite it being a legal substance. When analyzing the prevalence of cannabis use and its harm reduction potential, historical trends and the context in which data are collected are important factors for researchers to consider.

### Stigma

Participants reported that stigma around cannabis use has decreased within certain population groups, and people are more likely to have conversations about cannabis with their healthcare providers. However, stigma toward cannabis use within the healthcare system continues, prompting a lack of trust. With respect to youth, participants highlighted the cumulative impact of stigma related to mental health and substance use concerns, which is often compounded by the blaming of family members or close friends.

### Methodology

Researchers face several challenges around cannabis research. There are the challenges of getting the appropriate licences for research projects and getting the required funding and time to conduct in-depth studies. Researchers also reported on the difficulty of achieving cannabis product consistency within and across analyses. Also, because there is no standardized THC unit, self-reporting on cannabis use is inconsistent and challenging to compare.

Researchers typically work with synthetic extracts, yet people report on their experiences with biological extracts, which can produce different effects on people who use cannabis. Trials should therefore include biological extracts to effectively study the potential benefits of cannabis for diseases such as Parkinson’s. However, getting trials approved that incorporate biological extracts requires a lot of time and manoeuvring around regulatory barriers.

Depending on the trial, researchers will ask different questions or look for different information. Population-level data (e.g., age, sex, occupation) are often either missing or not standardized, making trials very difficult to compare. At the same time, to be able to draw conclusions both nationally and internationally, a diverse range of methodological approaches is required, and an appropriate amount of time and resources should be allocated to facilitate data sharing.

### Cannabis Use Among Youth

When it comes to cannabis research and youth populations, much attention is placed on the potential harms or associated harms instead of exploring the reasons that lead to cannabis use in the first place. Participants highlighted how inconsistency in defining the age range for “youth” hampers their ability to measure impact across research studies: some define youth as people aged 14 to 18 years, and others define it as people aged 16 to 21 years. Instead of considering this population as one homogenous group, it is also important that youth programs or guidelines on cannabis use be well-rounded and consider the diversity of the population.

### How Individuals Who Use Cannabis Access Information

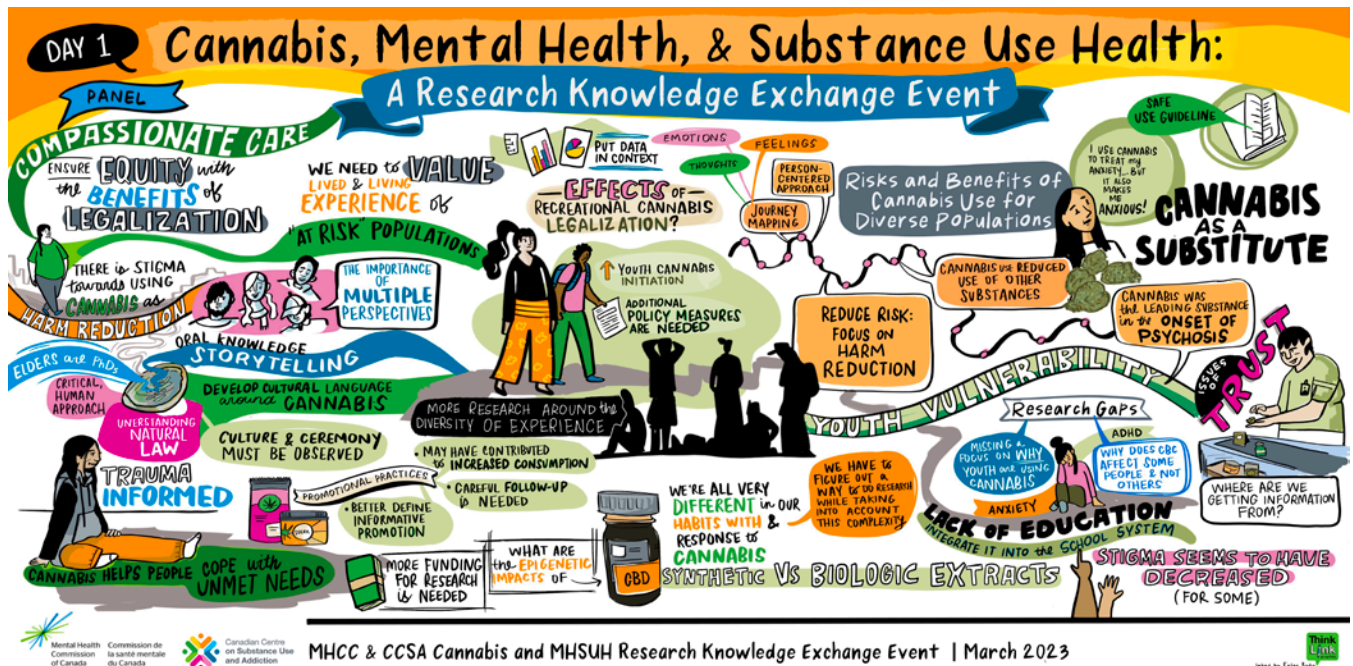
People who use cannabis often receive medical information from dispensaries or peers who may not be able to provide evidence-based findings. Participants reinforced the importance of community-level dissemination of knowledge and understanding about cannabis use. Going forward, cannabis education should be better integrated into schools and the healthcare system.

