

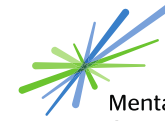
Mental Health
Commission
of Canada

Commission de
la santé mentale
du Canada

Cannabis and Mental Health Webinar

October 28th, 2019

Host



Mental Health
Commission
of Canada

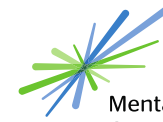
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du Canada



Karin Moen

Program Manager, Mental Health and Substance Use
Mental Health Commission of Canada

Speakers



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du Canada



Dr. Fiona Clement

Associate Professor,
Cumming School of
Medicine and O'Brien
Institute for Public Health
University of Calgary



Dr. Rebecca Haines-Saah

Assistant Professor,
Cumming School of
Medicine
University of Calgary

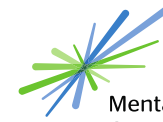


Dr. Robert Gabrys

Research and Policy Analyst
Canadian Centre on
Substance Use and
Addiction

Agenda

- MHCC and our work in cannabis and mental health
- Cannabis and Mental Health: an Environmental Scan and Scoping Review
 - Dr. Fiona Clement, University of Calgary
- Clearing the Smoke on Cannabis: Regular Use and Mental Health
 - Dr. Robert Gabrys, CCSA
- CCSA's Cannabis Public Education
- MHCC's ongoing projects and next steps
- Q&A
 - Dr. Fiona Clement, Dr. Rebecca Haines-Saah, Dr. Robert Gabrys



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About the MHCC

Vision



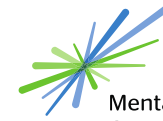
Mental health
and wellness
for all.

Mission



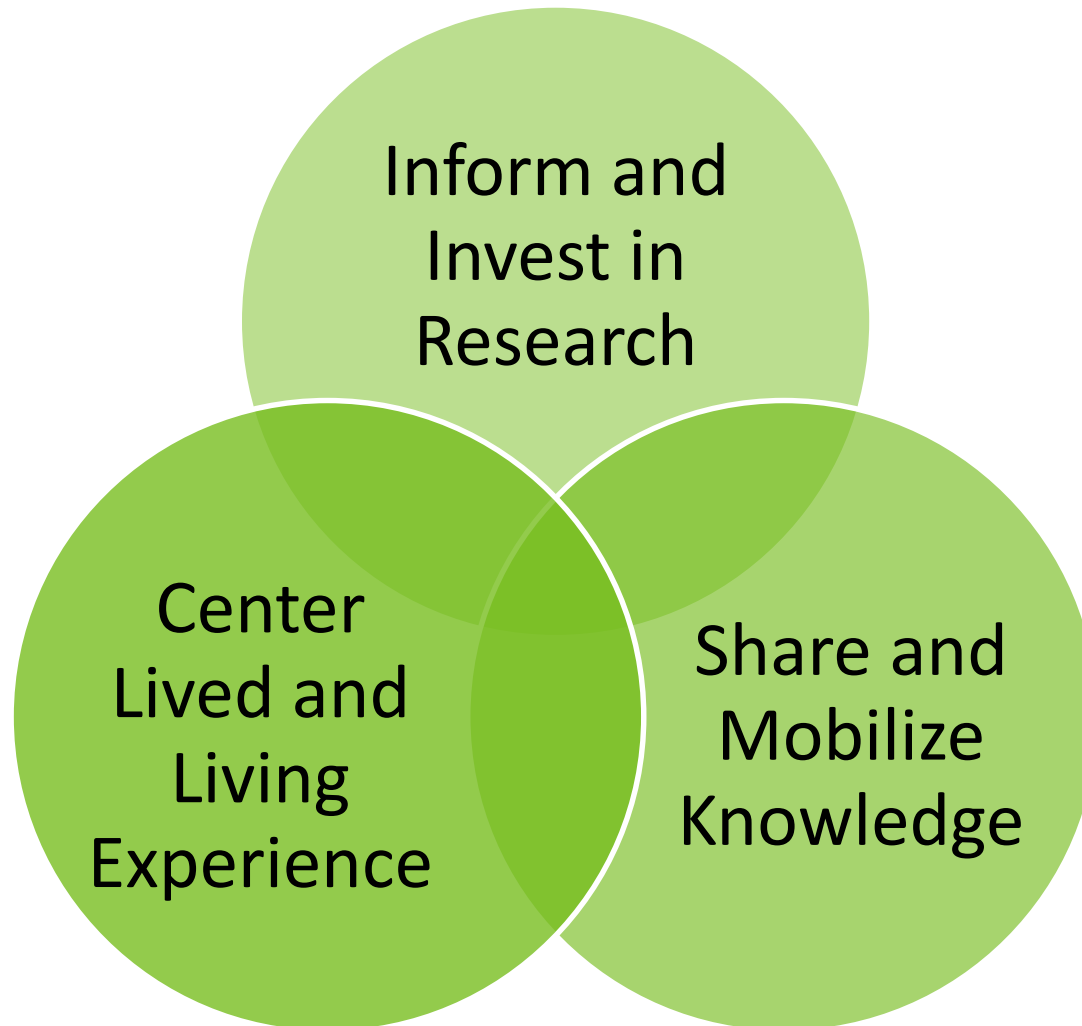
To raise awareness of the mental health
and wellness needs of Canadians, and
to catalyze collaborative solutions to
mental health system challenges.

