

Medical cannabis for chronic pain

Deciding whether to use medical cannabis for chronic pain

This document is aimed at...

- Adults with chronic non-cancer pain who want to try medical cannabis
- Physicians who are considering using medical cannabis as a therapeutic option to relieve chronic non-cancer pain in their patients

This document is designed to...

- Support physicians in their discussions with patients
- Provide nuanced, evidence-based information to patients and physicians, presenting the advantages and disadvantages of using medical cannabis for chronic pain

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Chronic pain

This decision box focuses on chronic non-cancer pain. Chronic pain is pain that has persisted for more than three months (e.g., knee pain, back pain, and headaches).

Drug treatments for chronic pain

There are several drug treatments available for chronic non-cancer pain: analgesic or antispasmodic drugs, opioids and a number of other types of drugs.

Non-drug treatments for chronic pain

There are several non-drug treatments available, such as physiotherapy, occupational therapy, and chiropractic treatments.

However, not all of these treatments are effective in controlling chronic non-cancer pain.

Medical cannabis

Medical cannabis can be used for its therapeutic properties. It can be used in contexts such as palliative care, nausea, and vomiting induced by chemotherapy, or for the treatment of various types of pain.

While medical cannabis appears to be an interesting avenue for the treatment of chronic pain, the evidence to this effect is limited.

Different ways of taking cannabis

Under supervision

- Safer: the care team starts with the smallest dose and gradually increases according to tolerance.
- The care team ensures that there is no interaction with current medication. Doses of current medications can be adjusted.
- Allows for better acceptance by those around you.

Self-medication

- Access is easier and dose adjustment is faster.
- The patient's file is not analyzed by the care team.
- The treatment is less safe.





INTRODUCTION

Who and why?

Warnings

Consult your pharmacist or doctor before using cannabis if you have any of the following conditions:

- Known sensitivity to THC, CBD, or any other cannabinoid, including Nabilone[®] or Nabiximols[®]
- Respiratory disease (e.g., asthma or chronic obstructive pulmonary disease)
- Severe liver impairment or liver failure in patients with chronic hepatitis C
- Personal history of psychiatric disorders (e.g., psychosis, schizophrenia, anxiety and mood disorders) or a family history of schizophrenia
- History of drug or alcohol abuse
- People receiving treatment with sedative-hypnotics or other psychoactive drugs
- Pregnant or breastfeeding women
- Cannabis, especially smoked or vaporized cannabis, containing primarily THC should not be used in people under 25 years of age.

Warning: Medical cannabis may interfere with operation of a motor vehicle. Use caution and inquire fully about the effects of your prescribed cannabis on driving. If you plan to travel outside of Canada or by air, it will probably not be possible to take your medical cannabis with you.

Cannabis products

There are two medications approved in Canada that contain cannabis ingredients: Nabilone[®] and Nabiximols[®].

In addition to these two drugs, medical cannabis can be smoked, vaporized, and consumed in edible form. It can also be found in creams that are applied to the skin. Cannabis oil can be consumed in capsules or by dropper.

Consider your priorities

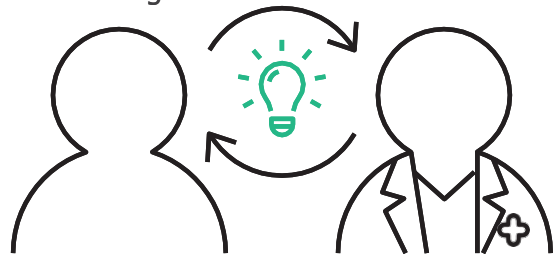
Depending on your priorities, you can choose whether or not to treat your chronic pain. You can also choose how to treat it.

These choices are up to you because...

- Different treatments are available.
- There is a lack of knowledge and consensus among healthcare personnel about the efficacy of medical cannabis.
- These different treatments can have positive or negative effects, and it is impossible to predict their effects on you.
- It is easier to implement a treatment that you chose yourself.

We recommend that..

- The decision takes into account the **values** and **priorities** of the individual.
- The decision is **shared** between the health care professional and the individual, and, if applicable, with his or her caregiver.





OPTIONS

Explore the options



Use medical cannabis

Medical cannabis must be authorized by a healthcare professional, and some are more comfortable authorizing it than others. Unlike recreational cannabis, the prescription specifies the dose, frequency, and form of cannabis to be taken. Several routes of administration are available: see table in appendix.

BENEFITS

↓ Pain

Out of 100 adults living with chronic pain who use medical cannabis, 7 experience a decrease in pain intensity with cannabis. Pain is decreased by 30% to 50% in these individuals.