#### Key Takeaways from the Breakout Group Discussions

Trends remain that need to be monitored and some gaps still need to be filled with future research, including:

- Cannabis use as a harm reduction tool;
- Evidence-based and non-stigmatizing conversations around cannabis use;
- Diverse experiences, applications and methodologies; and
- Methodological challenges and policy barriers.

For each day of the event, illustrator Erica Bota documented the main ideas and discussion themes as a visual story.





“We were lucky to have committed players on our team and a well-connected advisory group. We relied heavily on their relationships. There is no way we could have pulled through without them.”

— Participant



## DAY 2 – RESEARCH EXPERIENCE: METHODS, CHALLENGES AND INNOVATIONS

Day 2 focused on the research experience, looking closely at the tools, methods and procedures used by the research teams. It also looked at some of the challenges researchers experienced along the way – and how those challenges were overcome.

To start the day, participants gathered for a large roundtable discussion, sharing their experiences in conducting cannabis research shortly after legalization and during the COVID-19 pandemic. The absence of a national database listing Canadian cannabis companies and those that are sponsoring research was noted. This makes it very difficult to stay on top of the rapidly changing cannabis industry, which is characterized by numerous subsidiary companies and frequent mergers and acquisitions. While public funding for research is limited, fears remain about bias in research that is sponsored by private companies. More insights are needed to understand the role and impact of the industry in shaping research related to cannabis and health outcomes.

Following the roundtable discussion, the research teams broke out into groups based on the tools and methodologies they used: surveys, randomized controlled trials and pre-clinical trials, secondary data review, community-based research, mixed methods, and other qualitative or arts-based methods. Several common themes related to working with a newly legalized substance within a pandemic environment were brought up across all five groups and are summarized below.

### Recruitment

Recruitment is a challenge, particularly when striving for diverse representation of participants in terms of gender and racial identities. For example, social media has increased access to information for many, but it also attracts disingenuous people and bots. Researchers repeatedly highlighted the importance of establishing relationships and personal connections, especially when working with Indigenous communities and other equity-deserving groups.

Collaboration with well-established organizations, such as CCSA and the MHCC, can be beneficial to getting a base of potential research participants. However, many people highlighted the need for dedicated networks or researcher databases to support their recruitment efforts.

Other challenges include:

- Scams and fraudulent entries by bots, requiring an additional layer of security for online surveys, and
- Fear and mistrust of government due to a history of criminalization and discriminatory and inequitable treatment related to cannabis use.

The ability to compensate research participants fairly and adequately for their time and expertise is crucial to participation. There are important factors to consider when assessing how to compensate participants. Gift cards, for example, could attract participants interested in compensation only.

## Methodology

When building an evidence base about cannabis, diverse research methodologies should be used so that people can share their experiences and topics can be investigated in different ways. In addition to randomized controlled trials and clinical trials, other approaches should be considered. These include an epidemiological approach (understanding how often health-related events occur in different population groups and why), a qualitative approach and community- or participatory-based approaches. Indigenous methodologies, oral histories and on-the-ground conversations should also be considered. Research supported by CCSA and the MHCC also used other innovative approaches such as photovoice projects, participatory video projects, co-led interviews and journey mapping.

Overall, research methodologies must reflect the needs of the community and include diverse voices in safe and accessible ways. Mixed-method approaches can help tell more nuanced stories.

Though surveys can draw attention to national trends, recognizing their limitations is important. National surveys often lack data relating to ethnicity or Indigenous distinctions. Surveys also paint very different pictures depending on the sample group and size. For example, surveys targeted toward youth will have different results than a cannabis survey on a national level. In addition, the different measurements and quantifications of cannabis used for research purposes in the lab are different from the cannabis sold in stores, making it difficult to gather accurate and precise information through surveys.

## Stigma

Cannabis use is still highly stigmatized in society and people may find certain topics difficult to discuss with researchers. For example, research participants might not feel comfortable talking about driving after using cannabis or the accidental poisoning of their children. Many people find it hard to talk about cannabis use at all since it was criminalized for so long. This may highlight the benefits of triangulating different types of data,

such as self-report data alongside administrative data. Peer-to-peer research involving researchers who are part of or close to the community can help deconstruct stigma, bring a sense of safety to conversations and increase engagement.

