

# Addressing Perinatal Cannabis Use



## HIGHLIGHTS

- | What is Cannabis?
- | Cannabis Alternatives
- | New Patient Resources
- | Effects of Cannabis on Pregnancy
- | Cannabis & Breastfeeding
- | Cannabis & Safe Infant Sleep
- | Cannabis Poisoning
- | Dangers of Vaping Cannabis
- | Cannabis Screening

## What is Cannabis?<sup>1</sup>

Cannabis is known by many names, including marijuana, weed, CBD, or pot. The term “cannabis” is used to describe products created from the *Cannabis sativa* species of plants. The cannabis plant contains over 104 cannabinoids. Cannabinoids are substances that are found in relatively high concentrations in the cannabis plant. The cannabis plant can be cultivated to have higher concentrations of different cannabinoids. Common Cannabinoids include:

THC (Tetrahydrocannabinol)	CBD (Cannabidiol)	THCA (Tetrahydrocannabinolic acid)
<p>Different isomers include delta-8, delta-9 and delta 10 THC</p> <p>All THC isomers have an intoxicating psychoactive effect, creating a “high”</p> <p>Delta-8 and Delta-10 are not regulated and are easily obtained in stores and online</p> <p>Delta-9 is currently illegal in NC (except within the Qualla Boundary of the Eastern Band of Cherokee Indians)</p>	<p>Does not cause intoxication</p> <p>Legal and marketed as safe, despite lack of evidence</p> <p>Some people experience side effects such as sleepiness, mood changes, decreased appetite and diarrhea<sup>2</sup></p>	<p>Chemical precursor to THC</p> <p>Converts to psychoactive THC when exposed to light or heat (e.g., burning)</p> <p>Unregulated and widely available in stores and online</p>

# Why do Patients use Cannabis?<sup>3</sup>

- Cannabis products are easy to purchase
- Available in vape shops, gas stations, restaurants, hemp dispensaries and through online retailers
- No age restrictions or ID requirements
- Increased acceptability of cannabis nationwide and decreased perception of cannabis-related harms<sup>3,4</sup>
- Aggressive marketing with attractive packaging, flavors and unfounded health claims, reinforced by those who sell the products
- Self-medication for a variety of health concerns<sup>5</sup>
- Cannabis products are perceived as a “natural” remedy
- Pregnant people report using cannabis for pregnancy-related discomforts despite lack of evidence for efficacy and the known risks of use.

Recent data show an increase in the use of cannabis among pregnant people without co-occurring substance abuse<sup>4</sup>, reflecting an increase in casual use, due to misperception of safety in pregnancy. It is important for health care providers to be a source of accurate information about cannabis use for patients.



## Evidence-based Alternatives to Cannabis<sup>6</sup>

Recent research has explored the reasons pregnant women choose to use cannabis. Many state that they use cannabis to manage common pregnancy discomforts such as morning sickness/nausea, body aches and anxiety or depression. There are FDA-approved and evidence-based alternatives to cannabis to manage pregnancy discomforts. Cannabis is not considered safe during pregnancy, and is considered Lactation Risk Category L3 for infrequent use, and L4 for chronic use.<sup>7</sup>

The chart below lists remedies that are generally considered to be safe during pregnancy and lactation. Please review the resources for clinicians for more detailed information.<sup>7</sup>

