



# Let's Be Blunt: Facts about Cannabis and Pregnancy



## What is cannabis?

Cannabis refers to all products derived from the plant Cannabis Sativa or Indica. The cannabis plant contains more than 500 chemical substances and more than 80 unique cannabinoids. Cannabinoids are chemicals that produce effects by attaching to specific receptors in the brain and body. The most prevalent cannabinoids include the psychoactive cannabinoid ( $\Delta 9$ -tetrahydrocannabinol, known as THC) and the non-psychoactive cannabidiol (CBD).

The prevalence of cannabis use is on the rise, especially among people of reproductive age, including during the COVID-19 pandemic, in part due to heightened anxiety and stress.<sup>i</sup>

## How do people use cannabis?

The most common method of cannabis administration in both non-pregnant and pregnant populations is smoking, vaping, dabbing, and ingesting.

- 1) Smoking or Vaping: These are the fastest methods for THC to enter your body and provides rapid onset with a short duration of symptoms. Inhalation of smoke or vapor released by heating the flowers, leaves, or extracts of cannabis releases  $\Delta 9$ -THC. Smoking cannabis exposes the user to carcinogens released when the flowers and leaves are burned. To avoid inhaling smoke, some people are using vaporizers. These devices pull the active ingredients (including THC) from the marijuana and collect their vapor in a storage unit. A person then inhales the vapor, not the smoke.
- 2) Dabbing: Refers to inhaling vapors from cannabis-based oils, concentrates, and extracts consisting of extremely concentrated tetrahydrocannabinol THC.
- 3) Ingesting: Edibles are gaining popularity because they are palatable, discreet, and effects can last for hours. Because edibles require gastrointestinal absorption, it takes longer before symptom onset and thus, can lead to a higher likelihood of overconsumption.

## How addictive is cannabis?

About 30% of people who use cannabis will become addicted.<sup>ii</sup> Those who use cannabis prior to the age of 18 are 7 times more likely to have cannabis use disorder.<sup>iii</sup>

## How has cannabis changed?

There has been about a 200% increase in THC content in the cannabis plant over the past 10 years.<sup>iv</sup> Higher potency THC has been linked to an increased risk of psychosis, depression, anxiety, and cannabis use disorder.<sup>v</sup> Medical cannabis is not safer than recreational cannabis.



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## Can someone overdose on cannabis?

Yes. Cannabis overdose is rarely fatal but can cause serious behavioral and physical health effects that can be life-threatening. Symptoms of cannabis overdose include: psychosis, paranoia, worsening of existing psychiatric symptoms including depression or anxiety, difficulties breathing, severe vomiting, and cardiac symptoms such as chest pain.<sup>vi</sup>

## How common is cannabis use during pregnancy?

Cannabis is the most common illicit drug used by pregnant women. Cannabis use rates have more than doubled since 2002 from about 3.4% to 7% nationally in pregnant women.<sup>vii</sup> Cannabis use was the highest in the first trimester, with about 12% of women using cannabis.<sup>viii</sup> The prevalence of pregnant women using cannabis within the last month was noted to be 4.9% among pregnant women aged 15–44 years old and increased to 8.5% when looking at pregnant women between ages 18–25.<sup>v</sup>

## Is cannabis safe to use during pregnancy?

No amount of cannabis has been proven safe to use during pregnancy or while breastfeeding. In 2018, the American Academy of Pediatrics released its first official guidelines, advising women who are pregnant or nursing to avoid cannabis use because it isn't safe for them or their children.

## Who's most likely to use during pregnancy:

Single or unmarried women, young, lower socioeconomic status, less education, or residing with a partner who also uses cannabis.<sup>ix</sup>

## Reasons women use cannabis during pregnancy:

Some of the reasons why women report using cannabis during pregnancy include:

- 1) Nausea and vomiting: There are many prescription medications and non-medical treatments that are safe to take during pregnancy. There is no evidence cannabis is helpful for nausea and vomiting.
- 2) Pain and discomfort: To alleviate physical discomfort and pain there are many other options to consider such as massage, physical therapy, and pregnancy bands – all of which have been proven to help.
- 3) Anxiety and changes in mood: Pregnant women are at higher risks for depression than people in the general population. Other treatment alternatives include counseling, behavioral therapy, and safe prescription medications.



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Many women report using cannabis recreationally prior to becoming pregnant and then turning to cannabis to manage or decrease some of the unpleasant side effects of pregnancy. However, there are safer methods to manage uncomfortable symptoms during pregnancy and it's important to speak to your provider about ways to decrease discomfort that will be safe for you and your baby.

Cannabis may be harmful to you and your baby no matter how you use it—this includes smoking, vaping, dabbing, eating or drinking.

