Cannabis in Canada
Health Information Then & Now
Itinerary


Reefer Reality: Cannabis 101 for Information Professionals

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Disclaimer:
I am not a doctor, nor a lawyer.
I'm a health sciences librarian
Cannabis 101
Endocannabinoid System

[Endo]Cannabinoids
- 2-arachidonoyl glycerol
- arachidonoyl ethanolamide

Cannabinoid receptors
- In the CNS, Brain, PNS
- CB1 + CB2

Enzymes
Types of Cannabinoids

Endocannabinoids

Phytocannabinoids

Synthetic cannabinoids
[Phyto]cannabinoids in Cannabis

THC: Tetrahydrocannabinol
CBD: Cannabidiol
UNDERSTANDING THE RELATIONSHIP BETWEEN CANNABINOIDS

RAW
Fresh, uncured cannabis remains in its acidic form.
Conversion begins immediately after harvest.

DRIED / HEATED
Decarboxylation occurs, converting from an acid to the active compound.

AGED
Created over time after exposure to oxygen, heat, and UV light.
• CANNABIS
  The plant genus in the Cannabaceae plant family, Urticales order, Hamamelidae subclass. The flowering tops are called many slang terms including pot, marijuana, hashish, bhang, and ganja. The stem is an important source of hemp fiber.

• MEDICAL MARIJUANA [2014]
  Product of the CANNABIS plant, CANNABINOIDS, or synthetic derivatives thereof, used in the treatment of a wide range of clinical symptoms.

• MARIJUANA USE [2018]
  Medicinal or recreational utilization of MARIJUANA.

• MARIJUANA SMOKING [1988]
  Inhaling and exhaling SMOKE from CANNABIS

• MARIJUANA ABUSE [1990]
  Use of marijuana associated with abnormal psychological, social, and or occupational functioning.

• CANNABINOIDS [1977]  *Explode to include specific cannabinoids*
  Compounds having the cannabinoid structure. They were originally extracted from Cannabis sativa L. The most pharmacologically active constituents are TETRAHYDROCANNABINOL[Dronabinol]; CANNABINOL; and CANNABIDIOYL.

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Relevant MeSH Headings
• **ENDOCANNABINOIDS [2013(2004)]**
  Fatty acid derivatives that have specificity for CANNABINOID RECEPTORS. They are structurally distinct from CANNABINOIDS and were originally discovered as a group of endogenous CANNABINOID RECEPTOR AGONISTS.

• **RECEPTORS, CANNABINOID [2004]**
  A class of G-protein-coupled receptors that are specific for CANNABINOIDS such as those derived from CANNABIS. They also bind a structurally distinct class of endogenous factors referred to as ENDOCANNABINOIDS. The receptor class may play a role in modulating the release of signaling molecules such as NEUROTRANSMITTERS and CYTOKINES.

• **RECEPTOR, CANNABINOID, CB1 [2004]**
  A subclass of cannabinoid receptor found primarily on central and peripheral NEURONS where it may play a role modulating NEUROTRANSMITTER release.

• **RECEPTOR, CANNABINOID, CB2 [2004]**
  A subclass of cannabinoid receptor found primarily on immune cells where it may play a role modulating release of CYTOKINES.

• **CANNABINOID RECEPTOR MODULATORS [2013]**
  Compounds that interact with and modulate the activity of CANNABINOID RECEPTORS.
The Search for Cannabis
How specific keywords can produce different search results

By George M. Eberhart | April 12, 2019

Scholarly articles about marijuana have exploded in the past 20 years, from only about 30 per year in the late 1990s to...
• Alternative spellings + endings
  • Marijuana or Marihuana
  • Marijuana or Marijuanas
• Strains: Indica, Sativa
• Synonyms: Ganja, Weed, Hash, Hashish, Blunts, Hemp, Bhang...
• Specific Cannabinoids:
  • THC, Tetrahydrocannabinol, Tetra-hydrocannabinol, THC-delta-9, Dronabinol, Delta 9THC, D9THC, Tetrahydrocannabinolic Acid, THCA...
Survey
Survey designed in LibWizard
January 2020
Distributed via…
  • Social Media: Twitter, LinkedIn
  • Listservs: CANMEDLIB, CHLPEN, OPHL
70 responses (69 included)
What type of library do you work in?

- Academic: 38%
- Hospital: 33%
- Health (non-hospital): 23%
- Other: 6%

What title would best describe your role?

- Librarian: 83%
- Library Technician: 9%
- Library Assistant: 3%
- Student: 1%
- Other: 4%
Where in Canada do you work?

- Ontario: 34 (49.3%)
- Nova Scotia: 4 (5.8%)
- New Brunswick: 4 (5.8%)
- Quebec: 6 (8.7%)
- British Columbia: 8 (11.6%)
- Alberta: 3 (4.3%)
- Saskatchewan: 5 (7.2%)
- Manitoba: 4 (5.8%)
- Newfoundland and Labrador: 1 (1.4%)
After cannabis legalization in Canada, did you experience an increase in cannabis-related reference questions?

- Yes – more questions: 27 (39.1%)
- No – less questions: 4 (5.8%)
- Unsure: 2 (2.9%)
- I did not work in libraries prior to legalization: 1 (1.4%)
- No – the same amount of questions: 35 (50.7%)
Do you receive reference questions related to cannabis prior to legalization?

Did you experience an increase in reference questions related to cannabis after legalization?
Are you aware of any educational opportunities for information professionals related to cannabis?