**“When you ask 50 consumers about product quality, you will get 50 different answers. The market must provide the means to define quality and standardize products.”**

**— Participant**

## Standardized Measures

The lack of consistent measures and indicators makes cannabis research and data comparison challenging. This is true for studies conducted both within and outside of Canada’s borders. Dosage is a particularly difficult indicator to measure because many people who use cannabis are unaware of the amount they consume. When it comes to potency and THC content, lab-based cannabis differs from the cannabis sold in dispensaries, making efficacy testing particularly challenging. A standard THC unit would facilitate better research analyses and provide a much better understanding of the amount of THC consumed and the effects of cannabis.

## The COVID-19 Pandemic

The pandemic affected cannabis research significantly. Researchers described the following challenges:

- Communities needed to focus on public health, and research teams’ capacity was reduced due to infections, isolations and caregiving responsibilities.
- Research engagement had to be conducted online through interviews or surveys.



- Participants' access to computers or the internet was not a given.
- Research that ran in tandem with support programs, such as drug treatment courts, was affected if those programs were postponed or did not run during the pandemic.
- Some studies had to be conducted with fewer participants or closer to where the research team was located, which affected representativeness.
- Doing outreach to service providers and building relationships with them were not options during the pandemic, so researchers had to rely on existing relationships and more limited networks.

At the same time, the pandemic forced researchers to rethink their recruitment and engagement methods and to be more adaptive and innovative in their methods. In certain cases, this resulted in connections with other and more varied population groups than originally intended. While some studies had to cut participant numbers where connections through the internet could not be established, for others, online engagement enabled a much larger target group to be involved and engaged with the study.

### Engagement with Equity-Deserving Populations

When working with equity-deserving populations, it is important to build trust. Participants tend to be more open, trusting and forthcoming when kinship and support are provided by peers. The demand for shared identities speaks to the value of involving people with lived or living experiences and bringing methodological variety to the research model. Though long-term relationships require more time and resources upfront, they can yield many long-term benefits.

Peer-to-peer, photovoice and participatory video projects exemplify the potential of community-based research to actively engage participants in the research process and create space for them to express their opinions in various ways. But it is important to balance the demands placed on participants with their existing commitments while ensuring they are intentionally involved in the design, analysis and dissemination of study findings. Researchers should focus on building trust with the community and being able to evolve or adapt the study's scope to reflect the needs of the population being studied. When working with First Nations, Métis or Inuit communities, for example, the presence of Elders may help build trust and make people feel comfortable sharing their experiences.

**“It struck me how important participatory-led, community-led research is in garnering immensely valuable results. But due to the mixing of methods, such research can be challenging.”**

— Participant

### Time and Cost

Meaningful research and engagement are challenging when dealing with limited time. For example, one-year grants do not leave enough time to involve an advisory committee, have a co-designed process, collect and analyze data and prepare knowledge mobilization tools. In addition, certain types of research, such as participatory- or community-led projects, simply require more time than other research. This highlights the need for funding organizations to ensure ample time is allocated in funding timelines for meaningful engagement to occur.

Researchers must also contend with limited funding yet find ways to amplify their findings, so they can reach the communities that can benefit from them. Researchers reported running out of money, time or both when working with short-term grants.

### Knowledge Mobilization

Knowledge mobilization must be a priority for researchers because it is one way for them to give back to research participants and their communities, bringing to light the findings and highlighting participants' experiences. This is also how research can create an impact on policy, programs and practices – and make a difference in the lives of people who use cannabis.

