CBD SIDE EFFECTS

1. CBD PRODUCTS MAY NOT BE PURE

2. CBD PRODUCTS MAY HAVE NEGATIVE SIDE EFFECTS

The Journal of the American Medical Association (JAMA) published a research letter showing the results of "undercover" purchases of CBD from Internet sources. Of 84 samples obtained and tested, THC was detected in 21%. There were other defects in the mislabeled products noted by the undercover agents. For example, 26% of the 84 products contained less CBD than labeled. Eighty-four products were purchased and analyzed from 31 companies. With respect to CBD, 42.85% of products were underlabeled 26.19% were overlabeled and only 30.95% were accurately labeled. Accuracy of labeling depended on product type, with vaporization liquid most frequently mislabeled 87.50% and oil most frequently labeled accurately 45.00%. Concentration of unlabeled cannabinoids was generally low however, THC was detected in 21.43% cannabidiolic acid 15.48% and cannabigerol 2.38%. This yielded a good deal of information suggesting that open-source CBD bought on the Internet is not a very reliable or safe product if one is planning to use it for medical purposes. ¹

On December 8, 2017, the Utah Poison Control Center (UPCC) notified the Utah Department of Health (UDOH) of reports of emergency department visits associated with reported exposure to products labeled as CBD (cannabidiol), a nonpsychoactive compound derived from Cannabis sativa, the marijuana plant. Patients experienced adverse reactions, including altered mental status, seizures, confusion, loss of consciousness, and hallucinations. These reactions prompted concern for potential adulteration with a synthetic cannabinoid. Sale of CBD is currently illegal in Utah, although CBD is readily available online and in shops. This investigation highlights the hazards of consuming unregulated products labeled as CBD. ²

Over the past several years, FDA has issued several warning letters to firms that market unapproved new drugs that allegedly contain cannabidiol (CBD). As part of these actions, FDA has tested the chemical content of cannabinoid compounds in some of the products, and many were found to not contain the levels of CBD they claimed to contain. It is important to note that these products are not approved by FDA for the diagnosis, cure, mitigation, treatment, or prevention of any disease. Consumers should beware purchasing and using any such products. ³

In June, 2018, the FDA approved Epidiolex® (cannabidiol, CBD) oral solution for the treatment of seizures associated with two rare, severe forms of epilepsy - Lennox-Gastaut syndrome and Dravet syndrome - in people two years of age or older. The FDA approved a purified form of

https://www.fda.gov/NewsEvents/PublicHealthFocus/ucm484109.htm

¹ https://jamanetwork.com/journals/jama/article-abstract/2661569?redirect=true

² Notes from the Field: Acute Poisonings from a Synthetic Cannabinoid Sold as Cannabidiol- Utah, 2017–2018 MMWR Weekly May 25, 2018/67(20);587–588

https://www.cdc.gov/mmwr/volumes/67/wr/mm6720a5.htm?s_cid=mm6720a5_w

³ See the 2016 warning letter section at:

CBD. This is one of more than 80 active chemicals in marijuana. The FDA was quick to note however, that this is not an approval of marijuana or all of its components. This is the approval of one specific CBD medication for a specific use. And it was based on well-controlled clinical trials evaluating the use of this compound in the treatment of a specific condition. Moreover, this is a purified form of CBD. It's being delivered to patients in a reliable dosage form and through a reproducible route of delivery to ensure that patients derive the anticipated benefits. This is how sound medical science is advanced. 4 However, use should not be taken lightly due to the number of side effects that are being seen with this product.

CBD NEGATIVE SIDE EFFECTS

Drug Contraindications

CBD oil may potentially interact in a negative way with anti-epilepsy drugs such as:

- 1. carbamazepine (Tegretol)
- 2. phenytoin (Dilantin)
- 3. phenobarbital (Luminal, Solfoton, Tedral)
- 4. primidone (anti-seizure)⁵

There are interactions with CBD and immunosuppressive drugs used in transplants or chemotherapy and there are interactions with warfarin. ⁶

Common Side effects

The most common side effects of CBD can include: 7

High on Cannabis and Calcineurin Inhibitors: A Word of Warning in an Era of Legalized Marijuana https://www.hindawl.com/journals/crit/2016/4028492/

https://www.epilepsy.com/learn/treating-seizures-and-epilepsy/other-treatment-approaches/medical-marijuana-andepilepsy

https://www.rxlist.com/epidiolex-side-effects-drug-center.htm#professional https://www.clinicaltrials.gov/ct2/results?term=epidiolex&Search=Search

https://www.greenwichbiosciences.com/products-pipeline/research-trials/clinical-trials

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5569602/

⁴ Statement by FDA Commissioner Scott Gottlieb, M.D., on the importance of conducting proper research to prove safe and effective medical uses for the active chemicals in marijuana and its components.

https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm611047.htm

⁵ Is CBD Oil Harmful or Healing? What No One is Telling You https://www.thehealthyhomeeconomist.com/cbd-oil-dangers/#comment-643247

⁶ An interaction between warfarin and cannabidiol, a case report https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5789126

⁷ Medical Marijuana and Epilepsy.

Sleepiness

Decreased appetite

Diarrhea

Change in liver function

Fatigue

Malaise

Asthenia (weakness or lack of energy)

Rash

Insomnia

Sleep disorder

Poor quality sleep

Infections

CBD also interacts with some other seizure medicines.

Nausea or vomiting

Dizziness

Anxiety or depression

Changes in appetite/weight

The manufacturer of Epidiolex, a pure form on CBD just approved by the FDA, also warns about the following side effects.

- 1. Hepatocellular Injury (pertaining to liver cell injury)
- 2. Somnolence and Sedation
- 3. Suicidal Behavior and Ideation
- 4. Hypersensitivity Reactions
- 5. Withdrawal of Antiepileptic Drugs 8

Research published in the journal <u>Cannabis and Cannabinoid Research</u> shows that more than 40% of children with epilepsy who were given CBD orally had adverse events that included THC like symptoms. The research challenged the widely accepted premise that CBD is not intoxicating. ⁹

Is CBD Oil Harmful or Healing? What No One is Telling You https://www.thehealthyhomeeconomist.com/cbd-oil-dangers/#comment-643247

⁸ https://www.rxlist.com/epidiolex-drug.htm#side_effects_interactions

⁹ Is CBD Oil Harmful or Healing? What No One is Telling You https://www.thehealthyhomeeconomist.com/cbd-oil-dangers/#comment-643247