

Cannabis contains 100s of compounds including ~70 cannabinoids, of which Delta-9-tetrahydrocannabinol (aka dronabinol or THC) is most psychoactive. Two less psychoactive cannabinoids are Delta-8-THC & cannabidiol. Another active agent is cannabidiol (CBD), a potential analgesic & anti-inflammatory. These agents act at the Cannabinoid receptors (CB1 & CB2). General dosing considerations: start low & go slow.

Table with 6 columns: GENERIC/TRADE (Strength & Formulations), THERAPEUTIC USE/COMMENTS, CONTRAINDICATIONS CI/ADVERSE EVENTS AE/DRUG INTERACTIONS DI, INITIAL, USUAL & MAXIMUM DOSE, \$/30 DAYS, ADDITIONAL INFORMATION. Rows include Dronabinol (MARINOL), Marijuana, Nabilone (CESAMET), and Tetrahydrocannabinol (SATIVEX).

New: THC 12.5mg & CBD 12.5mg/1mL in Medium Chain Triglycerides oil CANTRUST x 1:1 Cannabis Drops; 40mL bottle ≈ 5g dried cannabis for about \$90. (Also THC & CBD only drops avail.) Various dosage forms (for vaporization, dried, buds, edibles, beverages & oils...) with differing ratios of THC:CBD. (eg. by CanniMed x)

AIDS=acquired immunodeficiency syndrome ac=before meals BP=blood pressure CBD=cannabidiol dx=disease fx=function HC=Health Canada HR=heart rate hx=history GP=general practitioner MP= medical practitioner MS=multiple sclerosis N/V=nausea & vomiting pt=patient sz=seizures rx=reaction TCA=tricyclic antidepressant THC=delta-9-tetrahydrocannabinol tx=treatment x=not Sask. formulary ⊗=not NIHB ▼=covered NIHB ≡=Exception Drug Status Sk ⊕=prior approval NIHB ♀=female ✓=official indication

BROADER CONSIDERATIONS, AND LIMITS OF THE EVIDENCE

- ♦ Limited RCT's, small short trials, differing routes, forms & types of cannabinoids makes assessing efficacy almost impossible. One observational trial in patients with posttraumatic stress found an association with worse outcomes in those with ↑marijuana use.
♦ Pain → based on very limited evidence: no more effective than codeine, ↑AE & need larger trials → cannabis may be moderately efficacious for chronic pain, benefits are offset by potential harms & complicated by the psychosocial aspects of chronic pain.
♦ MS → modest therapeutic effect & risk of AE thus caution about using cannabinoids
♦ Dravet syndrome → pure cannabidiol (CBD) at a dose of 20mg/kg/day in pediatric patients (2-18yrs of age) with Dravet syndrome showed a statistically significant reduction in seizure frequency.

POSSIBLE APPROACH

A close review of 1) the indications, 2) what meds were previously used & 3) the context of the "therapeutic trial" of marijuana. These people should have 4) a random urine screen... 5) an addictions assessment/addiction services, complete with 6) collateral information from family & others. Then 7) a focused case management discussion should be held, with all the assessors & care providers, before any decision is made. 8) Use a "treatment agreement" ... 9) Start low dose at HS to minimize AE. 10) In the end the physician may say, "I am not comfortable prescribing smoked cannabis, because it has little evidence of efficacy for your condition & considerable evidence of harm."

# Cannabinoids: Online Extras

## Links for Prescribing of Medical Marijuana

1. Medical documentation (complete minimum of once per year, but may authorize for shorter durations): [www.hc-sc.gc.ca/dhp-mps/alt\\_formats/pdf/marihuana/info/med-eng.pdf](http://www.hc-sc.gc.ca/dhp-mps/alt_formats/pdf/marihuana/info/med-eng.pdf)
2. List of Licensed Producers: [www.hc-sc.gc.ca/dhp-mps/marihuana/info/list-eng.php](http://www.hc-sc.gc.ca/dhp-mps/marihuana/info/list-eng.php)
3. Application to grow marijuana at home: [healthycanadians.gc.ca/drugs-products-medicaments-produits/buying-using-achat-utilisation/cannabis-medical/access-acces/personal-production-personnelle/index-eng.php](http://healthycanadians.gc.ca/drugs-products-medicaments-produits/buying-using-achat-utilisation/cannabis-medical/access-acces/personal-production-personnelle/index-eng.php)
4. See College Bylaws below for Saskatchewan - must complete marijuana treatment agreement form (sample below). For other provinces, refer to here for guidance <https://www.cmpa-acpm.ca/-/medical-marijuana-new-regulations-new-college-guidance-for-canadian-doctors>