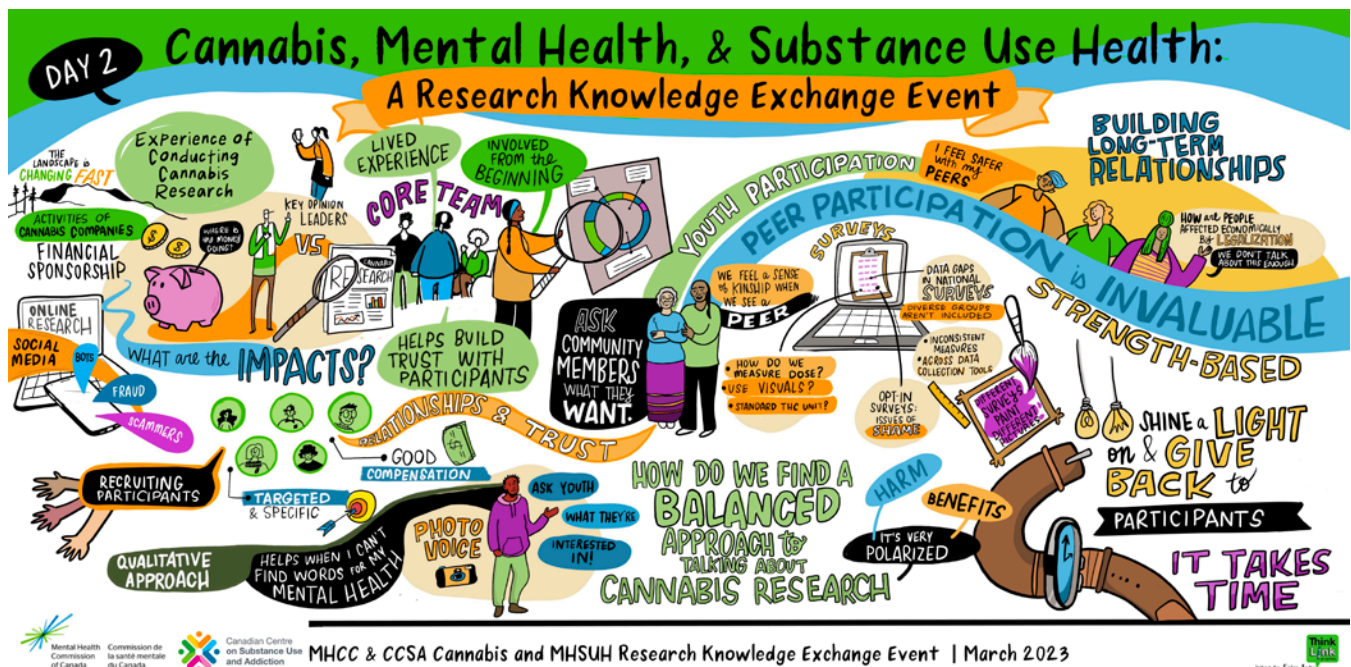
### Polarization of Cannabis Use

Despite legalization, cannabis use is still a contentious topic among people living in Canada. Out of fears and concerns, some people are fixated solely on the harms, while others understand the benefits from a place of optimism and hope. Researchers must find a balanced approach to make space for these often-conflicting ideas and marry divergent perspectives.

### Key Takeaways from the Breakout Group Discussions

Despite using a wide range of research methodologies and topics, researchers identified some common challenges and concerns. These included:

- Fair and adequate compensation of participants;
- The lack of a standardized THC unit, which impedes consumer understanding and research;
- Building trust with participants, especially equity-deserving populations; and
- The importance of knowledge mobilization in giving back to participating communities.



“If we want to overcome the divide between science and people, we need to acknowledge the lack of understanding and that some have been hurt in the past. We need to meet them where they’re at.”

— Chidera Onyegbule, Panellist



### DAY 3 – KNOWLEDGE MOBILIZATION, RESEARCH IMPLICATIONS AND FUTURE PRIORITIES

On Day 3, researchers exchanged ideas on how to best communicate and mobilize their findings to target audiences and populations. The discussions also focused on the implications of the research for policy, practice and public education.

#### Panel: Perspectives on Mobilizing Knowledge and Moving Evidence into Action

**Moderated by:**

Rebecca Jesseman, Associate, CCSA

**Panellists:**

Chidera Onyegbule, Carleton University

Daniel Bear, Humber College

Kinda Wassef, University of Montreal

During the facilitated panel discussion, panellists highlighted different perspectives and insights on knowledge mobilization and potential research implications for policy and practice. While thinking about next steps, panellists discussed bridging the gap between research and practice.

#### Bridging the Gap Between Cannabis Research and Equity-Deserving Populations

When asked how knowledge exchange can reduce the stigma and discrimination that is associated

with cannabis use, Chidera Onyegbule argued that first we must acknowledge that there is a divide between the general public and people who face oppression associated with cannabis use.

When non-medical cannabis was illegal, there were a lot of negative narratives pushed in the media. This was followed by the disproportionate incarceration of people of colour. Deliberate associations were created between cannabis’s negative aspects and racialized groups, especially Black and Hispanic people.

To undo these negative associations, the research community must work against dominant narratives and misperceptions to regain the trust of those who face oppression. That is where balanced cannabis research is key. Cannabis cannot be promoted as a cure-all without acknowledging its negative aspects, but highlighting objective positive associations can shift the balance away from cannabis being framed as a negative, violence-inducing drug. Research can also help educate the public on safer cannabis consumption and its therapeutic potential while also reporting on its negative aspects and risks.