- I am not interested this topic: 3 (4.4%)
- Yes, I am aware: 9 (13.2%)
- No, I am not aware: 56 (82.4%)
In terms of educational opportunities, what topics related to cannabis are of interest to you?

- **Cannabis 101 (what are cannabinoids, how and why cannabis is consumed)**
- **Medical use of cannabis**
- **Cannabis health effects and risk**
- **Producing and selling cannabis**
- **Personal/recreational use of cannabis**
- **Finding cannabis related data**
- **Database searching the cannabis research**
- **Information sources on cannabis laws and regulation**
- **Other**
Resources
CPHA Cannabis Webinar Series

https://www.cpha.ca/cannabis-resources-webinars

This series is focused on a range of issues related to cannabis consumption. We have partnered with public health researchers and practitioners to present different views and work that is occurring across Canada. The goal of these webinars is to ensure that public health, health and social service providers in Canada are prepared to respond to the needs of people who use cannabis and other substances.

• Youth and Cannabis Legalization: Considerations for Public Health and Prevention
• Legalizing Cannabis: Clearing the smoke
• Cannabinoids 101: Understanding the endocannabinoid system
• Trajectories of Marijuana Use Across the Decades
• Consumption, Risk Factors and Food Safety of Marijuana
• International differences in patterns of cannabis use among youth
Introduction to Cannabis (Webinar Series)

- Audience: non-health or health professionals looking to gain an introduction into cannabis, starting with a brief background in the history and science to the education and administration aspect of cannabis.
- Duration: 5 weeks
- $299

Cannabis Educator Certificate Program (Hybrid Course)

- Audience: Intended for all health professionals looking to gain a further understanding of medical cannabis.
- Duration: 12 weeks
- $949

https://michener.ca/continuing-education/ce-courses/cannabis-education/
Services and information

About cannabis
Learn about cannabis (marijuana), its uses, and forms

Cannabis health effects and risks
Health effects, long-term, short-term, mental health, impairment, safety, addiction

Producing and selling cannabis
Apply for a cannabis licence, guidelines, requirements, cost recovery, testing

Cannabis research and data
Survey, market data, statistic hub

Cannabis recalls, adverse reactions and reporting
Submit a report about a cannabis product, recall form and guide, adverse reaction guidance

Cannabis laws and regulations
Cannabis laws, process of legalization, cannabis in provinces and territories

Medical use of cannabis
Accessing cannabis for medical purposes, applying to be a licensed producer

Personal use of cannabis
Growing cannabis at home, safety, storage, possession limits

Producing and selling hemp
About hemp, apply for an industrial hemp licence, permits

https://www.canada.ca/en/health-canada/services/drugs-medication/cannabis.html
Purpose of this Guide

In order to support the information needs of health care providers, researchers, policy makers involved in delivering and improving health services, and the general community, this resource guide was developed through a partnership between Dalhousie University Libraries and Nova Scotia Health Authority Library Services. The focus of this Guide is on reliable information pertaining to cannabis use and health. It is not possible to cover all relevant topics on the Guide in depth. If you are looking for more information, please contact us and we will be happy to help.

Medicinal vs. Recreational Use

We acknowledge that legalization of cannabis has health and social impacts. When experiencing these impacts, it is important to consider that the body of scientific evidence about the use of cannabis has been impacted by its status as illegal. A large proportion of the scientific evidence to date examines the potential harm cannabis may cause (e.g. Eggertson, 2017). This guide recognizes that while there is a place for harm-focused research, we need to explore the therapeutic role of cannabis and anticipate that our understanding with this focus will increase over time.

Library Services

https://library.nshealth.ca/Cannabis
Cannabis Resources for Health Professionals

As a result of the changes to Canadian law, MUHC librarians have compiled a list of evidence-based resources on cannabis.

The following are intended for health professionals. Resources for the general public are available on our Patient Resource Centre’s cannabis webpage: muhclibraries.ca/cannabis.

https://www.muhclibraries.ca/cannabis-resources-for-health-professionals/
https://www.muhclibraries.ca/patients/health-topics/cannabis/
Welcome to **MedicinalCannabis+** - an online database that keeps you up-to-date with the highest quality research on medicinal cannabis. This resource aims to compile evidence that furthers the understanding of the benefits and harms of medicinal cannabis with respect to substance abuse disorders and pain.

As part of the Michael G. DeGroote Centre for Medicinal Cannabis Research this resource is supported by the Michael G. DeGroote Initiative for Innovation in Healthcare and the Boris Family Foundation.

Access the medicinal cannabis evidence that researchers, clinicians, and policymakers trust.

REGISTRATION TO DAY

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**Most Read Articles**

**Within the past month**

**Psychosocial interventions for people with both severe mental illness and substance misuse.**

**Interventions for female drug-using offenders.**

**Lower-Risk Cannabis Use Guidelines: A Comprehensive Update of Evidence and Recommendations.**
References


Image Sources in Order of Appearance

Slide 1, 3, 16: Cannabis Plant Image by 7raysmarketing from Pixabay
Slide 4, 5: Cannabis bud Image by M. Maggs from Pixabay
Slide 7: Endocannabinoid system image from The Ontario Cannabis Store website.
Slide 8: 2-Arachidonoylglycerol 3D model image by Adam001d from Wikipedia
Slide 8: Echanacia image by Matthias Böckel from Pixabay
Slide 8: Pill image by Steve Buissinne from Pixabay
Slide 10: Relationships between Cannabinoids Graph from Keys to Cannabis
Slide 14: Cannabis tincture image by Julia Teichmann from Pixabay
Slide 30, 33: Cannabis Leaf Image by M. Maggs from Pixabay
Thank you!

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