

# MARIJUANA USE DURING PREGNANCY



Marijuana in all its forms (edibles, vapes, flower, concentrates, and CBD products) contains tetrahydrocannabinol (THC) in varying amounts. THC is the ingredient that is responsible for the “high” people feel when using the drug. THC is dangerous to both the pregnant woman and the developing fetus.

## Effects on the pregnant woman:

1. Marijuana (THC) use can lead to an increased risk of falls due to dizziness, which could lead to injury as pregnancy changes the body’s center of gravity.
2. THC use may lead to impaired judgment which can also lead to injury such as during a motor vehicle accident.
3. When smoked, marijuana may lead to lower oxygen levels in the blood leading to difficulty breathing and even permanent lung injury.

## Effects on the developing fetus:

1. Many studies have established that the use of marijuana during pregnancy is responsible for poor growth of the fetus leading to infants that weigh less than 2500g (5 and ½ pounds). The effect can increase with greater use as well as with concurrent tobacco use.
2. Additionally, these babies can be born small for gestational age (less than the 10th percentile for weight based on age) and have a smaller head circumference reflecting changes in the growth of the brain.
3. Studies have also shown an association between maternal marijuana use and a lower Apgar score immediately after birth (which means more interventions such as artificial respiration), preterm delivery, increased rates of admission to the Neonatal Intensive Care Unit (NICU), more lung and brain infections, and problems with the blood system. These may lead to higher costs of care for exposed infants and even higher rates of infant mortality, although results of these studies have been mixed.



## Use during breastfeeding:

1. The American Academy of Pediatrics and the American College of Obstetrics and Gynecology (two of the most prestigious organizations that make recommendations for the care of pregnant women and their infants) discourage the use of the drug during breastfeeding, because it is unknown whether or not the chemicals in marijuana that are passed through breast milk to the infant are harmful.

## Long-term effects in children with maternal use:

1. Several studies have shown an association with maternal marijuana use on the developmental function of their children. These may include deficits in neuropsychological functioning, decreased attention, memory problems, and poor impulse control. These symptoms may lead to poor academic performance.
2. Studies also suggest an association between maternal marijuana use and the later development of certain symptoms in exposed children such with physical aggression, disobeying rules, cheating, stealing, and destruction of property which could lead to interactions with the criminal justice system.
3. Secondhand smoke from vapes or smoking marijuana can cause lung injury in children, especially in those with underlying asthma or other lung conditions.

## REFERENCES

1. Sadhana Dharmapuri, Kathleen Miller, Jonathan D. Klein; Marijuana and the Pediatric Population. *Pediatrics* August 2020; 146 (2): e20192629. 10.1542/peds.2019-2629.
2. Joan Younger Meek, Lawrence Noble, Section on Breastfeeding and the Use of Human Milk. *Pediatrics* July 2022; 150 (1): e2022057988. 10.1542/peds.2022-057988.
3. Marchand G, Masoud AT, Govindan M, et al. Birth Outcomes of Neonates Exposed to Marijuana in Utero: A Systematic Review and Meta-analysis. *JAMA Netw Open*. 2022;5(1):e2145653. doi:10.1001/jamanetworkopen.2021.45653.
4. Sorkhou M, Singla DR, Castle DJ, George TP. Birth, cognitive and behavioral effects of intrauterine cannabis exposure in infants and children: A systematic review and meta-analysis. *Addiction*. 2023 Nov 15. doi:10.1111/add.16370. Epub ahead of print. PMID: 37968824.
5. National Academies of Sciences, Engineering, and Medicine. 2017. *The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/24625>.
6. Brailon, A., & Bewley, S. (2018). Committee opinion no. 722: marijuana use during pregnancy and lactation. *Obstetrics & Gynecology*, 131(1), 164.
7. American College of Obstetrics and Gynecology. (2023, February). Marijuana and Pregnancy. <https://www.acog.org/womens-health/infographics/marijuana-and-pregnancy>