

## MEDICAL AND RECREATIONAL CANNABIS AND PARKINSON'S DISEASE

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### **Cannabis & Parkinson's**

*There is currently no conclusive evidence demonstrating that cannabis is beneficial for people with Parkinson's. A limited number of studies examining certain cannabinoids for Parkinson's symptoms have yielded mixed results (Health Canada, 2018a). If you are considering the use of cannabis for symptom management, consult with your doctor first. More research needs to be done to better understand the effects of cannabis for people with Parkinson's.*

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The use of cannabis (also known as marijuana) has been legal for medical in Canada use since 2001. As of October 17, 2018, it was legalized for recreational use as well. In British Columbia, the legal age to purchase cannabis is 19. Recreational cannabis can be purchased in government-operated stores, both in-person or online. Cannabis smoking and vaping (act of inhaling and exhaling vapor) is prohibited wherever tobacco smoking is prohibited, as well as places where children commonly gather, such as playgrounds (Government of BC, 2018). More information on BC cannabis regulations can be found under Additional Resources at the end of this help sheet.

### **Chemical Substances in Cannabis**

The chemical substances in cannabis are called cannabinoids. These have an effect on cell receptors in the brain and body, and can change how those cells behave and communicate with each other. The two most commonly known cannabinoids are delta-9-tetrahydrocannabinol (THC) and cannabidiol (CBD).

#### **THC**

THC is the most researched cannabinoid, and is responsible for the way your brain and body respond to cannabis, including intoxication, or the "high". THC has some therapeutic effects, but may be harmful in higher concentrations. The potency (concentration or strength) of THC in cannabis is often shown as a percentage of THC by weight (or by volume of oil). Cannabis that contains very low amounts of THC in its flowers and leaves (less than 0.3%) is classified as hemp.

#### **CBD**

Unlike THC, CBD does not produce a high or intoxication. Some evidence suggests that CBD may block or lower some of the side effects that THC has on the mind. This may occur when the amount of CBD is the same or higher than the amount of THC in the cannabis product. CBD is also being studied for its possible therapeutic uses. (Health Canada, 2018b).

### **Potential Therapeutic Uses of Cannabis**

Although Health Canada has produced information on its potential therapeutic effects, cannabis is not an approved therapeutic product. The educational material produced by Health Canada should not be interpreted as an endorsement of the use of cannabis for therapeutic purposes or of marijuana generally.

Your healthcare practitioner may authorize the use of cannabis for relief of symptoms associated with a variety of disorders which may not have responded to conventional medical treatments. The potential therapeutic and adverse effects associated with cannabis use may both vary depending on:

- the amount of cannabis used and the concentration of cannabinoids in the cannabis product,
- the frequency of cannabis use,
- the patient's age and medical condition,
- previous experience with cannabis or cannabinoids, and
- the use of other prescription or non-prescription drugs.

THC acts on very specific targets, known as cannabinoid receptors, which are found throughout the body in most tissues and organs, but are specifically numerous in the brain and nervous system. Other cannabinoids, such as a CBD, may have targets other than cannabinoid receptors. Cannabinoid receptors are involved in the regulation of bodily functions such as heart rate, blood pressure, perception of pain, wake/sleep cycle, digestion, and many other functions (Health Canada, 2016a).

#### ***When should cannabis not be used?***

According to Health Canada, cannabis should not be used if you:

- are under the age of 25
- have serious liver, kidney, heart or lung disease
- have a personal or family history of serious mental disorders such as schizophrenia, psychosis, depression, or bipolar disorder
- are pregnant, are planning to get pregnant, or are breast-feeding
- are a man who wishes to start a family
- have a history of alcohol or drug abuse or substance dependence

Talk to your healthcare practitioner if any of the above conditions apply to you, in addition to your Parkinson's disease. There may be other conditions where this product should not be used, but which are unknown due to limited scientific information.

Cannabis may also interact with several drugs. As such, be sure to tell your healthcare practitioner which prescription, non-prescription or herbal products you are currently taking, particularly:

- Any drugs which slow down the central nervous system, causing drowsiness. These may include sleeping pills, tranquilizers, some pain medications, some allergy or cold medications, or anti-seizure medications.
- Antiretroviral drugs used in the treatment of HIV/AIDS, certain anti-depressants, stomach acid inhibitors, certain antibiotic and antifungal medications, certain heart medications, and Saint John's Wort.

#### ***My doctor is not comfortable prescribing medical cannabis. What can I do?***

Many doctors are unfamiliar with the research on medical cannabis, and as such, are hesitant to prescribe it. In these situations, if you would like to try medical cannabis you may need to be your own advocate with your doctor. Bring documentation that explains the research and science behind cannabis and its therapeutic effects, as well as your experience if you have tried it recreationally. Some doctors may have negative attitudes towards the use of medical cannabis, but if you are able to explain

how medical cannabis may be beneficial as a treatment option, you are more likely to receive their support (Medical Marijuana.ca, 2016).

