

UNC SON **ECHO** ABC for MOUD

Addiction and Behavioral Clinic for Medication for Opioid Use Disorder Treatment

What You Need To Know About Delta-8-THC

Elizabeth Sherwood RN MS ANP-C

UNC SON ECHO ABC for MOUD is made possible by funding from the Health Resources & Services Administration (HRSA) Grant numbers: T94HP30882 (2017-2023) and T14HP33207 (2019-2023)



UNC
SCHOOL OF NURSING



University of North Carolina
at Chapel Hill
School of Nursing

Objectives

- The participant will be able to describe the differences between Delta-8-THC and Delta-9-THC.
- The participant will be able to state the challenges to the current regulations of Delta-8-THC.
- The participant will be able to identify 3 effects that the user of Delta-8 may be seeking.
- The participants will be able to identify for the user the safety and challenges of using Delta-8.

No Disclosures to Report

What is Delta 8?

- Delta-8 is a form of THC. The most common form is Delta-9-THC.
- The chemical difference between Delta-8 and Delta-9 is the location of the specific double bond with each molecular structure. Delta-8 has a double bond on the 8th carbon ring and Delta-9 has a double bond on the 9th carbon ring. There is also a Delta-10.
- These substances have a similar chemical structure. Both bind to CB1 receptors in the brain however Delta-8 has a weaker affinity for the CB1 receptor which tempers the psychoactive effects.

What do we know about Delta 8?

- Google searches grew by more than 850% in US between 2020 and 2021.
- About 16% of regular cannabis users use Delta-8.
- Use is highest in states that do not have recreational cannabis.
- Potency is thought to be about half in comparison to Delta-9-THC.
- It is used for relief of pain and anxiety, relaxation, heightened states and stress reduction with less of the psychoactive effects associated with Delta-9-THC.

What do we know about Delta 8?

- The 2018 Farm Bill made hemp legal and specified that hemp had to contain less than 0.3% of Delta-9 THC.
- Manufacturers figured out a way to synthesize Delta-8 extraction from CBD as there are only trace amounts in hemp. Delta-8 can be extracted from marijuana but then is not legal in many states.
- Delta-8 is chemically THC but legally hemp.
- While hemp is legal, 14 states have banned Delta-8 due to safety issues.
- There are no age limits on the purchasing of hemp products.

What do we know about Delta 8?

- Given that Delta-8 is not regulated there are concerns due to safety.
- The majority of Delta-8 products on the market do not resemble what is lab tested and may be contaminated with heavy metals and pesticides.
- Testing of 27 products-none contained amount stated and many had contaminants of mercury and lead.
- CDC issued a health advisory in September 2022 and the FDA in May 2023 citing accidental poisonings, hallucinations, vomiting, tremor, dizziness, confusion and loss of consciousness.

What do we know about Delta 8?

The process of extraction may use several different types of chemicals that theoretically should be cleansed from the product prior to sale. This may not be done by many manufacturers. If the product is not lab tested, quality is suspect. Some of the contaminants include:

- lead
- mercury
- bleaches
- pesticides
- acids

What do we know about Delta 8?

The conversion of CBD to delta-8-THC involves refluxing CBD in an organic solvent, such as toluene or heptane, with *p*-toluenesulfonic acid or another acid that serves as a catalyst. The reaction is typically run for 60–90 min. “You basically close the ring on the CBD molecule,” Coffin says.

Coleman also has concerns about some of the solvents people are using. One popular method uses dichloromethane, also known as methylene chloride. Dichloromethane should not be used “without appropriate ventilation and controls because it’s a silent killer,” Coleman says. “A lot of these shops, even the shops in the legal markets, are not ready for this kind of activity.”

<https://cen.acs.org/biological-chemistry/natural-products/Delta-8-THC-craze-concerns/99/i31>