↑ Physical functioning

Out of 100 adults living with chronic pain who use medical cannabis, 4 experience improved physical functioning with cannabis.

Quality of sleep

↑ Out of 100 adults living with chronic pain who use medical cannabis, 6 experience improved sleep with cannabis.

Additional treatment option

Medical cannabis is an additional option for chronic pain relief.

Need for painkillers

↓ People who take cannabis in the form of Nabilimols® take less pain medication.

HARMS

↑ Adverse effects

Out of 100 people with chronic pain who use medical cannabis on a long-term basis, about 28 experience adverse effects such as dizziness (20 out of 100), attention deficit (3 out of 100), confusion (2 out of 100), and dependence (20 out of 100). Other possible side effects include mental health, neurocognitive, or cardiovascular problems, risk of pulmonary complications when cannabis is smoked, and cancer.

Costs

↑ Cannabis costs between \$5 and \$12 for 1 gram. RAMQ (Québec's health insurance board) does not reimburse medical cannabis for the treatment of chronic pain. Nabilone® may be reimbursed by RAMQ for certain indications. It is important to check with your doctor or insurance company.

Stigma

↑ The use of medical cannabis can be perceived negatively by those around you.

Accessibility

There are few clinics that specialize in prescribing medical cannabis. There is little support among healthcare personnel for prescribing medical cannabis. Obtaining authorization to use medical cannabis can take several months.





Do not use medical cannabis

A person may choose not to use medical cannabis for their pain. In this case, they can opt for another treatment, or not take anything.

BENEFITS

Avoid making the effort if results are uncertain

Of those who use cannabis, a certain proportion do not experience a decrease in pain. This can be disappointing.

Limit costs

Cannabis is rarely reimbursed by insurance plans. It costs between \$5 and \$12 for 1 gram. Opting not to use cannabis avoids these costs.

Avoid waiting

Obtaining medical cannabis through the healthcare system can be a lengthy process. Opting not to use medical cannabis avoids these wait times.

Avoid feeling judged by those around you

Opting not to use cannabis avoids the stigma surrounding this treatment.

Adverse effects

↓ Medical cannabis can cause side effects such as dizziness, attention deficit, confusion, and dependence. Opting not to use cannabis is a way to avoid these side effects.

HARMS

Continued pain

People who do not use medical cannabis are less likely to experience a decrease in pain.

Pain-free moments

↓ These moments of respite from pain offer a further reduction in pain without having too much effect on cognition, allowing patients greater participation in activities.

Quality of life

↓ Medical cannabis can improve quality of life and allow patients to continue their daily activities. Those who opt not to use it will not have these effects.





PRIORITIES

Clarification exercise

Deciding whether or not to use medical cannabis for chronic pain

Select what is most important to you. Then, examine the options associated with your priorities.

Be aware of the efficacy and safety of treatment

Your option:



Do not use medical cannabis

Manage the dosage and frequency of treatment

Your option:



Use medical cannabis under supervision

Reduce my chronic non-cancer pain and improve my quality of life

Your option:



Use medical cannabis under supervision

Avoid the adverse effects of cannabis, e.g., psychoactive effects, anxiety, addiction, and dizziness

Your option:



Do not use medical cannabis

Avoid negative perceptions among my family or my care team with regard to the use of medical cannabis

Your option:



Do not use medical cannabis

Other:

Indicate the option that allows this priority to be met:





CHOOSE AN OPTION

Which option do you prefer?

Are you comfortable with your decision?

YES NO

S Sure of myself: I am sure of the best choice for me. YES NO

U Usefulness of information: I feel I have all the information I need on the pros and cons of the available options. YES NO

R Risk-benefit ratio: I feel I know what is important to me with respect to the advantages and harms associated with these options. YES NO

E Encouragement and support from others: I have all the support I need to make my choice. YES NO

SURE TEST
O'CONNOR & LÉGARÉ 2008

LIST OF CONTACTS TO ACCESS SERVICES

To access information or medical cannabis, talk to your family doctor or pharmacist, or contact a private medical cannabis clinic.

Find a clinic:
[googlemaps.com](https://www.google.com/maps)

Keywords: "medical cannabis clinic"

To access support and information about your pain:

Quebec Chronic Pain Association

douleurchronique.org
 514-355-4198

In case of overdose:

Go to Emergency
 911



Cannabis

Herb: the entire plant or parts or materials of the plant (e.g., flowers, resin, leaves, buds).
Other products: plant extract, oil, topical product, etc.

