# Fact THC and CBD: Understanding the Components of Cannabis

Missouri Partners in Prevention (PIP) is a higher education substance abuse consortium dedicated to creating healthy and safe college campuses.

As the conversation around cannabis has changed in recent years and states continue to legalize cannabis for medical or recreational use, people often have questions about the main components of cannabis, including THC and CBD. This fact sheet can help you to understand the difference between these two compounds.

## THC

Tetrahydrocannabinol (THC) is a type of cannabinoid and is the main psychoactive chemical in cannabis. Cannabinoids interact with receptors in the brain and THC overstimulates certain brain receptors, causing the 'high' sensation.

Users can experience:

- Altered senses
- Drowsiness
- Changes in mood
- Dry mouth and red eyes
- Increased heart rate and appetite
- Impaired body movement and coordination
- Difficulty with thinking, problem solving, learning, and memory
- In high doses- hallucinations, paranoia, anxiety

The amount of THC in cannabis has increased over the past few decades, and different types

of cannabis products (edibles, dabs, etc.) have more highly concentrated THC that can affect individuals more intensely. Additionally, different strains of cannabis plants may have different levels of THC.

### **CBD**

Cannabidiol (CBD) is typically the second most abundant cannabinoid in cannabis and is not psychoactive. CBD effects endocannabinoid receptors that help regulate functions such as sleep, immune-system response, and pain. The medicinal effects of CBD continue to be studied and have shown effectiveness at aiding certain conditions, such as epilepsy.

CBD oil may trigger side effects including:

- Nausea
- Fatigue
- Irritability

Medically prescribed CBD is regulated by the FDA, but CBD can also be sold in some states without a prescription as a supplement, which means it is not regulated by the FDA and could contain THC or other unknown elements.

# Legality

Current Missouri law (Amendment Two 12.19.18) dictates that state-licensed physicians who agree to provide a physician certification can recommend marijuana for medical purposes to patients with serious illnesses and medical conditions. Marijuana is NOT legal for recreational purposes and due to compliance with the federal Drug Free Schools and Campuses Regulations, marijuana is not allowed on college or university campuses. Even if you have a medical marijuana identification card, possession of marijuana is against campus policy and not allowed.

Missouri House Bill 2238 (5) which passed in 2014 also allows cannabis oil for medical purposes for patients with epilepsy to be purchased with a state-issued hemp registration card and from a cannabidiol oil care center. However, federal law dictated by the 2018 Farm Bill changed the status of hemp and hemp-derived products to being legal. This has resulted in the ability to sell CBD products in the state of Missouri, even though it is at odds with current Missouri state law.

### The Bottom Line

THC has not been shown to have any medicinal effects, and CBD can vary in purity depending on the source. If you are interested in using CBD to treat a medical issue, please consult a physician.

Contact Partners in Prevention at (573) 884-7551.

Report prepared July 1, 2019 by Margo Leitschuh, Communications Coordinator. Published July 11, 2019.