Onyegbule emphasized that representation is crucial to reach people of colour who have been discriminated against and hurt in the past. Research – including knowledge mobilization of research – must involve people with lived or living experience. Researchers must meet people where they are at and ensure findings are easily accessible and digestible. This includes using the most appropriate language to communicate findings so they can be used by the most relevant audiences. Many people do not have access to



scientific journals or do not read them; instead, they look for information on social media and the internet. A lot of misinformation exists online, so these same spaces should be the focus of accessible and relevant knowledge mobilization to increase the presence of timely, evidence-based information (versus misinformation).

**“Legalization has created an opportunity to talk about cannabis in a way that wasn’t possible before. Stigma hasn’t gone away, but we have the opportunity to chip away at it and dispel the myths.”**

— Daniel Bear, panellist

### **Dispelling Myths Surrounding Cannabis Consumption**

Though legalization has allowed people to speak more openly about their experiences with cannabis, the stigma around it prevails. According to Daniel Bear, we need to have more conversations about cannabis in a way that recognizes its potential harms (which can be addressed, mitigated and reflected on by the consumer) while not stigmatizing those who use it. Reducing stigma will require dispelling myths and having conversations about harm reduction. But where those conversations take place is an important issue that requires attention.

Currently, many people get their information about cannabis from staff working at cannabis dispensaries. While those conversations are important, people need information from trained professionals and access to public health information. The Weed Out Misinformation campaign includes materials specifically designed for retailers so they can direct people toward

evidence-based information and resources. Support from the government and other organizations is crucial to encourage public education, facilitate knowledge mobilization and dispel persistent myths.

**“My own positionality helped break the traditional hierarchy between researchers and participants.”**

— Kinda Wassef, panellist

### **Painting Truthful Pictures**

Innovative research methodologies, such as photovoice projects, can support targeted engagement with specific populations. According to Kinda Wassef, this methodology has been effective in connecting with young people in the 2SLGBTQ+ community in Quebec.

The photovoice project collected the experiences of people in the 2SLGBTQ+ community who use cannabis and who have mental health concerns. Wassef emphasized that the researchers sharing identity factors with participants was key to gathering truthful data. Their positionality as queer and young people helped break traditional hierarchies. When working with historically stigmatized and marginalized communities, such research can be a beneficial and even liberating experience for some participants.

Using art and language directly from the participants helps reduce stigma and humanizes their population group. Exhibiting the resulting art is also an effective way to include participants in knowledge mobilization. This project’s resulting exhibition provided an engagement platform and a space to share, discuss and reflect on important topics, such as cannabis consumption, mental health, sexuality and gender identity.

Defying the traditional boundaries of research, the photovoice methodology — and art-based methodologies in general — facilitates the gathering of experiences that cannot necessarily be described with words.

### Effective Knowledge Mobilization

After their individual remarks, the three panellists offered the following advice for valuable and innovative mechanisms to give back to the community:

- People need to see themselves in the information they access. Resources developed by and for people with lived or living experiences can increase both relevance of research and proximity between knowledge users and researchers.
- Finding the right messenger to facilitate discussions and share accurate information with different populations is critical. For example, police officers (a profession that used to penalize people who use cannabis) may be viewed as untrustworthy and may not be ideal messengers of information.
- Engaging participants in the knowledge mobilization process will yield much more effective outputs. They can detect stigma and tell whether a resource resonates with the audience.
- Most people still value expert input. Balancing peer information with expert advice and empirical data is important.
- Staff at cannabis dispensaries (“budtenders”) are limited in what they can discuss with customers when it comes to health-related information about cannabis. This is despite operating in a space where many people who use cannabis are open to such conversations. As trusted informants, budtenders must have the resources to direct customers to evidence-based information to help them make informed choices about cannabis and their health.
- Many misperceptions are generated on social media. Research must occupy those same spaces and change the balance of messages that are reaching and engaging people.

- Filters and algorithms on social media indiscriminately flag or filter out cannabis-related content, despite it being a legal substance. These algorithms need to improve, become more specific and be supported by policy, so evidence-based information can be easily found by the public.
- Reaching youth is a priority, but other groups, such as international students or older adults who are entering the cannabis market for the first time, must also be supported.

### Breakout Group Discussions

Participants were invited to join a breakout group of their choice to share insights and dive deeper into questions around knowledge mobilization for specific populations.

