

CBD

Q&A FOR SUBSTANCE MISUSE PREVENTION PROFESSIONALS



Community
Impact
North Carolina



Products containing cannabidiol (CBD) have become wildly popular in the U.S. CBD-containing gummies, lotions, pet foods, and vaping oils are sold by retailers ranging from high-end department stores to smoke shops.¹

Nearly one third of Americans who tried CBD in the past 24 months—roughly 20 million people—said they vaped it, according to a January 2019 Consumer Reports survey of more than 1,000 U.S. adults.²

Researchers estimate that annual CBD sales in the U.S. could reach nearly \$24 billion by 2023.³

WHAT IS CBD?

CBD is a cannabinoid derived from hemp (cannabis products containing 0.3 percent THC or less) or marijuana (cannabis products containing more than 0.3 percent of THC) or a synthetic version of such cannabinoid.

WHAT ARE CANNABINOIDS?

Cannabinoids are any of the 100-plus chemical constituents of hemp or marijuana. The main cannabinoids are tetrahydrocannabinol (THC) and CBD.⁴ THC is primarily responsible for the mental effects of marijuana.

DOES CBD MAKE PEOPLE HIGH?

No. According to the National Institute on Drug Abuse, CBD is not mind-altering.⁵

ARE CBD PRODUCTS LEGAL?

CBD products that contain more than 0.3 percent THC are considered marijuana and are illegal under federal controlled substance law.

For CBD products with 0.3 percent THC or less, legal status depends on the type of product.

Prescription Medication

A purified, precisely concentrated, FDA-approved CBD medication is legal with a prescription. As of December 2020, the U.S. Food and Drug Administration (FDA) had approved one medication containing CBD as its active ingredient. This product is indicated for the treatment of seizures associated with Lennox-Gastaut syndrome, Dravet syndrome, or tuberous sclerosis complex in patients 1 year of age and older. It is available by prescription only.

Food and Dietary Supplements

CBD-containing foods and dietary supplements, including those for pets, are not legal under federal food and drug law.⁶ In response to public interest in CBD-containing food and dietary supplements, the FDA is considering creating a regulatory pathway for the lawful marketing of CBD other than by prescription.⁷

CBD PRODUCTS THAT CONTAIN MORE THAN 0.3 PERCENT THC ARE CONSIDERED MARIJUANA AND ARE ILLEGAL UNDER FEDERAL CONTROLLED SUBSTANCE LAW.

In the meantime, CBD-containing foods and dietary supplements found in grocery stores and pharmacies are being marketed and sold in violation of federal food and drug law. Additionally, many of the CBD products available for sale are improperly labeled. A 2017 analysis of 84 CBD products sold online found that 26 percent contained substantially less CBD than the label indicated, and 43 percent contained substantially more.⁸ Similarly, numerous manufacturers of consumer CBD products have made unsubstantiated claims that their products can be used to prevent, diagnose, treat, or cure medical conditions, including Alzheimer's Disease, autism, cancer, and COVID-19, also in violation of federal food and drug law.⁹

Cosmetics

CBD-containing cosmetic products, such as skin moisturizers, makeup, shampoos, and deodorants, are legal if they are safe to consumers and contain 0.3 percent THC or less. These products also must not be intended to affect the structure or function of the body (e.g., claims that the products eliminate wrinkles or improve brain function), or to diagnose, cure, mitigate, treat, or prevent disease.¹⁰

Vaping Oils

CBD vaping oils that contain more than 0.3 percent THC are considered marijuana and are illegal under federal controlled substance law. CBD vaping oils containing 0.3 percent THC or less are illegal under federal food and drug law because they have the same active ingredient as a prescription CBD product.¹¹ Additionally, vaping oils are often marketed with therapeutic claims, which are not permitted under federal food and drug law.¹²

IS CBD SAFE?

It can be. The FDA has determined that prescription CBD, which is required to meet the agency's rigorous standards, is safe for the treatment of seizures associated with Lennox-Gastaut syndrome, Dravet syndrome, or tuberous sclerosis complex in patients 1 year of age and older.

The FDA has not determined other CBD products to be safe.

IS CBD EFFECTIVE?

It can be. The FDA has determined that prescription CBD is effective for the treatment of seizures associated with Lennox-Gastaut syndrome, Dravet syndrome, or tuberous sclerosis complex in patients 1 year of age and older.

The FDA has not determined other CBD products to be effective.

ARE CONSUMER CBD PRODUCTS HARMFUL?

They can be. CBD products can contain harmful substances. Other than the 0.3 percent THC limit, there are no federal quality, purity, or dosing standards for non-prescription CBD-containing products. Consumer CBD products have been found to contain illegal levels of THC and harmful metals, toxins, and mold.