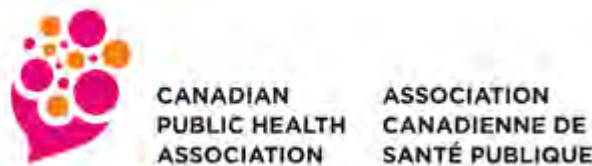
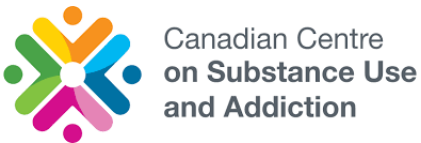
The MHCC, Cannabis, and Mental Health



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Collaboration and Partnership in Cannabis and Mental Health



Cannabis and Mental Health: an Environmental Scan and Scoping Review

Overview provided by Dr. Fiona Clement and Dr. Haines-Saah
on behalf of Dr. Corbett, B Farkas, M Hofmeister, R Diaz, J Taplin, Dr. Hill and Dr. Patten



THE MATHISON CENTRE
for MENTAL HEALTH RESEARCH & EDUCATION



UNIVERSITY OF CALGARY
O'Brien Institute for Public Health
Health Technology Assessment Unit



**HOTCHKISS
BRAIN INSTITUTE**

Our Team

Ruth Diaz, MSc, Dr. Rebecca Haines-Saah, Brenlea Farkas, MSc, Dr. Matthew Hill, Dr. Fiona Clement, Dr. Scott Patten, Dr. Caroline Corbett (not pictured)



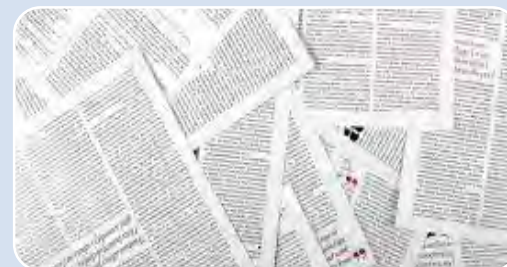
What did we do?



