

Cannabinoids

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CANNABIS + PREGNANCY

- Cannabis is a plant that can be smoked, vaped, eaten, or ingested in other forms such as tinctures. It is used for relaxation, pain, anxiety, glaucoma, and many other things. Some of the other names for cannabis are marijuana, weed, herb, mota, and hash. Some other forms are wax, dabs, oils, tinctures, and shatter.
- Most information about effects of exposure to cannabis on the fetus is conflicting and confusing. For example, some studies find mild negative effects on newborn development, some find mild positive effects, and some find no effects. Long-term outcomes appear similar to other children in the same peer group.

- There is no evidence to suggest that cannabis is related to stillbirth, preterm labor, significantly low birth weight, birth defects, cancer, or feeding problems. There is some recent evidence (2019) that shows that cannabis users had higher rates of preterm birth than nonusers (12.0% compared to 6.1%), but like most studies on pregnancy and cannabis, it was unable to control for many other factors, including smoking.
- ***New research alert!*** Torres et al. (2020) conducted a systematic review of prenatal cannabis exposure on cognitive functioning, finding that children with cannabis-exposure predominantly fell within the normal range, refuting many significant misunderstandings about cannabis and cognitive functioning.

CANNABIS + LACTATION

- Roughly 1% of the cannabis consumed passes into your milk. Infant absorption is poor, so infants only absorb about 1% of that, making the absorbed dose roughly one thousand times less than the parent's dose. This can still be enough to cause a positive result on a urine drug screen. Experts agree that the safest choice is to stop recreational use completely while lactating. If you continue using while breast/chestfeeding, use harm reduction methods like pumping before using or pumping and dumping right after using.

- Human milk is made for babies and is better for babies than formula. The benefits of breastfeeding your baby outweigh the risks of them being exposed to cannabis in your milk.

What treatment options are available for cannabis use disorder?

- There is no treatment medication specifically for cannabis use disorders or dependence. If you were using cannabis to medicate for pain, anxiety, or nausea, discuss with your healthcare provider whether there is a safer treatment method. Many people who continue to use cannabis during pregnancy — including those who use it daily — might have a cannabis use disorder which might make it more difficult for them to stop. Most people who want to quit cannabis do so without formal treatment, but others have found counseling or group therapy helpful.

- The biological effects of cannabis are mediated by the endocannabinoid system and studies have reported the presence of cannabinoid receptors in the male and female reproductive tract
- The main psychoactive component of cannabis, delta-9-tetrahydrocannabinol (THC), can also cross the placenta and has been detected in breastmilk.
- Maternal cannabis use during pregnancy and lactation has been associated with adverse effects including small for gestational age infants, preterm birth, fetal neurodevelopmental consequences, and impaired offspring sociobehavioral and cognitive development.



Cannabis
Consumption

PLACENTA:

- Impaired steroidogenesis¹³⁹
- Impaired development¹³⁵
- Impaired transport¹³⁵

FETUS:

- LBW¹²¹
- SGA¹²¹
- PTB^{121,127}



OFFSPRING:

- ↓ Apgar score, ↑NICU admission^{22,121,123,125,126}
- “withdrawal”-like syndrome¹⁴⁷
- Impaired brain development (↓ gray matter volume)^{5,145,146}
- Neurobehavioral, neurocognitive and neuropsychiatric disorders (ASD, intellectual disability, learning disorders, ↑PLE)¹⁴⁷⁻¹⁵⁶
- Impaired long term reproductive health¹⁴⁴

- Maternal cannabis use has been associated with increased psychotic-like experiences in pre-adolescent offspring.
- Genetic susceptibilities in parents and their offspring, including epigenetic transgenerational changes of substance use and psychiatric disorders may play a role.
- A recent study also identified prenatal cannabis exposure as a risk factor for psychopathology during middle childhood.
- Prenatal cannabis exposure before and after maternal knowledge of pregnancy were associated with higher psychotic life experiences and internalizing, externalizing, attention, thought, social, and sleep problems, as well as reduced cognitive function and gray matter volume in children aged 9 to 11 years.
- Only the observed associations with cannabis exposure before maternal knowledge of pregnancy showed to be dependent on potential confounders such as socioeconomic status and familial history of psychopathology.

- The limited literature on teratogenicity is conflicting and inconsistent, but include reports of congenital anomalies with maternal cannabis use such as gastroschisis, esophageal atresia, and congenital diaphragmatic hernia.

- **Thanks about your attention**