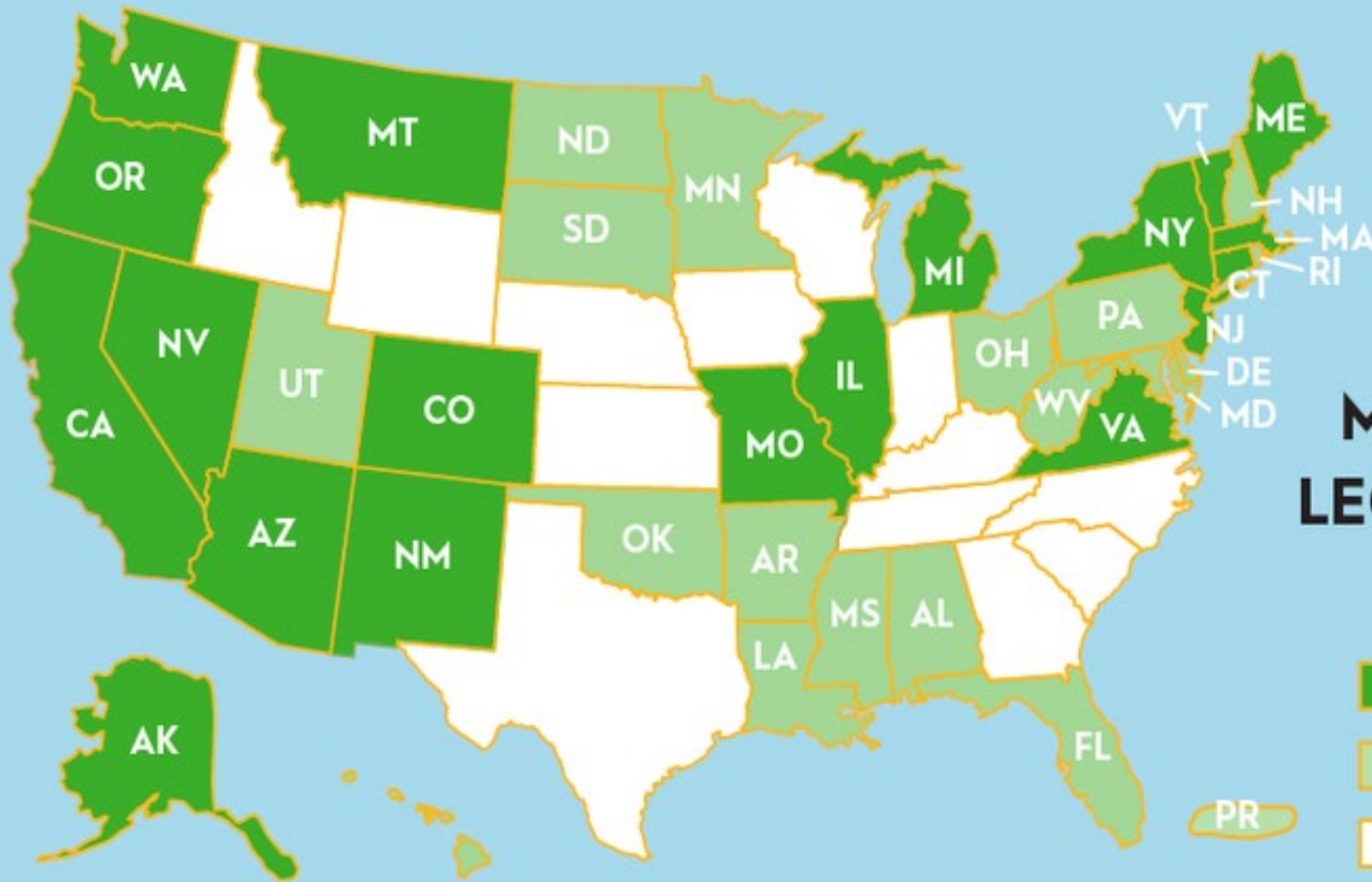
What to discuss with your patient using Delta 8

Delta-8 will test positive on drug testing for THC.

Due to the lack of regulations, it is important to know the quality and the testing of the product. Many low-quality products out there!

The effects may be more subtle than Delta-9-THC but this does not mean that one should use more to achieve a similar effect due to the concerns for increased side effects and contaminant exposure.

If going to use Delta-8, encourage research into the product and only using products that have 3rd party testing



MARIJUANA LEGALIZATION BY STATE

- Recreational
- Medical
- Illegal

Source: <https://dlsa.com/map-of-marijuana-legality-by-state>

References and Resources

Centers for Disease Control and Prevention(CDC) (2021). Increases in Availability of Cannabis Products Containing Delta-8 THC and Reported Cases of Adverse Events.

<https://emergency.cdc.gov/han/2021/han00451.asp>

Erickson, B. (2021)Delta-8-THC craze concerns chemist. Chemical and Engineering News. Vol 99, Issue 31.

<https://cen.acs.org/biological-chemistry/natural-products/Delta-8-THC-craze-concerns/99/i31>

Food and Drug Administration (FDA) (2022). 5 Things to Know about Delta-8 Tetrahydrocannabinol – Delta-8 THC

<https://www.fda.gov/consumers/consumer-updates/5-things-know-about-delta-8-tetrahydrocannabinol-delta-8-thc>

References and Resources

Smith, D. (2022). How Delta-8 THC Works And Why Experts Are Worried About It. The New York Times. Published 7/1/2022 and Updated 7/25/2022.

<https://www.nytimes.com/2022/07/01/well/mind/delta-8-thc-marijuana.html>

Society of Cannabis Clinicians (2021). SCC Consensus on Delta-8-THC.

<https://www.cannabisclinicians.org/2021/08/30/scc-consensus-on-delta-8-thc/>

Tavlock, C. (2023). Delta-8 THC in North Carolina: The Legal Cannabis that has Sellers, Consumers on High. Media Hub.

<https://mediahub.unc.edu/delta-8-thc-in-north-carolina-the-legal-cannabis-that-has-sellers-consumers-on-a-high-2/>