Canadian
Data Assets

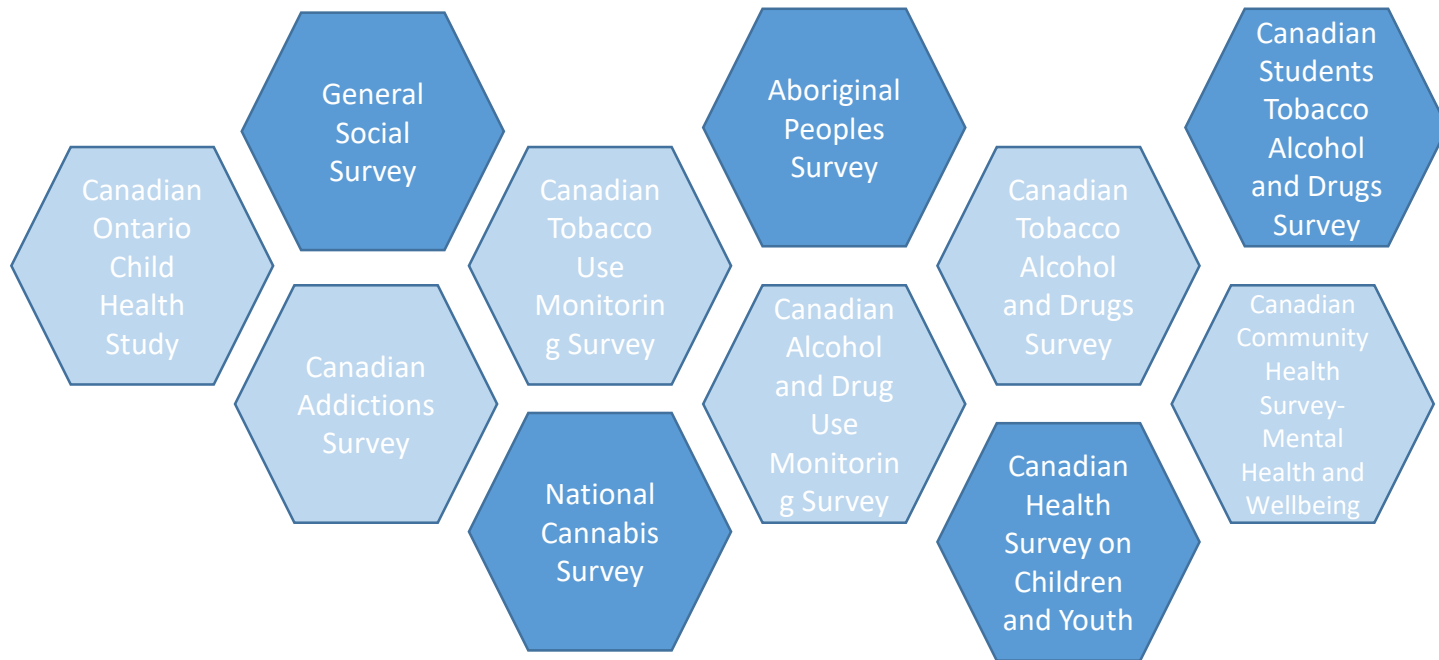


International
Data Assets

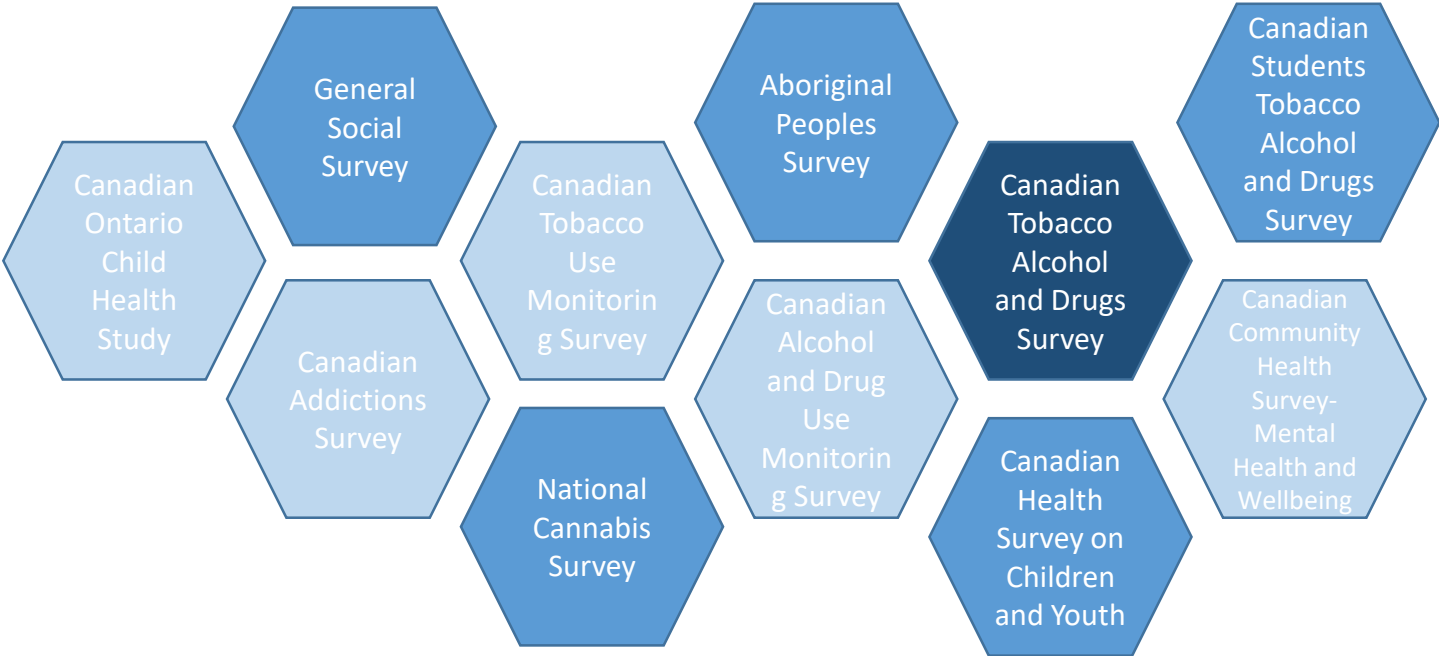


Published
literature

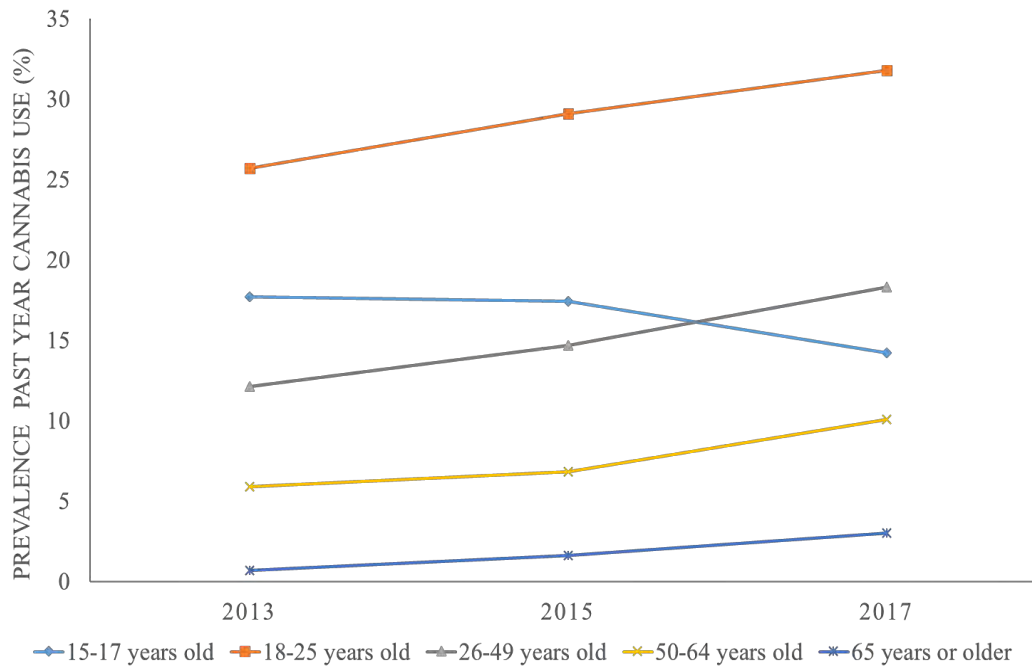