## What are possible effects of cannabis to your fetus?

- 1) Higher risk of still birth: Women using cannabis are 2.3 times more likely to have a stillbirth.<sup>x</sup>
- 2) Higher chance of pre-term labor (baby being born before 37 weeks): Women using cannabis weekly were at increased risk of preterm delivery, which can increase risks related to normal brain development, increase visual and hearing impairments, and increase behavioral and social-emotional problems.<sup>xi</sup>
- 3) Smaller size at birth: There is an increased risk of the birth weight of the baby being less than the 10th percentile among cannabis users. Smaller size at birth is also related to increased levels of cardiovascular risk factors such as high blood pressure, diabetes, and high cholesterol.<sup>xii</sup>
- 4) Higher risk of sudden infant death syndrome (SIDS): Children born to mothers who both drank and smoked beyond the first trimester of pregnancy are at 12 times the risk for SIDS.<sup>xiii</sup>
- 5) Higher risk of behavioral problems and trouble paying attention in school: Intrauterine cannabis exposure has been associated with decreased attention, poorer reading and spelling scores, and decreased problem-solving skills.<sup>xiv</sup> It has also been linked to an increased risk of autism spectrum disorder (ASD).<sup>xv</sup>

## What are possible effects of cannabis on the mother during pregnancy?

- 1) Lung injury: Secondhand cannabis smoke contains many of the same toxic and cancer-causing chemicals found in tobacco smoke.<sup>xvi</sup> THC can also be passed to infants through secondhand smoke.<sup>xvii</sup>
- 2) Cognitive impairment: Cannabis can cause changes in your perception of time and space and impair your judgement. This can put you at risk for falls, car accidents, or other injuries.

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## Can secondhand cannabis smoke impact the baby?

Breathing cannabis smoke can also be bad for you and your baby. Secondhand cannabis smoke contains many of the same toxic and cancer-causing chemicals found in tobacco smoke. THC may also be passed to infants through secondhand smoke.<sup>xi</sup>

## What if I'm using cannabis while breastfeeding?

THC can pass through breastmilk to your baby and can stay within a mother's systems for months after stopping its use. Exposure to THC through breast milk in the first month of life could result in decreased motor development at 1 year of age. Because a baby's brain is still forming, THC consumed in breast milk can also affect brain development.<sup>xvii</sup>

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<sup>ii</sup> Hasin DS, Saha TD, Kerridge BT, et al. Prevalence of Marijuana Use Disorders in the United States Between 2001-2002 and 2012-2013. *JAMA Psychiatry*. 2015;72(12):1235-1242. doi:10.1001/jamapsychiatry.2015.1858

<sup>iii</sup> Winters KC, Lee C-YS. Likelihood of developing an alcohol and cannabis use disorder during youth: Association with recent use and age. *Drug Alcohol Depend*. 2008;92(1-3):239-247. doi:10.1016/j.drugaldep.2007.08.005

<sup>iv</sup> Stuyt E. The Problem with the Current High Potency THC Marijuana from the Perspective of an Addiction Psychiatrist. *Mo Med*. 2018 Nov-Dec;115(6):482-486. PMID: 30643324; PMCID: PMC6312155.

<sup>v</sup> Petrilli K, Ofori S, Hines L, Taylor G, Adams S, Freeman TP. Association of cannabis potency with mental ill health and addiction: a systematic review. *Lancet Psychiatry*. 2022 Sep;9(9):736-750. doi: 10.1016/S2215-0366(22)00161-4. Epub 2022 Jul 25. PMID: 35901795.

<sup>vi</sup> Monte AA, et al. (2019). Acute Illness Associated With Cannabis Use, by Route of Exposure: An Observational Study. *Ann Intern Med*. 170(8):531- 537.

<sup>vii</sup> <https://www.hhs.gov/surgeongeneral/reports-and-publications/addiction-and-substance-misuse/advisory-on-marijuana-use-and-developing-brain/index.html#:~:text=Pregnant%20women%20use%20marijuana%20more,2016%20among%20pregnant%20women13%20>. Access on 1/9/2023.

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<sup>ix</sup> Knaappila N, Marttunen M, Fröjd S, Lindberg N, Kaltiala R. Changes in cannabis use according to socioeconomic status among Finnish adolescents from 2000 to 2015. *J Cannabis Res*. 2020 Dec 24;2(1):44. doi: 10.1186/s42238-020-00052-y. PMID: 33526131; PMCID: PMC7819333.

<sup>x</sup> Tobacco, drug use in pregnancy can double risk of stillbirth. <https://www.nichd.nih.gov/news/releases/Pages/121113-stillbirth-drug-use.aspx>. Accessed January 13, 2023.

<sup>xi</sup> Chabarria KC, Racusin DA, Antony KM, Kahr M, Suter MA, Mastrobattista JM, et al. Marijuana use and its effects in pregnancy. *Am J Obstet Gynecol* 2016;215:506.e1-7.

<sup>xii</sup> Warshak CR, Regan J, Moore B, Magner K, Kritzer S, Van Hook J. Association between marijuana use and adverse obstetrical and neonatal outcomes. *J Perinatol* 2015;35:991-5.

<sup>xiii</sup> Klonoff-Cohen H, Lam-Kruglick P. Maternal and Paternal Recreational Drug Use and Sudden Infant Death Syndrome. *Arch Pediatr Adolesc Med*. 2001;155(7):765-770. doi:10.1001/archpedi.155.7.765.

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