THERE ARE NO FEDERAL QUALITY, PURITY, OR DOSING STANDARDS FOR NON-PRESCRIPTION CBD-CONTAINING PRODUCTS.

One study found illegal substances that cause impairment, such as “spice” or “K2,” in one third of the CBD vape oils that it analyzed.¹³

OTHER THAN THE POTENTIAL FOR CONTAMINATION AND MISLABELING, ARE CONSUMER CBD PRODUCTS HARMFUL?

They can be. Some participants in pharmaceutical studies had side effects, such as diarrhea (31% vs. 25% on placebo) or insomnia (11% vs. 4% on placebo), when taking purified CBD in known concentrations.¹⁴ Some participants developed liver function abnormalities (13% vs. 1% on placebo).¹⁵ Purified, known-concentration CBD also interacted with some of the medications study participants were taking.¹⁶

According to the FDA, studies of CBD safety have identified potential risks that require additional research. **Unanswered safety questions include:**

- What are the impacts of long-term CBD use?
- What dosing levels trigger known CBD risks?
- What is the effect of CBD on children and brain development?¹⁷

IS VAPING CBD OIL HARMFUL?

Yes. According to the American Lung Association, the health risks of vaping include irreversible lung damage and lung disease.¹⁸

An August 2020 public health alert issued by the U.S. Army Public Health Center warned that “many patients with medical conditions potentially related to vaping products marketed as containing CBD oil have been seen at medical treatment centers around the world.” The alert explained that CBD vape oils may contain synthetic cannabinoids, concentrated THC and/or other hazardous compounds in addition to, or in place of, CBD oil.¹⁹

In March 2018, the North Carolina Department of Health and Human Services alerted the public to an increase in emergency department visits by people who reported vaping CBD oil. During a three-month period, there were more than 30 reports of individuals who were treated in emergency departments across North Carolina for serious symptoms, including altered mental status, hallucinations, seizures, loss of consciousness and rapid heartbeat. “People should be aware that products labeled as CBD oil might contain other substances,” North Carolina Health Director Betsey Tilson, M.D., MPH said.²⁰

“PEOPLE SHOULD BE AWARE THAT PRODUCTS LABELED AS CBD OIL MIGHT CONTAIN OTHER SUBSTANCES.”

**-BETSEY TILSON, MD,
MPH, NORTH CAROLINA
HEALTH DIRECTOR**

CAN CBD USE CAUSE A PERSON TO TEST POSITIVE FOR THC?

Yes. A person could test positive for THC even if she has only used CBD.²¹ Some tests cannot distinguish between CBD and THC.²² Additionally, some CBD products have undisclosed high concentrations of THC.²³ Consumers who test positive for THC could face negative consequences, such as being suspended from school, being terminated from a job, or losing custody of a child.²⁴

WHAT ELSE SHOULD PEOPLE KNOW ABOUT CBD?

Consumer CBD products could pose risks to pregnant women and children. The FDA strongly advises pregnant and nursing women not to use CBD. Research has not established CBD's safety in these populations.²⁵ CBD products contaminated with substances, including THC, could pose risks to a fetus or breastfed baby.²⁶

THE FDA STRONGLY ADVISES PREGNANT AND NURSING WOMEN NOT TO USE CBD.

CBD products in the form of candies can be enticing to children. A single serving size may be one gummy. Yet, a child who gets hold of the product may consume more than one gummy. The impact of high doses of CBD are not known. Similarly, the effects of CBD on children and their brain development are unknown.²⁷

