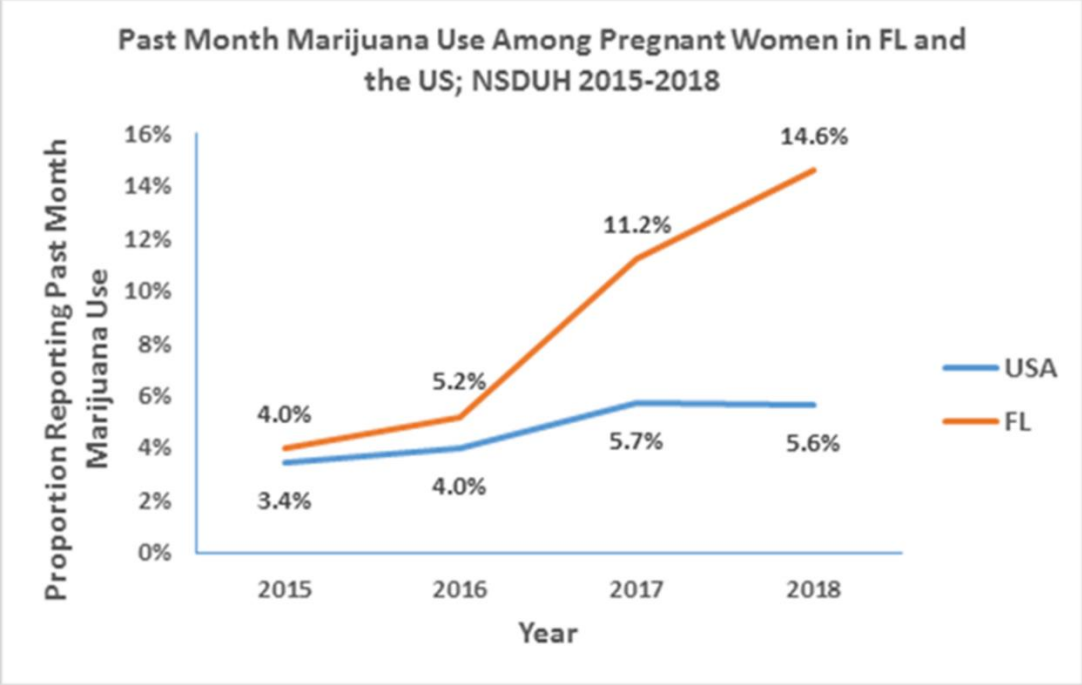
Marijuana Use During Pregnancy- Data and Research

Prepared by Drug Free America Foundation, Inc.

Changing marijuana laws and increased access and availability of marijuana is having a significant impact on the number of current drug users in the United States. Substance abuse significantly impacts all areas of our lives and no race or economic class is immune to these impacts. A high risk demographic is pregnant and postpartum women. Marijuana use can have significant negative impacts on a fetus and newborn. Doctors have linked marijuana use during pregnancy with increased risk for pregnancy complications that could include: low birth weight, premature birth, small head circumference, small length and stillbirth. With the increased availability of higher potency marijuana, it is more important than ever that science-based educational campaigns on the impacts of use during and after pregnancy are available.

According to the National Survey on Drug Use and Health (NSDUH), approximately 2.1% of pregnant women surveyed in the state of FL in 2003 reported past month marijuana use. By 2018, that percentage had risen to 14.6%— an alarming increase of 595%! The American College of Obstetricians and Gynecologists asserts that there is no safe level of marijuana use during pregnancy.

Prenatal THC exposure increases risk for a wide range of behavioral and cognitive deficits that extend well beyond infancy and childhood. This rise in marijuana use among Florida's pregnant women will likely result in adverse social, health, and economic consequences that will be felt statewide.



Paul SE, Hatoum AS, Fine JD, et al. Associations Between Prenatal Cannabis Exposure and Childhood Outcomes: Results From the ABCD Study. JAMA Psychiatry. 2021;78(1):64–76.

- Children of women who used marijuana during pregnancy had an increased incidence of psychotic behaviors in a study of 11,489 children enrolled in the Adolescent Brain Cognitive Development (ABCD) study.
- Compared to the 10,834 children without exposure, the 655 children exposed to marijuana in utero had a much higher incidence of psychotic behaviors, diminished cognitive abilities, and attention, social, and sleep problems.
- A dose-response relationship was observed between exposure and negative effects. In other words, the more frequent the use during pregnancy, the more severe the negative effects on the child.