### Equity-Deserving Populations

Several research projects prioritized the experience of specific groups, such as international students, people in 2SLGBTQ+ communities, people living with HIV, and people in First Nations communities and Métis communities. Some key points emerged from the discussion around how to effectively mobilize knowledge for specific audiences:

- The smaller and more focused the population group, the easier it is to engage and gain trust. Larger groups tend to overshadow individual experiences.
- Existing structures and resources can support research, but new voices must also be included.
- While knowledge mobilization methods other than print (e.g., webinars, videos) can be impactful, not all equity-deserving populations have access to these resources.
- Mechanisms for efficiently compensating participants for their expertise must be in place.
- Despite legalization, people who are members of racialized and marginalized groups still bear the brunt of the harms related to cannabis.



## People with Lived or Living Experience of Mental Illness and Concurrent Disorders

Participants shared their own stories and experiences and acknowledged that their relationships with cannabis and mental health have changed over time. Some started consuming cannabis to find community, while others started using cannabis to curb pandemic-induced anxiety and isolation. When it comes to knowledge mobilization for people with mental illness and concurrent disorders, researchers stated the following:

- Research and practice must be grounded in lived or living experience, which should also be considered as a form of expertise or accreditation.
- Participants with lived experience must be fairly compensated.
- Exploitation of equity-deserving populations (including people with lived or living experience) must be avoided.
- Information must be provided in social settings and spaces where people are gathering.
- Community leaders with lived or living experience can help connect with the community.
- Research can be sensationalized, misinterpreted and misconstrued in the media. Misinformation must be curbed by ensuring that research remains contextualized.
- Access to mental health services must be supported. Substance use and cannabis education are important, but a lack of mental health services might push young people to consume cannabis in the first place.
- For people who use cannabis for mental or physical health conditions, it is important that public education goes beyond risks and harms to offer alternative tools and strategies.
- Budtenders should be equipped with more evidence-based information as well as certification opportunities, so they can provide customers with accurate, trustworthy information.

## General Population and Cannabis Consumers

Collaborating with large organizations and institutions, and tapping into their processes and structures, is the most effective way to connect with people in the general population. These structures also help bring data sets and research outcomes to the attention of government, policy makers and public health authorities, potentially supporting the enactment of policy changes. The following key points emerged around mobilizing knowledge for the public:

- Knowledge mobilization should be tied into the planning of any research project and should not be an afterthought. Research results should inform guidelines, recommendations and standards at all levels.
- Research can benefit when the networks and expertise of trusted voices can be leveraged.
- Traditional approaches to knowledge dissemination and mobilization, such as academic articles and publications, should not be dismissed.
- Public health data should be consistent and comparable with other provinces and territories to ensure specific and appropriate policy recommendations can be developed.
- Accessing cannabis from the recreational market to use for medical purposes might reduce engagement with the healthcare system; opportunities to have conversations about drug interactions, dosing, alternative treatment options and the creation of a continuum of care might get lost.
- Access points should be diversified: pharmacies could be appropriate distribution sites where individuals who use cannabis have access to pharmacists and their expertise.
- The lack of studies and education in certain areas, such as vaping, must be addressed.
- Zoning restrictions and possession limits may continue to impact specific populations more than others.
- People with mental health and substance use concerns still face great stigma.

- Different avenues for education should be considered, such as school, family, communities, social media, internet and public-facing initiatives.