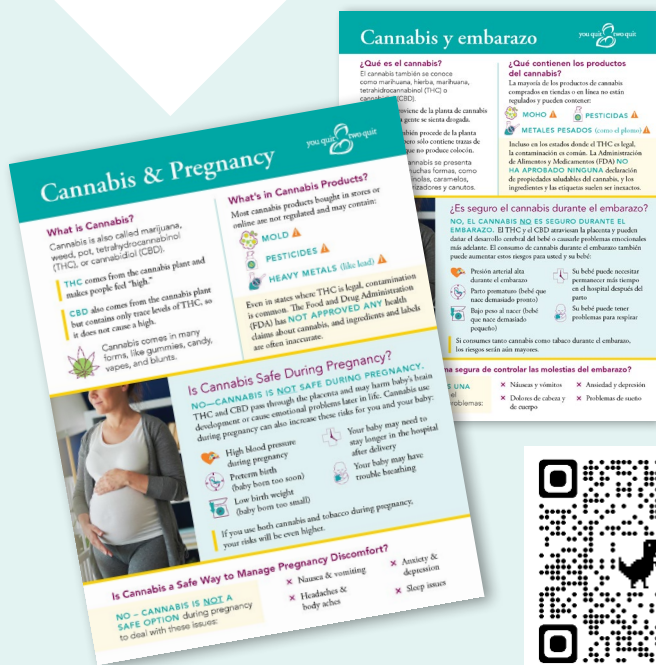
Health Issue	Evidence-based Remedy	Lactation on Risk Category	Alternatives or Other Information	Resources for Clinicians
Nausea and Vomiting of Pregnancy	Diclegis	L3 Presumed Compatible	Diet changes, Hydration, B1 supplementation	HER Foundation Clinical Tools: <a href="https://www.hyperemesis.org/tools/">https://www.hyperemesis.org/tools/</a>
	Zofran	L2 Probably Compatible		MomBaby Podcast Episode on Hyperemesis Gravidarum: <a href="https://pod.link/1775232218/episode/1c298879ccf952c96507669945f953e7">https://pod.link/1775232218/episode/1c298879ccf952c96507669945f953e7</a>
	Dimenhydrinate (Dramamine)	L2 Probably Compatible		
	Metoclopramide	L2 Probably Compatible		
Headaches <sup>8</sup>	Tylenol	L1 Compatible	Adequate sleep, Proper hydration, Avoid Triggers, Stress Management	Headaches in Pregnancy and Postpartum. Obstetrics & Gynecology, 139 (5), 944-972. doi: 10.1097/AOG.0000000000004766.
	Caffeine	L2 Probably Compatible		
	Diphenhydramine (Benadryl)	L2 Probably Compatible		
Anxiety <sup>9</sup> / Depression	Sertraline	L2 Probably Compatible	Sleep hygiene, Self-care, Exercise, Balanced Nutrition	American College of Obstetricians and Gynecologists (ACOG). Treatment and Management of Mental Health Conditions During Pregnancy and Postpartum: ACOG Clinical Practice Guideline No. 5. Obstet Gynecol. 2023 Jun;141(6):1262-1288. doi: 10.1097/AOG.0000000000000520
	Fluoxetine	L2 Probably Compatible		
	Citalopram	L2 Probably Compatible		
	Escitalopram	L2 Probably Compatible		
Sleep Issues	Zolpidem (Ambien)	L3 Presumed Compatible		
Tobacco Cessation	Counseling and support	N/A	Refer to NC Quitline for up to 7 free counseling sessions	<a href="#">Tobacco Cessation Practice Bulletin</a>
	Pharmacotherapy- Bupropion	L3 Presumed Compatible		Nicotine Replacement Therapy is not considered safe for use in pregnancy since nicotine in any form is harmful to the fetus.*

\*Rare exceptions for use may include when the patient is a heavy tobacco user, other treatment options have been exhausted, and the patient understands the potential risks of NRT. Short-acting NRT (lozenge, gum) is the preferred option if NRT is used in pregnancy.

# Patient Resources



You Quit, Two Quit has developed many pregnancy and parenting-specific resources for providers and patients. Materials shown can be downloaded at [YouQuitTwoQuit.org](https://YouQuitTwoQuit.org) and most items can be ordered through the Women, Infant, and Community Wellness Section. (See more information at the bottom of this page).



## NEW!

**Cannabis & Pregnancy** provides key information about cannabis, safety standards during pregnancy and postpartum for both mother and infant, and risks associated with using cannabis. The back side of the flyer provides key information about the use of cannabis for morning sickness, postpartum use, and breastfeeding. Additional information is provided to help anyone who needs assistance with quitting cannabis, tobacco, and vaping. **This flyer is also available in Spanish.**



## To order materials:

- Scan the QR code or go to [SurveyMonkey.com/r/WHBPublicationsOrderForm](https://SurveyMonkey.com/r/WHBPublicationsOrderForm)
- Follow instructions for online ordering
- Select the "Tobacco Cessation" category to order any of the materials pictured here.

