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Information for Patients about Medical Cannabidiol in Iowa

What is Medical Cannabidiol? Medical Cannabidiol refers to the use of a cannabinoid product for the treatment of a medical condition.

Who Can Receive a Medical Cannabis Registration Card? Iowa currently has a medical cannabidiol program that allows people to legally buy cannabinoid products to treat some medical conditions. A list of medical conditions that quality a patient to receive a medical cannabis registration card can be found here: <u>https://idph.iowa.gov/cbd/For-Patients-and-Caregivers</u>.

What is a Cannabinoid? Cannabinoids are a kind of chemical that can be found in some plants and animals. There are more than 100 cannabinoids in nature. Some cannabinoids have been found to help people with the symptoms of certain medical conditions.

What is CBD? Cannabidiol (CBD) is one of the cannabinoids found naturally in cannabis plants. It has potential medical uses and does not cause mind-altering, or psychoactive effects. CBD has been researched for many conditions including inflammation, spasms, seizures, anxiety, psychosis, and nausea. Most people who use CBD do not experience a lot of negative effects and it has been found to be generally quite safe.

What is THC? Tetrahydrocannabinol (THC) is another kind of cannabinoid found in the cannabis plant that may help certain medical conditions. It also the main psychoactive, or mind-altering, component of cannabis. The psychoactive effects have been shown to be reduced when given with CBD. THC has been studied for its effects on things like pain and nausea.

How do CBD, THC and other Cannabinoids Work? CBD, THC and other cannabinoids act on certain receptors in the body. The human body produces some cannabinoid molecules on its own, called endocannabinoids and has receptors for these them. Two of the most well studied cannabinoid receptors are the *CB1* and *CB2* receptors.

- CB1 receptors are found mostly in the central nervous system with some in other parts of the body. CB1 receptors affect things like movement, pain, mood, and appetite.
- CB2 receptors are more common in the immune system and digestive tract. CB2 receptors can affect inflammation and pain.

Products (like pills, oils, creams, etc.) that contain both CBD and THC can act on both CB receptors and can potentially affect the body's own endocannabinoids.

What are the Potential Health Benefits of CBD, THC, and other Cannabinoids? There is evidence that shows potential health benefits for certain medical conditions. This includes treating things like seizures, inflammation, pain, anxiety, and nausea.

How are CBD, THC and other Cannabinoids Used? CBD, THC and other cannabinoids can be used in a variety of ways. In Iowa, they can be taken by mouth (capsules, tinctures etc.), applied on the skin as a cream or an oil, breathed in as a vapor, or used as a rectal suppository.

<u>CBD</u>

Potential Side Effects of CBD: Studies on the safety of CBD have found that it is generally well-tolerated. So far there have been no significant side effects among people who use CBD. The most common side effects of CBD are:

- Fatigue/tiredness
- Diarrhea
- Changes in appetite or weight
- Dry mouth

Special Considerations for Use of CBD:

• There is not currently enough reliable information about the safety of taking CBD while pregnant or breastfeeding. CBD is not recommended for use by pregnant or breast-feeding women.

CBD Drug Interactions:

• CBD is broken down by the liver so it's possible it could interact with other medications that the liver breaks down. This can include; ketoconazole, itraconazole, ritonavir, clarithromycin, phenobarbital, rifampicin, carbamazepine, phenytoin, SSRIs, tricyclic antidepressants, beta blockers, some antibiotics such as cyclosporine, warfarin, diclofenac, some kinds of cancer treatment drugs and clobazam.

Some of these interactions are based on research only and so you should talk with your healthcare provider about your medications.

<u>THC</u>

Potential Side Effects of THC: The most common side effects of THC are:

- Impaired attention or short-term memory
- Drowsiness, dizziness or lightheadedness
- Dry mouth
- Nausea
- Sense of well-being (euphoria), and general changes in mood
- Heightened awareness
- Increased appetite
- In high doses: anxiety, panic, confusion, or transient psychosis

Special Considerations for the use of THC:

- There is not currently enough data about the safety of using THC while pregnant or breastfeeding. THC should not be used by pregnant or breastfeeding women.
- THC should be used with caution in those with prior psychiatric diseases or mental illness.
- THC should be used with caution in kids because it can impact brain development.
- Patients using THC should not drive or do anything that could be considered dangerous until they understand their reaction to THC.

THC Drug Interactions:

- THC may interact with several medications including; clozapine, duloxetine, naproxen, cyclobenzaprine, olanzapine, haloperidol, chlorpromazine, warfarin, diclofenac, some antibiotics, alcohol, barbiturates, and benzodiazepines
- Alcohol use may increase serum THC levels
- Some studies have shown potential nausea and cramping with disulfiram and metronidazole.

You should talk with your doctor about how THC might affect your other medications.

Special Considerations for the use of Cannabis products: (Generally contain both THC and CBD)

- Patients with a history of hypersensitivity to cannabis should not use medical cannabis.
- Products should be used with caution in those with severe acute heart, immune, liver or kidney disease
- Cannabis products may exacerbate arrhythmia (abnormal heart rhythms)

Just like any new treatment, patients should consider the health benefits, side effects, and risks of CBD, THC, and other cannabinoids before using them. The dose and form (pill, oil, cream, vapor etc.) can vary depending on the condition being treated. If you experience side effects, stop treatment and talk to your healthcare provider immediately.

References for the information included here can be found below. Please note this document will be revised as new scientific information and best practices become available.

References

- 1. Whiting PF, Wolff RF, Deshpande S, Di Nisio M, Duffy S, Hernandez AV, Keurentjes JC, Lang S, Misso K, Ryder S, Schmidlkofer S, Westwood M, and Kelijnen J. Cannabinoids for medical use: A systematic review and meta-analysis. JAMA. 2015 Jun 23-30;313(24):2456-73
- 2. Bergamaschi, Mateus Machado, et al. "Safety and Side Effects of Cannabidiol, a Cannabis Sativa Constituent." *Current Drug Safety*, vol. 6, no. 4, 2011, pp. 237–249
- 3. Berry, E.M., Mechoulam, R. "Tetrahydrocannabinol and endocannabinoids in feeding and appetite." *Pharmacology & Therapeurics*, vol. 95, issue 2, 2002, pp. 185-190
- 4. Colombo, D., et al. "Cyclosporine and Herbal Supplement Interactions." *Journal of Toxicology*, vol. 2014, 2014, pp. 1–6
- 5. Epidiolex Clinical Trials
- 6. Dronabinol Clinical Trials
- Department of Health Government of District of Colombia "Medical Cannabis, Adverse Effects and Drug Interactions" accessed at <u>www.doh.dc.gov</u>
- Iffland, Kerstin, and Franjo Grotenhermen. "An Update on Safety and Side Effects of Cannabidiol: A Review of Clinical Data and Relevant Animal Studies." *Cannabis and Cannabinoid Research*, vol. 2, no. 1, 2017, pp. 139–154
- 9. The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research. The National Academies Press, 2017
- 10. World Health Organization 40th ECDD– Review on cannabis 2018: Access at: http://www.who.int/medicines/access/controlled-substances/ecdd_40_meeting/en/
- 11. Zuardi, A.W. "Cannabidiol: from an inactive cannabinoid to a drug with wide spectrum of action. *Revista Brasileira de Psiquiatria*, vol. 30, no. 3, 2008, pp. 271-280.
- 12. https://idph.iowa.gov/cbd/For-Physicians