Canadian Data Assets



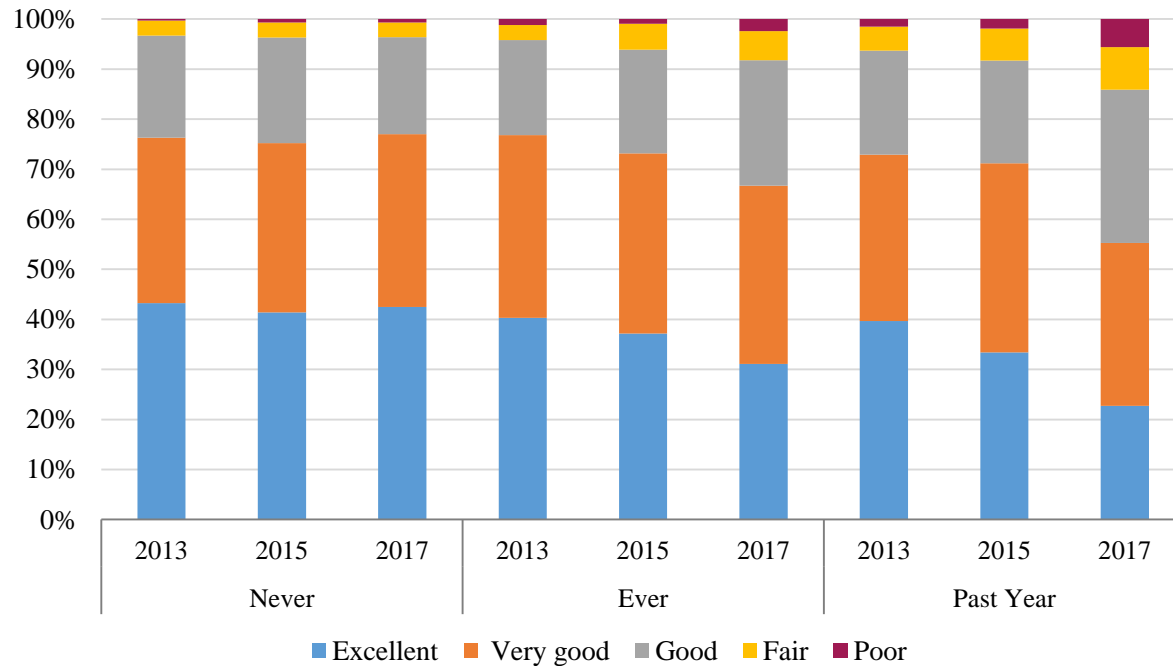
Canadian Data Assets



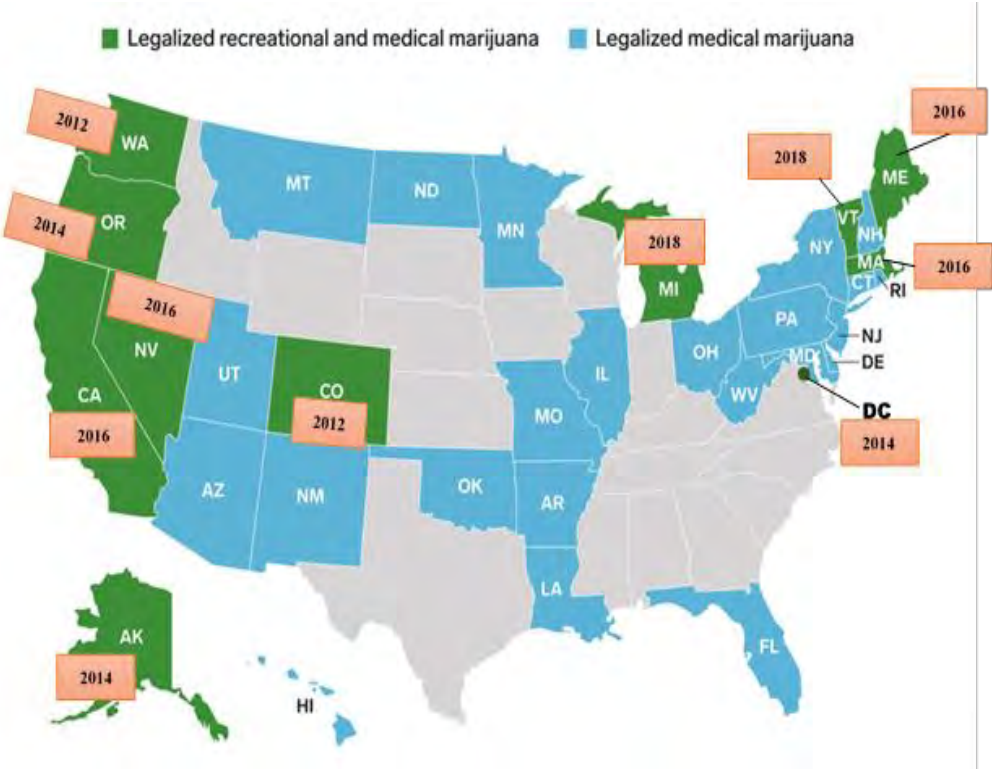
Prevalence of Cannabis Use by Age Past 12 Months, 2013-2017