## Cannabis and Perinatal Health

### Preconception Health and Cannabis

THC is a very fat-soluble molecule, so it is stored within the body fat of cannabis users and slowly released over days or weeks. The amount of THC stored and released depends on how much and how frequently the individual uses cannabis products.<sup>10</sup> Because THC stays in the body for a long period of time, it is important to talk with women about their cannabis use and encourage them to quit before they become pregnant.



# Effects of Cannabis on Pregnancy

Approximately 7% of pregnant people in the United States report past month cannabis use.<sup>11</sup> While the research is still evolving, evidence is building that cannabis use during pregnancy is harmful to both the developing fetus and the pregnant person.

- THC readily crosses the placenta and is rapidly distributed to the brain and fat of the fetus
- CBD increases the permeability of the placenta, allowing other substances to more readily cross to the fetus
- Maternal carbon monoxide levels are 5 times higher after smoking cannabis compared to tobacco.<sup>12</sup>

Two large research studies, each including over 300,000 pregnant people in California, showed that prenatal cannabis use is associated increased risks for both mom and baby:

### Increased Maternal Risks<sup>13</sup>:

- Gestational hypertension (dose-response relationship)
- Preeclampsia
- Weight gain outside of pregnancy guidelines (both excess and inadequate)
- Placental abruption

### Increased Fetal/Infant Risk<sup>14</sup>:

- Low Birth Weight
- Small for Gestational Age (SGA)
- Preterm Birth
- NICU admission

Many cannabis users also regularly use tobacco. Tobacco or cannabis alone can negatively impact perinatal outcomes, and the risk of these outcomes increases when both are used together.<sup>15</sup>

Perinatal Outcomes Among Pregnant Women in California, 2012 to 2019				
Outcome	Substance used, % of participants			
	Unexposed (n=3039129)	Cannabis-use (n=23007)	Nicotine-product use (n=56811)	Both (n=10312)
Hypertensive disease <sup>b</sup>	7.6	12.3	9.6	11.2
Preterm delivery <37 wk	6.6	12.2	12.0	17.5
Preterm delivery <32 wk	0.8	2.1	1.8	2.9
SMM	1.3	2.3	2.1	2.6
Nontransfusion SMM	0.4	0.8	0.7	1.0
NICU admission	10.0	15.6	17.8	22.5
Small for gestational age	8.5	14.3	13.7	18.0
Respiratory distress syndrome	3.4	5.9	5.5	7.5
Infant death	0.3	0.7	0.7	1.2
Neonatal death	0.2	0.3	0.3	0.6
Postneonatal death	0.1	0.4	0.4	0.6
Hypoglycemia	2.1	3.5	3.0	3.8
Bronchopulmonary dysplasia	0.1	0.2	0.1	0.2

Abbreviations: NICU, neonatal intensive care unit; SMM, severe maternal morbidity.

<sup>a</sup> P<.001 for all differences among 4 groups (calculated using x<sup>2</sup> test).

<sup>b</sup> Includes gestational hypertension and preeclampsia with or without severe features.

Crosland BA, Garg B, Bandoli GE, et al. Risk of Adverse Neonatal Outcomes After Combined Prenatal Cannabis and Nicotine Exposure. JAMA Netw Open. 2024;7(5):e2410151. doi:10.1001/jamanetworkopen.2024.10151

## Cannabis and Breastfeeding

The use of any nonprescribed substance during breastfeeding carries risk, including reduced ability of the parent to respond to infant feeding cues and infant substance exposure through breastmilk. Societal norms around cannabis are changing,<sup>13</sup> and there is an increased likelihood that breastfeeding people may be unaware of the potential risks when they choose to use cannabis. An online survey of 1,516 mothers who used cannabis during lactation found that two-thirds of participants were “not at all” concerned that cannabis used during lactation would affect their baby.<sup>12</sup>