## College of Physicians & Surgeons of Saskatchewan: The College's bylaw 2014-

The College's bylaw which regulates physician authorization of medical marihuana is now in effect. A summary of the bylaw follows:

1. The bylaw begins with a statement that there has not been sufficient scientific or clinical assessment to provide evidence about the safety and efficacy of marihuana for medical purposes. The bylaw begins with an acknowledgement that federal government regulations have authorized the use of marihuana for medical purposes.
  2. A physician cannot authorize the use of marihuana for a patient unless the physician is also the treating physician for the condition for which the patient is authorized to use marihuana. For example, if a patient is to be authorized to use medical marihuana to deal with symptoms of MS, the physician must also be the treating physician for the patient's MS.
  3. A physician must review the patient's medical history, review relevant records pertaining to the condition for which the use of marihuana is authorized and conduct an appropriate physical examination before authorizing the patient's use of marihuana.
  4. The patient must sign a written treatment agreement which contains the following:
    - A) A statement from the patient that the patient will not seek a prescription for marihuana from any other physician during the period for which the marihuana is prescribed;
    - B) A statement by the patient that the patient will utilize the marihuana as prescribed, and will not use the marihuana in larger amounts or more frequently than is prescribed;
    - C) A statement by the patient that the patient will not give or sell the prescribed marihuana to anyone else, including family members;
    - D) A statement by the patient that the patient will store the marihuana in a safe place;
  5. The physician's record for the patient must include the requirements for all medical records and, in addition, contain the following:
    - A) The treatment agreement signed by the patient;
    - B) The diagnosis for which the patient was authorized to purchase marihuana;
    - C) A statement of what other treatments have been attempted for the condition for which the use of marihuana was prescribed and the effect of such treatments;
    - D) A statement of what, if anything, the patient has been advised about the risks of the use of marihuana;
    - E) A statement that in the physician's medical opinion the patient is likely to receive therapeutic or palliative benefit from the use of marihuana to treat the patient's condition.
  6. The physician must retain a single record, separate from other patient records, which can be inspected by the College, and which contains:
    - A) The patient's name, health services number and date of birth;
    - B) The quantity and duration for which marihuana was prescribed;
    - C) The medical condition for which marihuana was prescribed;
    - D) The name of the licensed producer from which the marihuana will be obtained, if known to the physician.
  7. Physicians who prescribe marihuana will be required to provide the College with the information referenced in paragraph 6:
    - A) Every twelve months if the physician has prescribed marihuana to fewer than 20 patients in the preceding 12 months;
    - B) Every six months if the physician has prescribed marihuana to 20 or more patients in the preceding 12 months.
  8. The bylaw prohibits physicians from diagnosing or treating patients at the premises of a licensed producer;
  9. The bylaw prohibits physicians who prescribe marihuana from having an economic or management interest in a licensed producer;
  10. The bylaw prohibits physicians from storing or dispensing marihuana from any location where the physician practices medicine.
- The bylaw is numbered Bylaw 19.2 of the regulatory bylaws of the College and is available at the College's website.

### Sample treatment agreement to comply with the College Bylaw

I \_\_\_\_\_ understand that I will be receiving a medical document from Dr. \_\_\_\_\_ which will authorize me to purchase marihuana for a medical purpose. I agree to the following:

- A) I will not seek to obtain a medical document to authorize me to purchase marihuana from any other physician during the period for which the marihuana is authorized;
- B) I will utilize the marihuana as authorized in the medical document and I will not use the marihuana in larger amounts or more frequently than is authorized in the document;
- C) I will not give or sell the prescribed marihuana to anyone else, including family members;
- D) I will store the marihuana in a safe place;
- E) I understand that if I break any of these conditions, Dr. \_\_\_\_\_ may refuse to provide any future medical authorization to purchase marihuana.