Medical Cannabis

All types of cannabis or cannabinoids used for medical purposes

Cannabinoid

Biologically active component of cannabis or synthetic compound that generally has affinity and activation for cannabinoid receptors

Opioid

Synthetic psychoactive substance that has effects similar to opium or natural opiates

Antispasmodic Drug

Medication that reduces muscle contraction

Analgesic Drug

Drug used to suppress or reduce pain

Nabiximols (Sativex)

Cannabinoid-based medicine used in the form of oral spray. This medication is used to reduce neuropathic pain.

Stigma

When a person is unfairly judged by others for who they are (e.g., ethnicity, gender, etc.), what they do (e.g., mental illness, cannabis use, etc.), or the image they project (physical disabilities)

Palliative Care

Care provided to people with potentially terminal illnesses. The goal of palliative care is to maintain and improve quality of life for people of all ages.

Recreational Cannabis Use

Cannabis used for its euphoric and disinhibiting effect

Tetrahydrocannabinol (THC)

The cannabinoid that is found in the greatest quantity in the cannabis plant. THC affects the functioning of the brain (feeling of being "high").

Cannabidiol (CBD)

CBD does not produce a "high" or intoxication. CBD is currently being studied for its potential therapeutic uses.

Sedative Hypnotic

Medication that induces sleep

Psychoactive (or psychotropic) Drug

Drug used in the treatment of mental and neurological illnesses. These substances affect the central nervous system and have an impact on cognitive functions (e.g., memory, concentration, etc.), behavior, and mood.

Liver Failure (Hepatic insufficiency)

Dysfunction of the liver, which can no longer perform its usual functions. Liver failure can be caused by disease or occur after surgery to remove part of the liver.





GLOSSARY

Definitions

Psychoactive Effect

Psychotropic effect that impacts brain functioning, e.g., perception, mood, consciousness

Nabilone (Cesamet)

A synthetic molecule that resembles THC. The drug is sometimes used to treat severe nausea and vomiting. It provides pain relief.



ABOUT THIS DECISION AID

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The themes and priorities set out herein were identified by physicians (some who prescribed medical cannabis and some who did not) and patients age 18 years and older with chronic pain, who took part as research participants. Some of the physicians and patients who participated in the earlier medical cannabis project were involved in validating the Decision Box model.

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Conflicts of Interest:

No conflict of interest to **declare**.

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Chronic Pain

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N/A

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Option 1: Use Medical Cannabis

Description

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Pain

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Wang, L. et al. [2021]. "Medical cannabis or cannabinoids for chronic non-cancer and cancer related pain: a systematic review and meta-analysis of randomised clinical trials." *BMJ (Clinical Research Ed.)*, 374, n1034. Design: Systematic review of 32 randomized clinical trials; Participants: 5,174 patients aged 50-60 years with chronic cancer and non-cancer pain; Intervention: treatment with medical cannabis (oral or topical) versus placebo; Follow-up: ranged from 1 to 5.5 months.

Physical functioning

Wang, L. et al. [2021]. "Medical cannabis or cannabinoids for chronic non-cancer and cancer related pain: a systematic review and meta-analysis of randomised clinical trials." *BMJ (Clinical Research Ed.)*, 374, n1034. Design: Systematic review of 32 randomized clinical trials; Participants: 5,174 patients aged 50-60 years with chronic cancer and non-cancer pain; Intervention: treatment with medical cannabis (oral or topical) versus placebo; Follow-up: ranged from 1 to 5.5 months.

Quality of sleep

Stockings, E. et al. [2018]. "Cannabis and cannabinoids for the treatment of people with chronic noncancer pain conditions: a systematic review and meta-analysis of controlled and observational studies." *Pain*, 159(10), 1932-1954. Design: Systematic review of 47 randomized controlled studies and 57 observational studies. Participants: 9,958 participants with chronic non-cancer pain. Intervention: Groups taking cannabinoids were compared across studies with either placebo controls, wait-list controls, or controls receiving other interventions. Follow-up: There were studies of one day's duration, very short duration [<4 weeks], short duration [4-12 weeks], intermediate duration [13-26 weeks] or long duration [>26 weeks].

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Additional treatment option

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Need for painkillers

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Adverse effects

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Latif, Z., & Garg, N. [2020]. "The impact of marijuana on the cardiovascular system: a review of the most common cardiovascular events associated with marijuana use." *Journal of Clinical Medicine*, 9(6), 1925. Design: A review of the literature; Writings identified: over 55 writings published between 1971 and 2019 that address the adverse effects of cannabis on the cardiovascular system. Case studies indicate that the main cardiovascular problems are myocardial infarction, cardiac arrhythmia, stroke, and arteritis.