### Facts about Cannabis and Breastfeeding:

- Both THC and CBD are fat-soluble molecules. Due to the high fat content of human milk, THC and CBD readily move into and remain in breastmilk. THC has been detected in milk from 6 days to 6 weeks after consumption.
- Peak concentrations of cannabinoids in human milk usually occur within one hour of maternal cannabis use.
- THC has a long half-life, both in maternal plasma (25-36 hours)<sup>13</sup> and human milk (12-39 hours)<sup>12</sup>, so “pumping and dumping” is not a sustainable option.
- There is limited and conflicting data on the acute and long-term impacts of infant cannabis exposure via breastmilk.<sup>13</sup> There is concern about the possible effects of THC and other cannabinoids on neurotransmitters and development of the nervous system in the infant.<sup>12</sup>
- Maternal cannabis use is associated with decreased breastfeeding duration. It is unclear if this is a result of cannabis use or other social-structural factors.
- Cannabis may decrease serum prolactin, suggesting a possible link with decreased milk supply.<sup>12</sup>
- Cannabis may impact breastmilk composition, increasing the relative concentration of lactose and lowering the concentration of immunoglobulins which are important for supporting infant immune function.

The Academy of Breastfeeding Medicine (ABM) encourages the cessation and/or reduction of cannabis use during lactation. However, cannabis use, particularly infrequent use, should not preclude breastfeeding. For those who continue to use cannabis and wish to breastfeed, ABM recommends a shared-decision making process to discuss the risks and benefits of breastfeeding.<sup>13</sup> Infants who are exposed to cannabis should be monitored for sedation, not waking to feed, poor feeding, appropriate weight gain and potential neurobehavioral or psychomotor delays.<sup>7</sup>

## Cannabis and Safe Infant Sleep

Parental cannabis use is linked to an increased risk of infant sleep-related deaths, including sudden infant death syndrome (SIDS). When cannabis (or other substance) use is combined with bed sharing, the risk of SIDS and accidental suffocation rises significantly.<sup>16,17</sup> Parental impairment from substance use can hinder safe sleep practices. Research indicates that paternal cannabis use during conception, pregnancy, and the postnatal period is significantly associated with SIDS<sup>18</sup>, while at least one study suggests maternal cannabis use may also elevate this risk.<sup>19</sup>

### Call Poison Help

Counsel patients who use cannabis products to store them in a locked container or cabinet, safely out of children’s reach, and to call Poison Help at 800-222-1222 if accidental ingestion occurs or vaping liquid is spilled on skin.

# Cannabis Poisoning<sup>20</sup>

There has been a steep increase in the number of CBD and THC-related reports to poison control involving children in the past 5 years as these products have become more accessible in homes. Cannabis products frequently resemble snack foods or candy that are familiar to children, so accidental consumption is increasingly common. From 2019 to 2025, Poison Centers managed 38,250 cannabis edible exposure cases in patients that were 0-19 years of age.<sup>21</sup> Young children are particularly vulnerable to poisoning by cannabis products due to their small body size.

## Dangers of Vaping Cannabis

As with all vaping products, the components of the vaping liquid can cause harm, in addition to the harms associated with cannabis. Vegetable glycerin, propylene glycol, and flavoring compounds are respiratory irritants that have been shown to cause airway/lung cell inflammation and damage, including cell death.<sup>22</sup> E-liquids also contain acrolein, a weed killer, which can cause acute lung injury, COPD, and may cause asthma and lung cancer.<sup>23</sup> Vaping products produce dangerous aldehydes, which can cause lung and heart disease.<sup>24</sup> Inconsistent and deceptive labeling can make it very challenging to understand potential risks of other components that may be contained in the electronic vape liquids. Frequently the cannabis e-liquids also contain nicotine, even when not labeled as such.

A study testing 27 delta-8 THC vaping products from 10 different brands found that none had accurate labeling of THC content, 11 contained unlabeled cutting agents contaminated with unlabeled adulterants, and all contained unintended byproducts, including delta-9 THC and heavy metals.<sup>25</sup>

## Screening for Cannabis Use

It is important to screen all patients for cannabis use. In North Carolina, cannabis products are available from a wide variety of vendors including convenience stores, grocery stores, tobacco shops, and specialty hemp “dispensaries,” without age restrictions. Cannabis products can also easily be purchased online.

The 2019 e-cigarette/vaping product associated lung injury (EVALI) outbreak, which affected 2,807 people and resulted in 68 deaths, was largely attributed to vitamin E acetate contamination of THC vaping products.<sup>26</sup>

Approximately 7% of pregnant women in the United States report past-month cannabis use. Individuals may be fearful to admit cannabis use, given the ambiguous legal status of such products in North Carolina and concerns about potential reports to child protective services. People with substance use disorders may avoid seeking care due to stigma, fear of child removal, or other punitive measures.