\_\_\_\_\_  
Patient's signature Date

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### References Cannabinoids:

Prepared by: Brent Jensen BSP, Loren Regier BSP BA for [www.RxFiles.ca](http://www.RxFiles.ca)  
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Link to – Health Canada - Medical Marihuana: How to Apply: <http://www.hc-sc.gc.ca/dhp-mps/marihuana/how-comment/applicant-demandeur/index-eng.php>

Link to CFPC: [http://www.cfpc.ca/Dried\\_Cannabis\\_Prelim\\_Guidance/](http://www.cfpc.ca/Dried_Cannabis_Prelim_Guidance/)

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May/09 **CNN**: The average potency of marijuana, which has risen steadily for three decades, has **exceeded 10 percent** for the first time, the U.S. government will report on Thursday. Scientists working for the government predict that potency, as measured by the drug's concentration of the psychoactive ingredient THC, will continue to rise. At the University of Mississippi's Potency Monitoring Project, where thousands of samples of seized marijuana are tested every year, project director Mahmoud ElSohly said some samples have THC levels exceeding 30 percent. Average THC concentrations will continue to climb before leveling off at 15 percent or 16 percent in five to 10 years, ElSohly predicted. The average THC for tested marijuana during 2008 was 10.1 percent, according to the government, compared to 1983 when it was reportedly under 4 percent. Even drugs seized at the United States' southwest border are showing increasing potency, the Office of National Drug Control Policy says. The median potency increased from 4.8 percent in 2003 to 7.3 percent in 2007. Marijuana from Mexico and other southern sources traditionally had lower THC content than other sources. <http://www.whitehouse.gov/the-press-office/2009/05/07/05-07-09-marijuana-potency>
- Campbell FA, Tramer MR, Carroll D, Reynolds DJ, Moore RA, McQuay HJ. Are cannabinoids an effective and safe treatment option in the management of pain? A qualitative systematic review. *BMJ*. 2001 Jul 7;323(7303):13-6. **Conclusion**: Cannabinoids are no more effective than codeine in controlling pain and have depressant effects on the central nervous system that limit their use. Their widespread introduction into clinical practice for **pain management** is therefore **undesirable**. In acute postoperative pain they should not be used. Before cannabinoids can be considered for treating spasticity and neuropathic pain, further valid randomised controlled studies are needed.
- Tramer MR, Carroll D, Campbell FA, et al. Cannabinoids for control of chemotherapy induced nausea and vomiting: quantitative systematic review. *BMJ*. 2001 Jul 7;323(7303):16-21. **CONCLUSIONS**: In selected patients, the cannabinoids tested in these trials **may be useful** as mood enhancing adjuvants for controlling **chemotherapy related sickness**. Potentially serious adverse effects, even when taken short term orally or intramuscularly, are likely to limit their widespread use.
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- Marijuana Medical Access Division, Drug Strategy & Controlled Substances Program, AL: 3503B, Ottawa, On K1A 1B9 **1-866-337-7705** or the **website** <http://www.hc-sc.gc.ca/dhp-mps/marihuana/index-eng.php> -Forms **B1 & B2 & Daily Amount Fact Sheet** Info for Health care professionals: [www.hc-sc.gc.ca/dhp-mps/marihuana/how-comment/medpract/infoprof/information\\_e.html](http://www.hc-sc.gc.ca/dhp-mps/marihuana/how-comment/medpract/infoprof/information_e.html)  
Marijuana Stakeholder **statistics** from Health Canada: <http://www.hc-sc.gc.ca/dhp-mps/marihuana/stat/index-eng.php>  
Marihuana for Medical Purposes Regulations- **MMPR**: <http://www.laws-lois.justice.gc.ca/eng/regulations/SOR-2013-119/>
- Sativex Fact sheet Health Canada [http://www.hc-sc.gc.ca/dhp-mps/alt\\_formats/hpfb-dgpsa/pdf/prodpharma/sativex\\_factsheet\\_e.pdf](http://www.hc-sc.gc.ca/dhp-mps/alt_formats/hpfb-dgpsa/pdf/prodpharma/sativex_factsheet_e.pdf) Trial Info at [www.gwpharm.com](http://www.gwpharm.com) & [www.ccohta.ca](http://www.ccohta.ca)
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