Self-Reported Mental Health by Cannabis Use 2013 – 2017

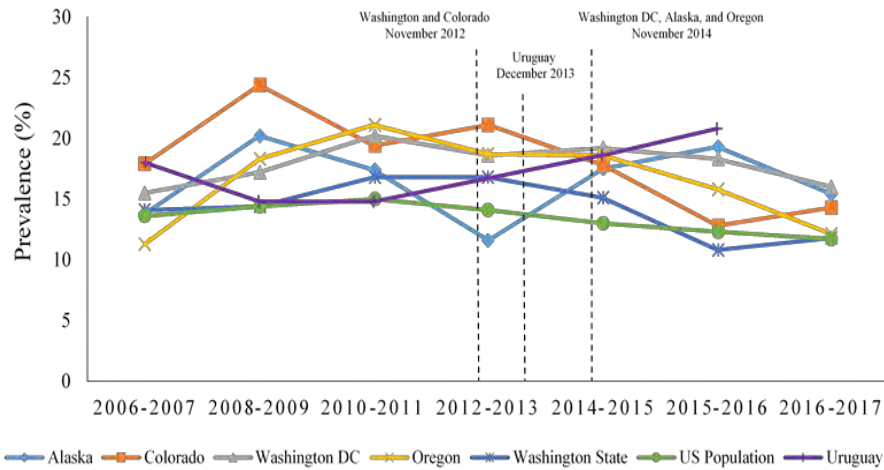


International Data Assets

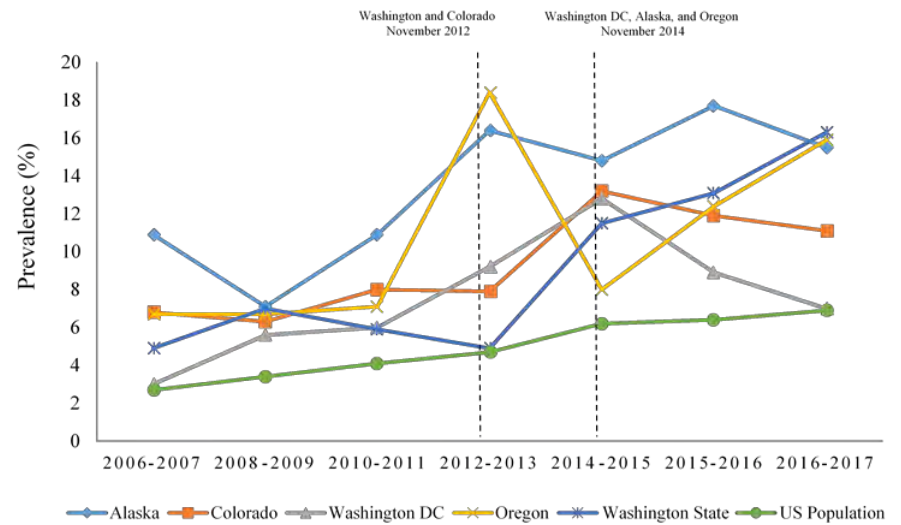


Prevalence of past-year cannabis use over time

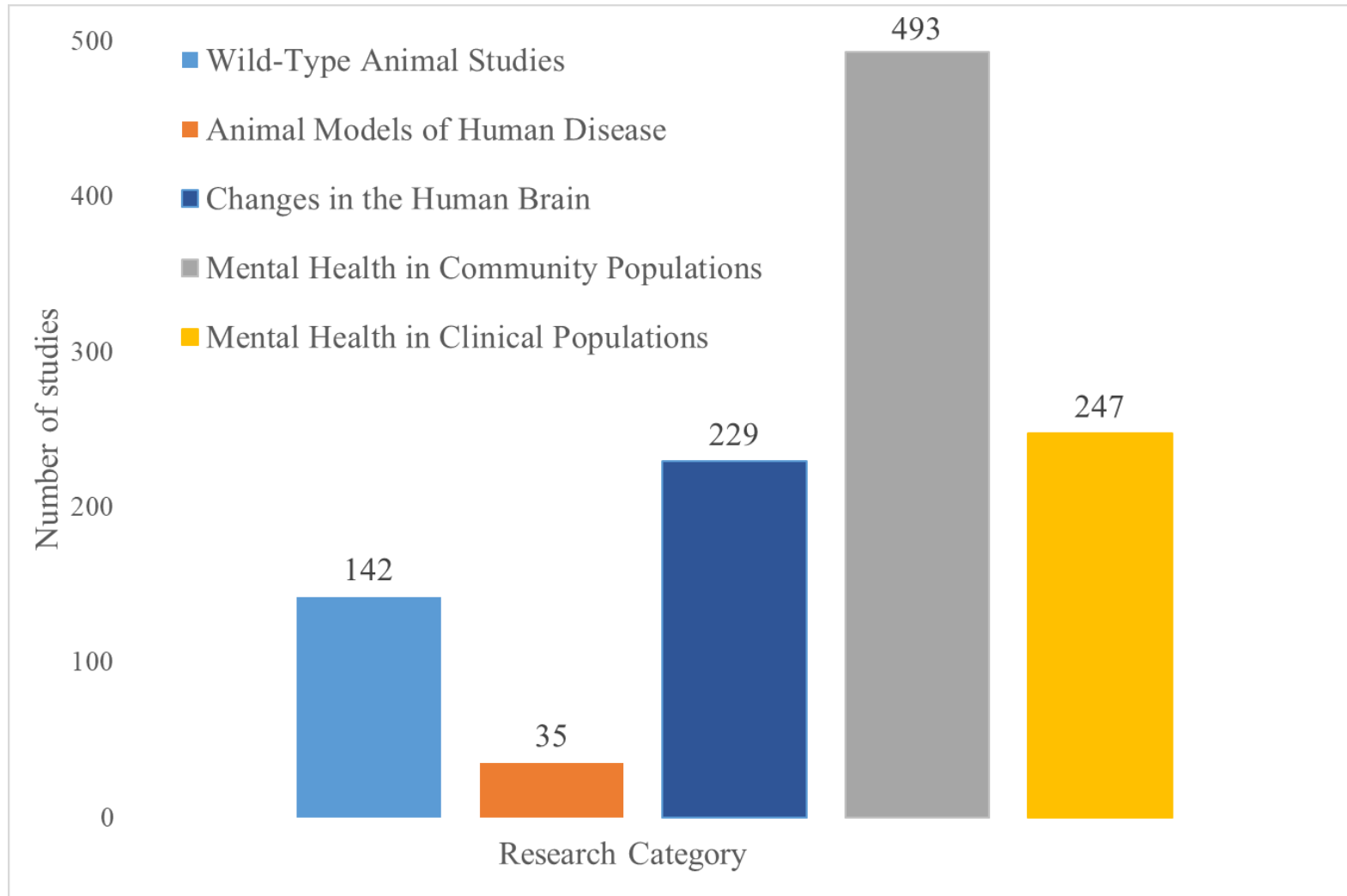
United States ages 12-17; Uruguay 13-17



Over 50 years of age



Published Literature: scoping review



Take away messages

Animal Studies

Strengths

- 177 studies (4 active Canadian labs)
- Majority > 6 animals
- ~ 50% of studies employ rats

Gaps

- Mode of administration primarily injection.
- Few studies examine cannabis in extract form or the primary cannabinoids (THC or CBD)

Human Studies

- Robust literature assessing the relationship between community populations of adults (over 18 years of age) across a range of mental health outcomes.
- People with Schizophrenia Spectrum disorder are the most commonly assessed clinical population .
- Canadian Community Health Survey and the National Longitudinal Survey of Children and Youth both used and reported

- Limited research using a design that can establish the directionality of the relationship between cannabis use and mental health outcomes
- Limited research, in both community and clinical populations, considers populations that are likely to have unique needs (e.g. IRER, 2SLGBTQ, ACE)
- Limited research adopts a sex and gender lens. When it is adopted, there is no clarity about whether sex or gender is considered.
- Both qualitative and quantitative methodologies primarily adopt a harm lens with very few studies assessing quality of life and well-being

Moving Forward



Where can I find the reports?



Cannabis and Mental Health: an Environmental Scan and Scoping Review

<https://obrieniph.ucalgary.ca/system/files/cannabis-and-mental-health-report-for-mhcc-aug-14th.pdf>

Cannabis and Mental Health: Priorities for Research

<https://www.mentalhealthcommission.ca/English/media/4273>



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on Substance Use
and Addiction

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Centre canadien sur
les dépendances et
l'usage de substances

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www.ccsa.ca • www.ccdus.ca

Clearing the Smoke on Cannabis: Regular Use and Mental Health

Cannabis and Mental Health Webinar

Robert Gabrys

October 28, 2019

About CCSA



- **Vision:** A healthier Canadian society where evidence transforms approaches to substance use.
- **Mission:** To address issues of substance use in Canada by providing national leadership and harnessing the power of evidence to generate coordinated action.
- **Value Proposition:** Provide national leadership to address substance use in Canada. A trusted counsel, we provide guidance to decision makers by harnessing the power of research, curating knowledge and bringing together diverse perspectives.
- National non-profit organization with a pan-Canadian and international role.