As with all conversations about substances, a nonjudgmental, person-centered approach is best when asking about cannabis use and helping someone to quit or cut back on cannabis. People use cannabis for many different reasons, so an open and curious mindset is essential for understanding patterns of use and helping modify those patterns.

Start by asking the person if they use any cannabis products:

- Do you sometimes use cannabis products?

If they use cannabis ask them to share more, and follow up with questions about frequency, type and reason for use:

- Can you tell me a little bit about your cannabis use?
  - ◆ Follow up questions if needed:
    - What kind of cannabis products do you use?
    - How often do you use [cannabis product]?
    - Why do you use [cannabis product]?

## References

1. National Academies of Sciences Engineering, Medicine. The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research. The National Academies Press; 2017. doi:10.17226/24625
2. Cannabis (Marijuana) and Cannabinoids: What You Need to Know. NCCIH. Accessed June 11, 2025. <https://www.nccih.nih.gov/health/cannabis-marijuana-and-cannabinoids-what-you-need-to-know>
3. 5 Things to Know about Delta-8 Tetrahydrocannabinol – Delta-8 THC. FDA. Published online August 9, 2024. <https://www.fda.gov/consumers/consumer-updates/5-things-know-about-delta-8-tetrahydrocannabinol-delta-8-thc>
4. Young-Wolff KC, Sarovar V, Tucker LY, et al. Trends in Cannabis Polysubstance Use During Early Pregnancy Among Patients in a Large Health Care System in Northern California. JAMA Netw Open. 2022;5(6):e2215418. doi:10.1001/jamanetworkopen.2022.15418
5. Foti TR, Green A, Altschuler A, et al. Patient Perceptions of Prenatal Cannabis Use and Implications for Clinicians. Obstetrics & Gynecology. 2023;142(5). [https://journals.lww.com/greenjournal/fulltext/2023/11000/patient\\_perceptions\\_of\\_prenatal\\_cannabis\\_use\\_and.21.aspx](https://journals.lww.com/greenjournal/fulltext/2023/11000/patient_perceptions_of_prenatal_cannabis_use_and.21.aspx)
6. Armstrong C. ACOG Guidelines on Psychiatric Medication Use During Pregnancy and Lactation. afp. 2008;78(6):772-778.
7. Hale TW, Krutsch K. Hale's Medications and Mothers' Milk 2025-2026: A Manual of Lactational Pharmacology. Twenty-First edition. Springer Publishing; 2025. <https://www.halesmeds.com/>
8. American College of Obstetricians and Gynecologists. Headaches in Pregnancy and Postpartum: ACOG Clinical Practice Guideline No. 3. Obstetrics & Gynecology. 2022;139(5). [https://journals.lww.com/greenjournal/fulltext/2022/05000/headaches\\_in\\_pregnancy\\_and\\_postpartum\\_\\_acog.37.aspx](https://journals.lww.com/greenjournal/fulltext/2022/05000/headaches_in_pregnancy_and_postpartum__acog.37.aspx)
9. American College of Obstetricians and Gynecologists. Treatment and Management of Mental Health Conditions During Pregnancy and Postpartum: ACOG Clinical Practice Guideline No. 5. Obstetrics & Gynecology. 2023;141(6). [https://journals.lww.com/greenjournal/fulltext/2023/06000/treatment\\_and\\_management\\_of\\_mental\\_health.36.aspx](https://journals.lww.com/greenjournal/fulltext/2023/06000/treatment_and_management_of_mental_health.36.aspx)
10. Cannabis. In: Drugs and Lactation Database (LactMed®). National Institute of Child Health and Human Development; 2006. Accessed June 11, 2025. <http://www.ncbi.nlm.nih.gov/books/NBK501587/>
11. Harris M, Schiff DM, Saia K, Muftu S, Standish KR, Wachman EM. Academy of Breastfeeding Medicine Clinical Protocol #21: Breastfeeding in the Setting of Substance Use and Substance Use Disorder (Revised 2023). Breastfeeding Medicine. 2023;18(10):715-733. doi:10.1089/bfm.2023.29256.abm
