# **What’s the Cannabis Conversation About?**

Marijuana, bud, blunt, chronic, dab, dope, ganja, grass, green, hash, herb, joint, loud, Mary Jane, mj, pot, reefer, skunk, smoke, trees, wax, weed…

**What is cannabis?** Cannabis, the term preferred by the Canadian government, is a plant-derived drug that contains tetrahydrocannabinol (THC), the principal psychoactive constituent of cannabis. It is the [most commonly used psychoactive substance](https://www.drugfreekidscanada.org/wp-content/uploads/2017/06/34-17-1850-Cannabis-Talk-Kit-EN-10.pdf) in Canada, second only to alcohol. Cannabis can be used for [medicinal purposes](https://www.canada.ca/en/health-canada/services/publications/drugs-health-products/understanding-new-access-to-cannabis-for-medical-purposes-regulations.html) (legal since 1991) or recreational use.

Cannabinoid receptors, on which THC attaches, are concentrated in areas of the brain associated with thinking, memory, pleasure, coordination and time perception. THC activates these regions and affects a person's memory, pleasure, movements, thinking, concentration, coordination and sensory and time perception. The psychoactive effects can make some people feel happy and relaxed, while it can cause confusion, drowsiness, forgetfulness, panic, delusions and distorted perception in others. [Research has shown](https://www.researchgate.net/publication/227602658_Potency_Trends_of_D9-THC_and_Other_Cannabinoids_in_Confiscated_Cannabis_Preparations_from_1993_to_2008) that the current average potency of cannabis THC is almost 10% higher than decades ago. The [activation speed and duration of these effects](https://www.canada.ca/content/dam/hc-sc/documents/services/campaigns/27-16-1808-Factsheet-Health-Effects-eng-web.pdf) depend on whether the cannabis was smoked or vaporized (begins right away and lasts at least six hours) or consumed through edibles (begins between .5–2 hours after consumption and can last 12 hours or longer). For information on the long-term effects of cannabis usage, review the California Society of Addiction Medicine article, *The Adverse Effects of Marijuana (for healthcare professionals)*.

**Why this topic?** In the late spring of 2018, the Hot Spot Review Crew conducted a quality assurance survey with CSMLS members to determine their views on the cannabis conversation. At that time, support for cannabis legalization wasn’t as strong as we had expected, where only 58% agreed with it, 24% were unsure and 15% were against legalization. Whatever your opinion is, it is a done deal; legalization of cannabis is coming into force on October 17, 2018 (see preceding [timeline of events](https://openparliament.ca/bills/42-1/C-45/)). Although some [provincial and territory regulations will differ](http://www.ccsa.ca/Resource%20Library/CCSA-Canadian-Provincial-Territorial-Cannabis-Regulations-Summary-2018-en.pdf), the federal government has defined that “adults who are 18 years of age or older will be [[legally able] to](http://www.justice.gc.ca/eng/cj-jp/cannabis/):

* possess up to 30 grams of legal cannabis, dried or equivalent in non-dried form in public
* share up to 30 grams of legal cannabis with other adults
* buy dried or fresh cannabis and cannabis oil from a provincially-licensed retailer
  + in provinces and territories without a regulated retail framework, individuals would be able to purchase cannabis online from federally-licensed producers
* grow, from licensed seed or seedlings, up to 4 cannabis plants per residence for personal use
* make cannabis products, such as food and drinks, at home as long as organic solvents are not used to create concentrated products”

Canada is the second country in the world and the first G7 country to legalize cannabis. A small number of countries, [such as the United States](https://www.businessinsider.com/legal-marijuana-states-2018-1), have certain regions that have legalized it, while other regions remained unchanged.

**How does the medical laboratory fit into the cannabis conversation?** As a survey participant questioned, how is legalization of cannabis a clinical issue? Let’s take a moment to consider that the determination of whether it should be legal or not requires significant consultation about the positive, negative and neutral impacts on Canadians. To create legalization, lawyers, politicians, environmentalists, economists, law enforcement, health professionals and the general public, to name a few, were involved in stakeholder discussions. But, the discussion runs further than that.