Strategic Core Functions

Providing National Leadership

Create a common focus and purpose to achieve collective impact

Advancing Research

Synthesize and generate timely evidence to inform practice and policies

Building Strategic Partnerships

Bring people and knowledge together to develop collective responses and coordinated action

Mobilizing Knowledge

Expand the reach and adoption of new and emerging practices

CCSA's National Priorities

Cannabis

Children & Youth

Substance Use & Mental Health

Indigenous Peoples

Workforce Development

National Treatment Strategy

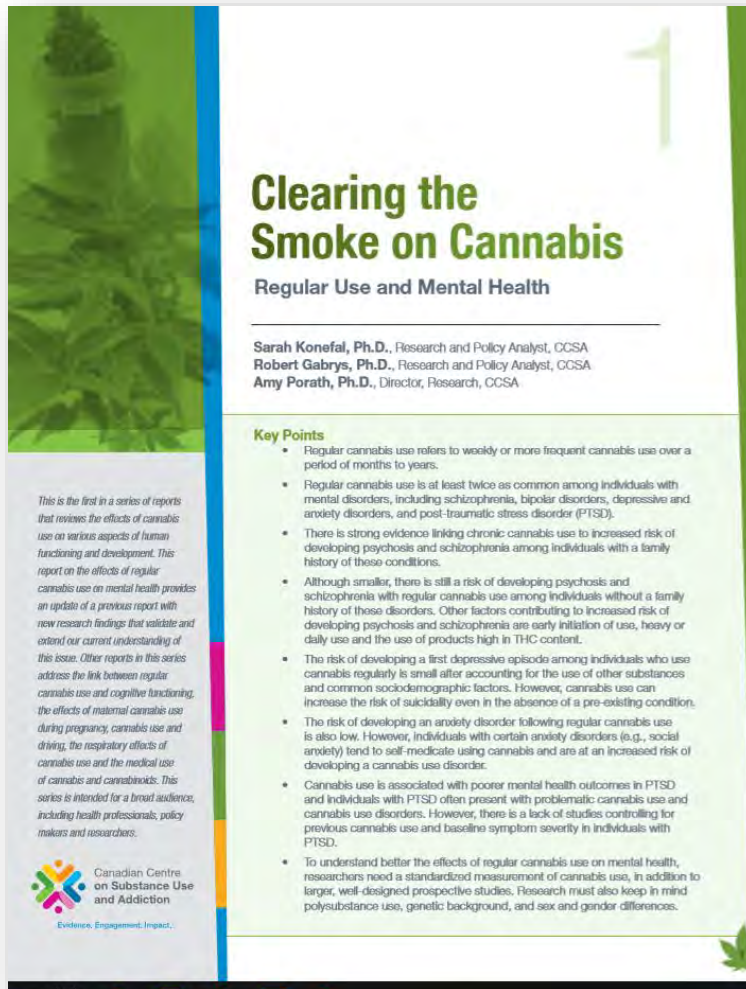
Impaired Driving

National Alcohol Strategy

Opioids & Prescription Drugs

Stigma

Clearing the Smoke on Cannabis series



1

Clearing the Smoke on Cannabis

Regular Use and Mental Health

Sarah Konefal, Ph.D., Research and Policy Analyst, CCSA
Robert Gabrys, Ph.D., Research and Policy Analyst, CCSA
Amy Porath, Ph.D., Director, Research, CCSA

Key Points

- Regular cannabis use refers to weekly or more frequent cannabis use over a period of months to years.
- Regular cannabis use is at least twice as common among individuals with mental disorders, including schizophrenia, bipolar disorders, depressive and anxiety disorders, and post-traumatic stress disorder (PTSD).
- There is strong evidence linking chronic cannabis use to increased risk of developing psychosis and schizophrenia among individuals with a family history of these conditions.
- Although smaller, there is still a risk of developing psychosis and schizophrenia with regular cannabis use among individuals without a family history of these disorders. Other factors contributing to increased risk of developing psychosis and schizophrenia are early initiation of use, heavy or daily use and the use of products high in THC content.
- The risk of developing a first depressive episode among individuals who use cannabis regularly is small after accounting for the use of other substances and common sociodemographic factors. However, cannabis use can increase the risk of suicidality even in the absence of a pre-existing condition.
- The risk of developing an anxiety disorder following regular cannabis use is also low. However, individuals with certain anxiety disorders (e.g., social anxiety) tend to self-medicate using cannabis and are at an increased risk of developing a cannabis use disorder.
- Cannabis use is associated with poorer mental health outcomes in PTSD and individuals with PTSD often present with problematic cannabis use and cannabis use disorders. However, there is a lack of studies controlling for previous cannabis use and baseline symptom severity in individuals with PTSD.
- To understand better the effects of regular cannabis use on mental health, researchers need a standardized measurement of cannabis use, in addition to larger, well-designed prospective studies. Research must also keep in mind polysubstance use, genetic background, and sex and gender differences.