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Costs

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Stigma

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Accessibility

Poisblaud, L., et al [2022]. "Cannabis against non-cancer pain: Perceptions and preoccupations of doctors regarding the medical use of cannabis as a treatment option". Article in preparation. Design: Qualitative study; Participants: 27 patients aged 18 years and older with chronic musculoskeletal pain for more than 3 months who may or may not use medical cannabis. Eleven physicians who follow patients with musculoskeletal pain who may or may not have prescribed/authorized medical cannabis. Intervention: Semi-structured interview.

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Option 2: Do Not Use Medical Cannabis

Avoid making the effort if results are uncertain

Fisher et al [2021]. "Cannabinoids, cannabis, and cannabis-based medicine for pain management: a systematic review of randomised controlled trials: A systematic review of randomised controlled trials." *Pain*, 162(Suppl 1), S45-S66. Design: Systematic review of 36 randomized controlled trials. Participants: 7,217 participants with acute or chronic pain. Mean age of participants was 51 years; Intervention: Treatment with natural or synthetic cannabinoid products. The control groups in the different included studies could take a placebo or use another pharmacological or non-pharmacological treatment for their pain. Follow-up: Short-term follow-up (treatment duration up to 7 days) and long-term follow-up (treatment duration greater than or equal to 7 days).

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Limit costs

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Avoid waiting

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Avoid feeling judged by those around you

Poisblaud, L. et al. [2022]. "Cannabis against non-cancer pain: Perceptions and preoccupations of physicians regarding the medical use of cannabis as a treatment option." Article in preparation. Design: Qualitative study; Participants: 27 patients aged 18 years and older with chronic musculoskeletal pain for more than 3 months who may or may not use medical cannabis. Eleven physicians who follow patients with musculoskeletal pain who may or may not have prescribed/authorized medical cannabis. Intervention: Semi-structured interview.

Continued pain

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Decrease in pain-free moments

Poisblaud, L. et al. [2022]. "Cannabis against non-cancer pain: Perceptions and preoccupations of physicians regarding the medical use of cannabis as a treatment option." Article in preparation. Design: Qualitative study; Participants: 27 patients aged 18 years and older with chronic musculoskeletal pain for more than 3 months who may or may not use medical cannabis. Eleven physicians who follow patients with musculoskeletal pain who may or may not have prescribed/authorized medical cannabis. Intervention: Semi-structured interview.

Decreased quality of life

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APPENDIX

Comparison of Cannabinoid-based Prescription Drugs and Non-approved Products

GENERIC NAME	REGISTERED NAME	PRINCIPAL CONSTITUENTS/SOURCE	OFFICIAL STATUS IN CANADA	APPROVED INDICATIONS	ONSET OF EFFECTS (O) AND DURATION (D) OF ACTION	DOSAGE	ROUTE OF ADMINISTRATION	TYPES OF PRODUCTS	COVERED IN QUEBEC BY RAMQ
Nabilone	Cesamet	Synthetic THC analogue	Approved	Severe nausea and vomiting following cancer chemotherapy	O : 60 to 90 mins D: 8 to 12 hours	Depending on the indication	Oral (capsule, dropper, or spray)	Cannabis oil, cannabis edibles, cannabis infusions	Yes
Nabiximols (THC + CBD)	Sativex	Botanical extracts of <i>C.Sativa</i> (various)	Approved	Spasticity and neuropathic pain For cancer pain where opioids do not work	O: 5 to 30 mins D: 12 to 24h	Each spray of 100 ul = Mixture of THC-CBD 1:1 (2.7 mg CBD / 2.5 mg THC)	Oro-mucosal	Oro-mucosal sprayer (mucous membrane of the mouth)	No
Cannabis (vaporized or smoked)	N/A	Parts of the plant of <i>C. Sativa</i> (various)	Not an approved product	N/A	O: 5 mins D: 2 to 3 hours	N/A	Smoking or inhalation using a sprayer	Sprayers, e-cigarettes, joints	No
Cannabis (oil)	N/A	Botanical extracts of <i>C. Sativa</i> (various)	Not an approved product	N/A	O: 5 to 30 mins D: 12 to 24h	N/A	Oral (capsule or dropper)	Cannabis oil (for administration beneath the tongue)	No
Cannabis (oral, edible)	N/A	Parts of the <i>C. Sativa</i> plant (various)	Not an approved product	N/A	O: 30 to 90 mins D: 4 to 12 hours	N/A	Oral	Edibles, cannabis infusions	No
Cannabis (topical)	N/A	Botanical extracts of <i>C. Sativa</i> (various)	Not an approved product	N/A	N/A	N/A	Topical (on the skin)	Topical creams	No

Physicians can visit www.canada.ca for detailed information on Sativex®.