Timely and reliable testing of THC found in the body can be extremely important. As cannabis consumption grows, so does the testing associated with it, which places our profession in the midst of the cannabis conversation. The Canadian Imperial Bank of Commerce (CIBC) predicts that Canada's legal cannabis market [will grow to a $6.5 billion industry](http://www.businessinsider.com/marijuana-canada-eclipse-liquor-sales-2020-2018-5) by 2020! Alberta’s [cannabis testing and research labs](https://www.thestar.com/calgary/2018/07/02/legalization-promises-a-boom-in-cannabis-testing-and-research-for-alberta-labs.html) have stated that they expect to see a boom in business once the drug is finally legalized in October.

Over the past year, many Hot Spot Review survey participants (CSMLS members) haven’t noticed a change in cannabis testing as of yet. Only 9% of medical laboratory professionals had noticed an increase in cannabis testing, ranging from 5% to 20% more tests. A total of 42% of the survey respondents were ‘unsure’ if there was a change in testing volume. Nonetheless, 42% of these participants expect there will be an increase.

This increase in cannabis testing comes at a time when there is a general increase in demand for many other types of laboratory testing (i.e., aging population, a more health-conscious younger generation). In addition, we are experiencing and will continue to experience a shortage of laboratory professionals in Canada, and [“[cannabis testing] could be a burden to the system”](https://globalnews.ca/news/3092655/government-predicts-legal-pot-will-lead-to-influx-of-lab-tests/) as Christine Nielsen, CSMLS CEO notes. Canada may look to the United States to help keep up with the increased workload but our Canadian laboratory system needs to brace for the increase, a nationally undefined value at this time. How much will the increase be?

* From law enforcement, [testing is critical in determining an offence or infraction](https://nationalpost.com/cannabis/federal-government-approves-first-device-for-testing-drivers-saliva-for-cannabis).
  + The majority of Hot Spot Review survey participants agreed (73%) that medical laboratory professionals (MLPs) provide the best second-line testing detection for drug evaluation of drivers (compared to front-line police officers).
* From health professionals and patients, THC testing may be integral in identification associated with drug abuse scenarios or determination of THC effects on treatment options in various diseases.
* From an employer or insurance perspective, testing can be necessary to [demonstrate voluntary or mandatory compliance with a standard or regulation.](https://www.cbc.ca/news/politics/cannabis-drug-testing-workplaces-1.4687200)

Members of the Canadian medical laboratory community will be directly affected by cannabis legalization because of the importance of associated testing. There is still considerable debate over the determination of long-term effects, how police will test for cannabis usage roadside and what the legal limits for consumption is, amongst other discussions. Consider these topics where our community can contribute:

* Providing technical testing information and advocacy in the determination of legal limits.
  + Only 41% of Hot Spot Review survey participants felt knowledgeable about the debate to determine the legal limit of cannabis use and 33% felt knowledgeable about the best screening test for drivers under the influence of cannabis.
* Obtaining specimens from patient/clients and conducting clinical laboratory tests associated with cannabis.
  + [Canadian Blood Services states](https://blood.ca/en/blood/recent-changes-donation-criteria), “Marijuana and alcohol: If you’re sober and can give informed consent, then you can donate. Prior to these latest changes, donors had to wait 12 hours after resolution of intoxication. Many people think they’re deferred for past marijuana use, but that is not the case.” (change as of April 23, 2018)
* [Testing the quality and safety](https://www.theglobeandmail.com/cannabis/article-globe-investigation-whats-in-your-weed-we-tested-dispensary/) of medicinal and non-medicinal cannabis, and advocating for improved standards.
  + Only certain [labs in Canada are licensed](https://www.canada.ca/en/health-canada/services/list-licensed-dealers.html) to conduct activities with cannabis.
* Conducting and contributing to research on the effects of cannabis to the body and mind as well as validation of new point-of-care-testing devices.
  + Using mass spectrometry technology, [Cannabix Technologies](http://www.cannabixtechnologies.com/) has been developing a marijuana breathalyzer and claims that it can detect impairment rather than past use. A similar device is being created at the [University of British Columbia](http://www.ctvnews.ca/sci-tech/ubc-professor-develops-marijuana-breathalyzer-1.2867706).
* Creating [employee policies](http://www.portailrh.org/Ressources/AZ/dossiers_speciaux/guidecannabis/pdf/CRHA_Guide_Cannabis_ANG_WEB.pdf) to ensure safety for all in the lab.