ENDNOTES

- 1 <https://www.nordstrom.com/sr?origin=keywordsearch&keyword=cbd>
- 2 <https://www.consumerreports.org/cbd/is-it-safe-to-vape-cbd/>
- 3 <https://www.bloomberg.com/news/articles/2019-07-18/booming-demand-for-cbd-is-making-hemp-the-cannabis-cash-crop>
- 4 <https://www.nccih.nih.gov/health/cannabis-marijuana-and-cannabinoids-what-you-need-to-know>
- 5 <https://archives.drugabuse.gov/about-nida/noras-blog/2015/07/researching-marijuana-therapeutic-purposes-potential-promise-cannabidiol-cbd>
- 6 <https://www.fda.gov/news-events/public-health-focus/fda-regulation-cannabis-and-cannabis-derived-products-including-cannabidiol-cbd#cosmetics>
- 7 <https://www.fda.gov/news-events/fda-voices/fda-committed-sound-science-based-policy-cbd>
- 8 <https://www.nccih.nih.gov/health/cannabis-marijuana-and-cannabinoids-what-you-need-to-know>
- 9 <https://www.fda.gov/news-events/public-health-focus/warning-letters-and-test-results-cannabidiol-related-products>
- 10 <https://www.fda.gov/cosmetics/cosmetics-laws-regulations/it-cosmetic-drug-or-both-or-it-soap>, <https://www.fda.gov/news-events/public-health-focus/fda-regulation-cannabis-and-cannabis-derived-products-including-cannabidiol-cbd#cosmetics>; <https://www.fda.gov/news-events/public-health-focus/fda-regulation-cannabis-and-cannabis-derived-products-including-cannabidiol-cbd#legaltosell>
- 11 <https://www.fda.gov/consumers/consumer-updates/what-you-need-know-and-what-were-working-find-out-about-products-containing-cannabis-or-cannabis>
- 12 <https://www.fda.gov/news-events/public-health-focus/warning-letters-and-test-results-cannabidiol-related-products>
- 13 <https://www.chicagotribune.com/nation-world/ct-nw-vaping-cbd-bad-drugs-20190917-77fx47fb2jey7okmk223drbrlq-story.html>
- 14 <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=8bf27097-4870-43fb-94f0-f3d0871d1eec>
- 15 <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=8bf27097-4870-43fb-94f0-f3d0871d1eec>
- 16 <https://www.nccih.nih.gov/health/cannabis-marijuana-and-cannabinoids-what-you-need-to-know>
- 17 <https://www.fda.gov/consumers/consumer-updates/what-you-need-know-and-what-were-working-find-out-about-products-containing-cannabis-or-cannabis>
- 18 <https://www.lung.org/quit-smoking/e-cigarettes-vaping/lung-health>
- 19 <https://phc.amedd.army.mil/topics/healthyliving/tfl/Pages/VapeOils.aspx>
- 20 <https://www.ncdhhs.gov/news/press-releases/dhhs-carolinas-poison-center-investigating-increase-emergency-department-visits>
- 21 <https://www.medscape.com/viewarticle/940531>
- 22 <https://www.nytimes.com/2019/10/15/science/cbd-thc-cannabis-cannabidiol.html>
- 23 <https://jamanetwork.com/journals/jama/fullarticle/2661569>
- 24 <https://abc7chicago.com/cbd-oil-what-is-near-me/5568430/>; <https://www.nytimes.com/2019/10/15/science/cbd-thc-cannabis-cannabidiol.html>;
<https://www.texastribune.org/2019/12/17/texas-schools-vaping-surge-expulsions-felony-charges/>
- 25 <https://www.fda.gov/consumers/consumer-updates/what-you-should-know-about-using-cannabis-including-cbd-when-pregnant-or-breastfeeding>
- 26 <https://www.fda.gov/consumers/consumer-updates/what-you-should-know-about-using-cannabis-including-cbd-when-pregnant-or-breastfeeding>
- 27 <https://www.fda.gov/consumers/consumer-updates/what-you-need-know-and-what-were-working-find-out-about-products-containing-cannabis-or-cannabis>

Supported by the NC Department of Health and Human Services, Division of Mental Health, Developmental Disabilities and Substance Abuse Services, with funding from the Substance Abuse and Mental Health Services Administration, State Opioid Response Supplemental - Prevention Funds (SOR- 3H79TI081710-01S1)

ABOUT COMMUNITY IMPACT NORTH CAROLINA

Celebrating more than 35 years of service to the community, Community Impact North Carolina (CINC) is one of North Carolina's leading organizations committed to preventing alcohol and other drug harms in our communities.

We were established in 1982, as a group of concerned citizens, in response to what was seen as a crisis of alcoholism in the community. CINC continues to promote community-centered substance misuse prevention through education, community and environmental strategies, and policy advocacy.

For more information about Community Impact NC, visit impactcarolina.org.

MISSION

To work in partnership with communities to bridge gaps through direct support, evidence-based and innovative practices, and policy to minimize and prevent the harm caused by substance misuse.

We are community centric

We support communities to build their capacity to create change and determine their own futures. We develop our programs with the communities we serve, valuing their strengths and qualities. Our community programs and services delivery are supported by the latest evidence and data respective to measurable outcomes.

We prioritize partnerships, collaborations, and long term impact

We need to build strong alliances that help deliver positive outcomes and strengthen our partner communities' impact. Our approach is reflected in our organizational culture of collaboration.

We influence change in policy, systems, and institutions

Evidence influenced; we advocate for change in policy and practice within local and state government, society and business.

Human Centered

We put people at the center of all our thinking. This helps us understand community needs and behaviors that allow us to convert insights into compelling strategies & initiatives; and deliver superior experiences that connect.



**Community
Impact
North Carolina**

**405 Nash St West, Suite 210
Wilson, North Carolina 27893**

www.facebook.com/CommunityImpactNC
www.twitter.com/impactcarolina
www.instagram.com/communityimpact_nc/