12. Ryan SA, Ammerman SD, O'Connor ME, et al. Marijuana Use During Pregnancy and Breastfeeding: Implications for Neonatal and Childhood Outcomes. Pediatrics. 2018;142(3):e20181889. doi:10.1542/peds.2018-1889
13. Young-Wolff KC, Adams SR, Alexeeff SE, et al. Prenatal Cannabis Use and Maternal Pregnancy Outcomes. JAMA Intern Med. 2024;184(9):1083. doi:10.1001/jamainternmed.2024.3270
14. Avalos LA, Adams SR, Alexeeff SE, et al. Neonatal outcomes associated with in utero cannabis exposure: a population-based retrospective cohort study. American Journal of Obstetrics & Gynecology. 2024;231(1):132.e1-132.e13. doi:10.1016/j.ajog.2023.11.1232
15. Crosland BA, Garg B, Bandoli GE, et al. Risk of Adverse Neonatal Outcomes After Combined Prenatal Cannabis and Nicotine Exposure. JAMA Netw Open. 2024;7(5):e2410151. doi:10.1001/jamanetworkopen.2024.10151
16. Carpenter R, Irgens L, Blair P, et al. Sudden unexplained infant death in 20 regions in Europe: case control study. The Lancet. 2004;363(9404):185-191. doi:10.1016/S0140-6736(03)15323-8
17. Blair PS, Sidebotham P, Evason-Coombe C, Edmonds M, Heckstall-Smith EMA, Fleming P. Hazardous cosleeping environments and risk factors amenable to change: case-control study of SIDS in south west England. BMJ. 2009;339. doi:10.1136/bmj.b3666
18. Klonoff-Cohen H, Lam-Kruglick P. Maternal and Paternal Recreational Drug Use and Sudden Infant Death Syndrome. Arch Pediatr Adolesc Med. 2001;155(7):765. doi:10.1001/archpedi.155.7.765
19. Williams SM, Mitchell EA, Taylor BJ. Are risk factors for sudden infant death syndrome different at night? Arch Dis Child. 2002;87(4):274-278. doi:10.1136/adc.87.4.274
20. Edible Cannabis. Accessed June 11, 2025. <https://poisoncenters.org/track/edible-cannabis>. You can reach your local Poison Center by calling the Poison Help line: 1-800-222-1222.
21. Ibid.
22. Sassano ME, Davis ES, Keating JE, et al. Evaluation of e-liquid toxicity using an open-source high-throughput screening assay. PLOS Biology. 2018;16(3):e2003904. doi:10.1371/journal.pbio.2003904
23. Bein K, Leikauf GD. Acrolein – a pulmonary hazard. Molecular Nutrition & Food Research. 2011;55(9):1342-1360. doi:10.1002/mnfr.201100279
24. Ogunwale MA, Li M, Ramakrishnam Raju MV, et al. Aldehyde Detection in Electronic Cigarette Aerosols. ACS Omega. 2017;2(3):1207-1214. doi:10.1021/acsomega.6b00489
25. Meehan-Atrash J, Rahman I. Novel  $\Delta^8$ -Tetrahydrocannabinol Vaporizers Contain Unlabeled Adulterants, Unintended Byproducts of Chemical Synthesis, and Heavy Metals. Chem Res Toxicol. 2022;35(1):73-76. doi:10.1021/acschemrestox.1c00388
26. Smoking and Tobacco Use; Electronic Cigarettes. Centers for Disease Control and Prevention. August 3, 2021. Accessed June 11, 2025. [https://archive.cdc.gov/www\\_cdc\\_gov/tobacco/basic\\_information/e-cigarettes/severe-lung-disease.html](https://archive.cdc.gov/www_cdc_gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html)

# You Quit, Two Quit

## A Tobacco Cessation Quality Improvement Initiative

**You Quit, Two Quit** is implemented by the University of North Carolina Collaborative for Maternal and Infant Health, in partnership with the Women and Tobacco Coalition for Health, and the Women, Infant, and Community Wellness Section and the Tobacco Prevention and Control Branch of the NC Division of Public Health.

The goal of You Quit, Two Quit is to ensure that there is a comprehensive system in place to screen and treat tobacco use in women, including pregnant and postpartum mothers. This project is unique in its focus on low-income women, new mothers, and recidivism prevention.



**YouQuitTwoQuit.org**

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