And our profession’s importance may continue to grow! Toronto, Montreal and Vancouver are united in their call alongside health agencies, such as the Canadian Public Health Association, to decriminalize all hard drugs as discussed in a recent [National Post](https://nationalpost.com/news/canada/what-would-it-look-like-if-canada-decriminalized-all-the-drugs) article. Although the Hot Spot Review Crew doesn’t see this coming to fruition any time soon, attitudes on health and recreation are changing. If you don’t believe that any country would decriminalize drugs completely, you would be interested to learn about Portugal’s story—[the country that decriminalized all drugs in 2001.](https://nationalpost.com/news/we-had-nothing-to-lose-how-portugal-solved-its-catastrophic-drug-woes-through-decriminalization)

**One more thought…**

Before you start researching the cannabis topic further and determining how you can contribute to the conversation, here is an additional point from the Hot Spot Review Crew:

Make sure you are informed about your organization’s policies, procedures and resources regarding cannabis use. It will help keep you, your coworkers and your patients safe.

In anticipation of legalization, Hot Spot Review survey participants were asked if their workplace had reviewed or updated policies and procedures and/or created resources for various relevant populations. The vast majority of survey respondents were either unaware or indicated that policies had not been created.

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| **Resources:** | **No** | **Unsure** | **Yes** |
| Interactions with staff who may be using cannabis | 59% | 39% | 2% |
| Interactions with clients/patients who may be using cannabis | 58% | 40% | 2% |
| Ingestion/inhalation of cannabis on workplace property by staff or the public | 58% | 36% | 6% |
| Employee Assistance Program opportunities to support cannabis addiction | 52% | 37% | 11% |
| Educational material on cannabis use and legalization | 61% | 33% | 5% |

**Get informed. Get motivated. Get talking. Get political.**

*\*The data in this article should not be considered generalizable to all medical laboratory professionals*

*as it was collected as part of a CSMLS quality assurance project.\**

**How else can medical laboratory professionals support the cannabis conversation?** Being an MLP doesn’t mean you have to think of advocacy only in terms of the lab. You are also a part of the larger health system and have a voice to add to government discussions. For instance:

* Do you know a medical laboratory expert who could support discussions in cannabis drug testing?
* Can your lab or academic program contribute to research on the long-term effects of cannabis on the body and mind? What about validation of cannabis testing devices and procedures?
* Can you help update policies for your laboratory or organization to explicitly include parameters around cannabis usage and the workplace, for the worker, the patient and/or the student?

Add your opinion to the conversation and let your organization know that medical laboratory professionals have something to contribute!

**Additional Resources:**

* [Cannabis in Canada: Get the facts](https://www.canada.ca/en/services/health/campaigns/cannabis.html) (Government of Canada)
* [Health Effects of Cannabis – fact sheet](https://www.canada.ca/content/dam/hc-sc/documents/services/campaigns/27-16-1808-Factsheet-Health-Effects-eng-web.pdf)
* [Cannabis Stats Hub](https://www150.statcan.gc.ca/n1/pub/13-610-x/13-610-x2018001-eng.htm)
* [How to Adapt the Workplace to the Legalization of Cannabis](http://www.portailrh.org/Ressources/AZ/dossiers_speciaux/guidecannabis/pdf/CRHA_Guide_Cannabis_ANG_WEB.pdf)
* [[Canada’s Lower-Risk Cannabis Use Guidelines (LRCUG)](https://www.canada.ca/en/health-canada/services/drugs-medication/cannabis/resources.html)](https://www.camh.ca/-/media/files/pdfs---reports-and-books---research/canadas-lower-risk-guidelines-cannabis-pdf.pdf)
* [Talk about cannabis](https://www.canada.ca/en/health-canada/services/drugs-medication/cannabis/resources.html)
* [Cannabis: What Parents/Guardians and Caregivers Need to Know](https://www.camh.ca/-/media/files/guides-and-publications/cannabis-information-document-smha-camh-en.pdf)

Don’t forget to review this LABCON2018 presentation on cannabis and legalization in Canada presented by Constable T. Froats, DRE/SFST Training Coordinator for the Ottawa Police Services.