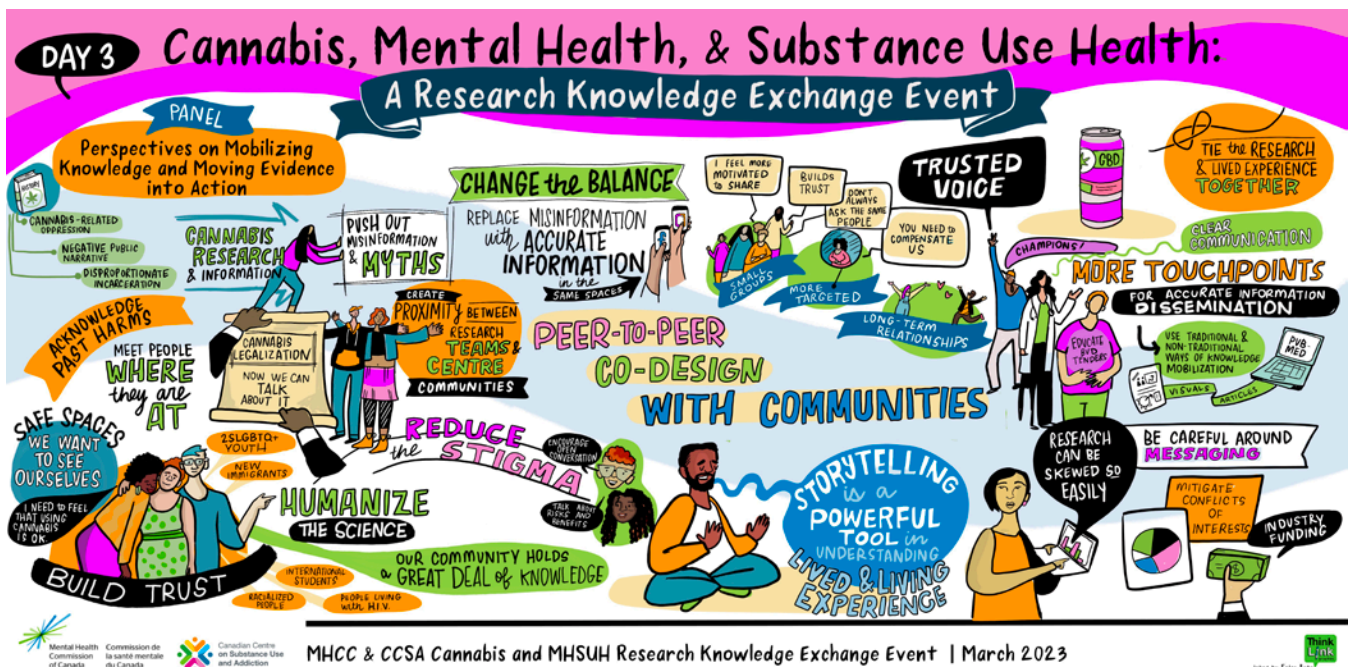
### Veterans

Veterans are a historically marginalized population and may be fearful that any information they provide will go back to the government and limit their access to cannabis. Awareness of power dynamics is crucial to getting buy-in from the veteran community. Trust in medical institutions and researchers must be established and maintained by including veterans in project design, planning and execution, as well as all knowledge mobilization efforts.

### Key Takeaways from the Breakout Group Discussions

For knowledge to be effectively mobilized, solutions must:

- Engage with and be relevant to diverse populations,
- Consider lived or living experience,
- Engage people who use cannabis in their social settings,
- Be informed by relevant data and
- Be transparent and open about the communication objectives to be achieved.





## RECOMMENDATIONS AND NEXT STEPS

Throughout the event, participants highlighted the importance of building trust and relationships, communicating clearly and developing more resources that are locally and culturally focused. They also talked about the need to fill knowledge gaps by linking the results of clinical trials and surveys with voices from the community.

Future mental health and substance use health research related to cannabis should address the following categories and priority areas:

### Cannabinoids

- Implement a standard THC unit to increase consumer understanding, measurement and data comparability.
- Continue to explore clinical evaluations of the effectiveness of CBD, THC and cannabis as a medical treatment.
- Conduct analyses of the effects of different cannabis compounds (e.g., cannabinoids).

### Practice

- Consider the effects of different administration routes or methods of use on mental health outcomes (e.g., how cannabis is consumed).
- Explore the effects of non-inhalation-based cannabis products.
- Invest in more research related to the safety and long-term impacts of vaping.

### Education

- Dismantle stigma and monitor changes in public attitudes to cannabis over time.

### Policy

- Conduct comparative policy analyses of commercial activities, zoning restrictions and penal sanctions for possession and consumption of cannabis – including who continues to be impacted by punitive measures.
- Ensure that public education, policy development and healthcare reflect evidence-based research and findings.

CCSA and the MHCC would like to thank all panellists and participants for sharing their valuable knowledge, perspectives and insights, which inspired productive thinking about the important intersections of cannabis research in Canada.

#### Learn more about the funded research projects at:

[ccsa.ca/research-cannabis](https://ccsa.ca/research-cannabis)

and

[mentalhealthcommission.ca/  
mental-health-and-cannabis-research/](https://mentalhealthcommission.ca/mental-health-and-cannabis-research/)

## APPENDIX: EVENT AGENDA

### Day 1: Research Findings

WEDNESDAY, MARCH 1, 2023, 1 – 4:00 P.M. ET

Time	Agenda item	Speakers and breakout rooms
1:00 – 1:15 15 min	<b>Welcome and opening</b> Welcoming remarks and land acknowledgement Event objectives and agenda overview	Mary Bartram, MHCC Pamela Kent, CCSA
1:15 – 2:00 45 min	<b>Research panel</b> (Short presentations and Q&A)	Moderator: Mary Bartram, MHCC  Panellists: Lisa Elford Kathleen Larose Sharon Goulet Suzanne McLeod Antoine Fournier Hai V. Nguyen Shweta Mital
2:00 – 2:15 15 min	<b>HEALTH BREAK</b>	
2:15 – 3:00 45 min	<b>Breakout discussions (organized by theme/topic)</b> Discuss your own projects and key findings related to mental health, substance use health, public health and safety (what did you learn?) What are some of the implications for policy and/or practice? Any outstanding research gaps?	1 – Diverse population experiences and benefits/risks with cannabis 2 – CBD treatment potential 3 – Legalization impact 4 – Guidelines, programs, and public education 5 – Cannabis use and health care access, impacts, and experiences
3:00 – 3:15 15 min	<b>HEALTH BREAK</b>	
3:15 – 3:50 35 min	<b>Large group reflections and discussion</b> Selected participants from each breakout room summarize what they heard, reflections, and discussion outcomes  Open discussion to highlight significant findings with implications for policy, practice, and future research	Moderator: Mary Bartram, MHCC
3:50 – 4:00 10 min	<b>Wrap up and reminders</b>	Sandra Gosling, MHCC Shea Wood, CCSA