If your doctor is not able to provide you with a prescription for medical cannabis, you may choose to visit a doctor who is a medical cannabis specialist. Greenleaf Medical Clinic and Medical Cannabis Resource Centre are options for getting connected to medical cannabis specialists. A referral from your GP may be required.

More information and relevant forms are available on their websites:

- Greenleaf Medical Clinic: [greenleafmc.ca/patients](http://greenleafmc.ca/patients)
- Medical Cannabis Resource Centre (MCRI): [www.mcrci.com](http://www.mcrci.com)

## Dosing Methods

There is no scientifically defined dose of cannabis for any specific medical condition. If you have not consumed cannabis before, it would be prudent to have someone with you the first time you use it. Dosing remains highly individualized. The current information suggests most individuals use less than 3 grams daily of dried marijuana, whether that amount is taken orally, inhaled, or a combination of both (Health Canada, 2016). Doses of THC as low as 2.5–3 mg, and even lower, are associated with therapeutic benefits with minimal psychoactivity.

### ***Inhaling***

When smoking or vaporizing cannabis, effects may be felt within a few minutes and will generally peak within 30 minutes. Acute effects typically last between 2 to 4 hours, but may be longer (e.g., 24 hours).

### ***Ingesting***

When ingesting oils, foods, or capsules, acute effects may be felt as quickly as 30 minutes or as long as 3 to 4 hours after administration. This variability depends on factors such as amount of food in the stomach. It is prudent to wait a minimum of 2 hours between administrations of single doses of oral products to prevent possible overdosing. Acute effects generally peak between 3 to 4 hours after dosing and can last 8 hours or longer.

### ***Topical Application***

With topical application (e.g., oils, creams), it is not known how long it takes for potential therapeutic effects to appear, nor how long they last. There have been reports of hypersensitivity reactions, such as rashes or itching, when skin has come into contact with cannabis.

Health Canada advises patients with no prior experience with cannabis or cannabinoids to begin at a very low dose and to stop therapy if unacceptable or undesirable effects occur. (Health Canada, 2016b)

## Accessing Medical Cannabis Legally

Although both recreational and medical cannabis is legal in Canada, Health Canada continues to operate the medical cannabis system. To access medicinal cannabis:

1. Meet with your healthcare practitioner to discuss the use of cannabis for medicinal purposes
2. Register with a licensed producer to obtain cannabis products for medical use, including:

- Fresh or dried marijuana
- Cannabis oil

To register with a licensed producer of your choice, you will need to:

- complete a registration form specific to that licensed producer
- provide your original [Medical Document Authorizing the use of Cannabis for Medical Purposes](#)

### 3. Possessing cannabis

If approved for medical cannabis access, you are allowed to possess up to a 30-day supply of dried marijuana, or its equivalent. Your maximum amount is based on the lower amount of what your healthcare practitioner has recommended, or 150 grams.

### 4. How to switch to a different licensed producer

You may switch to a different licensed producer at any time. Licensed producers are, however, not allowed to return your medical document. In order to switch licensed producers you must:

- Obtain a new medical document from your healthcare practitioner
- Cancel your registration with your current licensed producer
- Complete a registration form specific to the new licensed producer. Registration forms are available on the licensed producer's website or by contacting them directly
- Provide the original of your new medical document to the new licensed producer

(Health Canada, 2017)

## Travelling with Cannabis

While cannabis is legal nationwide in Canada, cannabis cannot be transported across the border – into or out of Canada – even if you are authorized to use cannabis for medical purposes and even if you are travelling from an area where cannabis has been legalized or decriminalized. If you try to travel to other countries with cannabis in your possession, you may be subject to criminal charges. If you are travelling within Canada, it is your responsibility to learn the laws of the province or territory to which you are travelling (Government of Canada, 2018b).

## Research on Medical Cannabis

Research is currently being conducted on medical cannabis. The Canadian Institutes of Health Research (CIHR) has made significant investments in research observing both the potential therapeutic effects, as well as potential adverse effects, of cannabis. In January 2018, CIHR announced \$1.4 million in funding for research relating to the implications of cannabis legalization and regulation and in July 2018, CIHR in partnership with the Mental Health Commission of Canada and the Canadian Centre on Substance Use and Addiction launched a \$3 million Catalyst Grant opportunity for research in areas deemed as urgent priorities. These investments in cannabis research will strengthen the evidence base and expand cannabis research in areas where it is needed most (Canadian Institutes in Health Research, 2018).

## Additional Resources

Cannabis Research | Video | [vimeo.com/221356207](https://vimeo.com/221356207)

Cannabis Rules and Regulations | Government of BC | [bit.ly/2QjdhWA](https://bit.ly/2QjdhWA)

Learn about Cannabis | BC Cannabis Stores | [bit.ly/2Qfo6J9](https://bit.ly/2Qfo6J9)

Cannabis in Canada | Government of Canada | [canada.ca/cannabis](https://canada.ca/cannabis) | [cannabis@canada.ca](mailto:cannabis@canada.ca)

## Sources

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