This is the first in a series of reports that reviews the effects of cannabis use on various aspects of human functioning and development. This report on the effects of regular cannabis use on mental health provides an update of a previous report with new research findings that validate and extend our current understanding of this issue. Other reports in this series address the link between regular cannabis use and cognitive functioning, the effects of maternal cannabis use during pregnancy, cannabis use and driving, the respiratory effects of cannabis use and the medical use of cannabis and cannabinoids. This series is intended for a broad audience, including health professionals, policy makers and researchers.

Canadian Centre on Substance Use and Addiction
Evidence. Engagement. Impact.



Cannabis Use Disorder

Diagnostic Criteria for Cannabis Use Disorder (DSM-5)

1. Using more cannabis than intended
2. Trying unsuccessfully to control use
3. Spending a significant amount of time obtaining and using cannabis or recovering from its effects
4. Experiencing a strong desire or urge to use cannabis
5. Failing to fulfil major obligations at work, home or school because of cannabis use
6. Giving up or reducing important social, occupational or recreational activities because of cannabis use
7. Continuing use despite recurring physical or psychological problems caused by cannabis
8. Continuing to use cannabis despite it causing problems in relationships
9. Using cannabis in physically hazardous situations
10. Increasing tolerance to cannabis' effects
11. Developing withdrawal symptoms

Regular use: weekly or more frequent use over a period of months to years

Heavy use: daily or more frequent use, which can be a sign of dependence and cannabis use disorder



Psychosis and Schizophrenia

- Strong evidence linking cannabis use to psychosis and schizophrenia among individuals with a family history of these conditions.
- Although smaller, there appears to still be a risk for individuals without a family history of these disorders.
 - Early initiation of use
 - Heavy or daily use
 - Use of products high in THC content



Depression

- Risk of first depressive episode seems to be small.
 - Specific depression profile?
 - Cannabinoid exposure or an ineffective coping strategy?
- The link between depression and cannabis use disorder appears to be reciprocal.



Anxiety Disorders

- For most individuals who use cannabis, the risk of developing an anxiety disorder seems to be low.
- Individual differences play an important role.
- Social anxiety might increase the risk of developing cannabis use disorder.



Post-Traumatic Stress Disorder

- Cannabis use is common among individuals living with PTSD.
- Preliminary research supports some symptom relief.

But ...

- Cannabis use has been associated with poorer mental health outcomes among those with PTSD.
- Individuals with PTSD often present with problematic cannabis use and cannabis use disorder.



Limitations of Current Research

- Measurement of cannabis use has been limited.
- Causality has been difficult to establish.
- Individual differences have not been fully explored.



Conclusions and Implications

- Strong evidence linking regular cannabis use to increased risk of developing psychosis or schizophrenia.
- The evidence is less clear for mood and anxiety disorders.
- Regular cannabis use appears to do more harm than good for individuals experiencing mental illness.
- Public education directed towards individuals living with, or at risk of, mental illness is essential.
- Weighing the costs vs benefits of cannabis use.



Cannabis Public Education

Cannabis: Inhaling vs Ingesting

To lower your risk of the harmful effects of cannabis, you need to understand the difference between the two most common ways of consuming it.

INHAALING
— smoking or vaping —
Cannabis smoke or vapor delivers THC, the chemical that gets you high, into your lungs where it passes directly into your bloodstream and then your brain.

INGESTING
— eating or drinking —
Edible cannabis travels to your stomach from your liver before getting into your bloodstream and the cannabis with the THC from the original product enters the rest of the body.

START OF EFFECTS
You will feel the effects from seconds to a few minutes of inhaling.

PEAK EFFECTS
Full effects can peak within 30 minutes.

LENGTH OF EFFECTS
Effects can last up to 4 hours after use. Some residual effects can last up to 24 hours.

YOU will feel effects within 30 minutes to 2 hours of ingesting.

PEAK EFFECTS
Full effects can peak within 4 hours.

LENGTH OF EFFECTS
Effects can last up to 12 hours after use. Some residual effects can last up to 24 hours.

THINK FOR LOWER-DRINK USE

- Inhaling and vaping are less harmful to your lungs than smoking.
- If you are using edible cannabis or cannabis oil, be sure to consume in small amounts with a long wait time (15-30 minutes) between doses.
- Inhaling for more than 40 minutes or consuming more than 100 mg of cannabis can lead to more adverse effects.

Checklist: Know the risks and benefits of cannabis use.

To learn more visit cannabis.communicable | cannabis.communicable

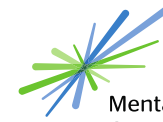
Talking pot with youth
A Cannabis Communication Guide for Youth Allies

The Effects of Cannabis Use during Adolescence
SUBSTANCE ABUSE IN CANADA 2015

Co-designed with input from youth and youth allies

Canadian Centre on Substance Use and Addiction

Q & A



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Thank you for joining us today!

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Dr. Robert Gabrys - rgabrys@ccsa.ca

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