## Day 2: Research Experience

MONDAY, MARCH 6, 2023, 1 – 4:00 P.M. ET

Time	Agenda item	Speakers and breakout rooms
1:00 – 1:15 15 min	<p><b>Opening and Day 2 overview</b></p> <p>Land acknowledgement</p> <p>Welcome back; recap of Day 1</p> <p>Day 2 objectives and agenda overview</p>	Moderator: Shea Wood, CCSA
1:15 – 2:00 45 min	<p><b>Roundtable discussion on the experience of conducting cannabis research</b></p> <p>The discussion will highlight regulatory frameworks, procedures, obstacles, and innovations</p>	Key informants
2:00 – 2:15 15 min	<b>HEALTH BREAK</b>	
2:15 – 3:00 45 min	<p><b>Breakout discussions (organized by methodology)</b></p> <p>Discuss your approach to research: methods, process/procedure, challenges and/or innovations</p> <p>What are some key take-aways or good practices for conducting cannabis research on mental health and substance use health?</p>	<p>1 – Surveys</p> <p>2 – Randomized controlled trials and pre-clinical trials</p> <p>3 – Secondary data review</p> <p>4 – Community-based research (includes Indigenous, arts-based, experience-based and other qualitative methods)</p> <p>5 – Mixed methods</p>
3:00 – 3:15 15 min	<b>HEALTH BREAK</b>	
3:15 – 3:50 35 min	<p><b>Large group reflections and discussion</b></p> <p>Selected participants from each breakout room summarize what they heard, reflections, and discussion outcomes</p> <p>Open discussion to highlight significant opportunities and obstacles in cannabis and mental health, substance use health, and public safety research by methodology and their implications</p>	Moderator: Shea Wood, CCSA
3:50 – 4:00 10 min	<b>Wrap up and reminders</b>	Sandra Gosling, MHCC



### Day 3: What's Next – Knowledge Mobilization Priorities for Research, Policy, and Practice

TUESDAY, MARCH 7, 2023, 1 – 4:00 P.M. ET

Time	Agenda item	Speakers and breakout rooms
1:00 – 1:15 15 min	<p><b>Opening and Day 3 overview</b></p> <p>Land acknowledgement</p> <p>Welcome back; recap of Day 1 and 2</p> <p>Day 3 objectives and agenda overview</p>	<p>Moderator: Rebecca Jesseman, Associate, CCSA</p>
1:15 – 2:00 45 min	<p><b>Diverse perspectives panel (reflections and discussion)</b></p>	<p>Panellists: Kinda Wassef Daniel Bear Chidera Onyegbule</p>
2:00 – 2:15 15 min	<b>HEALTH BREAK</b>	
2:15 – 3:00 45 min	<p><b>Breakout discussions (organized by population groups)</b></p> <p>Discuss gaps in cannabis and mental health and substance use health research and future research priorities</p> <p>Reflect on your own knowledge mobilization and ways to bring evidence into action</p> <p>Explore policy or practice-based recommendations and actions for cannabis, mental health, and substance use health</p>	<p>1 – Marginalized populations (houseless, justice-involved, older adults, 2SLGBTQ+, parents, racialized populations)</p> <p>2 – People with lived or living experience with physical and mental health conditions</p> <p>3 – General population / cannabis consumers</p> <p>4 – Veterans</p> <p>5 – Children and youth</p>
3:00 – 3:15 15 min	<b>HEALTH BREAK</b>	
3:15 – 3:50 35 min	<p><b>Large group reflections and discussion</b></p> <p>Selected participants from each breakout room summarize what they heard, reflections, and discussion outcomes</p> <p>Open discussion to highlight priority areas for future mental health and substance use health research by population</p>	<p>Moderator: Rebecca Jesseman, Associate, CCSA</p>
3:50 – 4:00 10 min	<p><b>Closing remarks and reflections</b></p> <p><b>What's next</b></p>	<p>Sandra Gosling, MHCC Shea Wood, CCSA</p>