Shi Y, Zhu B, Liang D. The associations between prenatal cannabis use disorder and neonatal outcomes. Addiction. 2021 Apr 22.

- Babies born to the frequent marijuana-using mothers were 6 percent more likely to be born prematurely, 13 percent more likely to have low birthweights, and 35 percent more likely to die within their first year of life, compared to the babies born to non-using women.

Corsi, D.J., Donelle, J., Sucha, E. et al. Maternal cannabis use in pregnancy and child neurodevelopmental outcomes. Nat Med 26, 1536–1540 (2020).

- In a study of 497,821 births investigators found that infants who were prenatally exposed to THC were 57% more likely to develop autism spectrum disorder (ASD) and 35% more likely to develop intellectual disabilities and learning disorders.

Winiger EA, Hewitt JK. Prenatal cannabis exposure and sleep outcomes in children 9-10 years of age in the adolescent brain cognitive development SM study. Sleep Health. 2020 Dec;6(6):787-789.

- A newly published study using data from the NIH's Adolescent Brain Cognitive Development Study (ABCD Study) found that prenatal THC exposure was associated with development of sleep disorders in children.
- In the study of 11,875 children ages 9-10, researchers found that any use of marijuana during pregnancy was associated with disorders of initiating and maintaining sleep, disorders of arousal, sleep wake disorders, and disorders of excessive somnolence. Frequency of prenatal daily marijuana use was also associated with disorders of excessive somnolence.

Corsi DJ et al. Association Between Self-reported Prenatal Cannabis Use and Maternal, Perinatal, and Neonatal Outcomes. JAMA. 2019;322(2):145–152

- In a study conducted among pregnant women in Ontario, Canada, self-reported marijuana use was significantly associated with an increased risk of preterm birth.

Volkow ND, Han B, Compton WM, McCance-Katz EF. Self-reported Medical and Nonmedical Cannabis Use Among Pregnant Women in the United States. JAMA. 2019 Jul 9;322(2):167-169.

- Cannabis effects on fetal growth (eg, low birth weight and length) may be more pronounced in women who consume marijuana frequently, especially in the first and second trimesters

Jeremy D. Fine et al., Association of Prenatal marijuana Exposure With Psychosis Proneness Among Children in the Adolescent Brain Cognitive Development (ABCD) Study J. JAMA Psychiatry Published online March 27, 2019

- Marijuana use after knowledge of pregnancy was associated with higher risk of the child developing psychosis in middle childhood

Gunn JKL, Rosales CB, Center KE, et al. Prenatal exposure to cannabis and maternal and child health outcomes: a systematic review and meta-analysis BMJ Open 2016;6

- Women who used marijuana during pregnancy were 36% more likely to experience anaemia compared with women who did not use during pregnancy.
- Infants exposed to marijuana in utero were 77% more likely to have low birth weight compared with infants whose mothers did not use during pregnancy.
- Infants exposed to marijuana in utero were twice as likely to need placement in the neonatal intensive care unit compared with infants whose mothers did not use during pregnancy.

Skelton, K. R., Hecht, A. A., & Benjamin-Neelon, S. E. (2020). Recreational Cannabis legalization in the US and maternal use during the preconception, prenatal, and postpartum periods. International Journal of Environmental Research and Public Health, 17(3).

- Pregnant women in states with legal recreational marijuana had a significantly higher prevalence of use than women in states without legalized recreational use.
- During the preconception, perinatal, and postpartum periods, women in legalized states were 1.5, 2.2, and 1.7 times, respectively, more likely to use cannabis than women in non-legalized states.

Schreiber S, Pick CG. Cannabis use during pregnancy: Are we at the verge of defining a "fetal cannabis spectrum disorder"? Med Hypotheses. 2019 Mar;124:53-55.

- As marijuana use becomes increasingly normalized in the US, more and more pregnant women are choosing to use marijuana to the detriment of their unborn infants. Approximately 10% of infants are prenatally exposed to THC despite the well-documented hazards.
- Significant effects of prenatal cannabis exposure have been found on children's sleep, cognitive functions (memory and scholastic skills), as well as on executive (frontal lobe) functions (reasoning, attention, impulsivity, and motivation), and affective (depression) and anxiety symptoms throughout the stages of development.
- Researchers have proposed the term ‘fetal cannabis spectrum disorder’ for these negative effects of prenatal THC exposure

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (2018). National Survey on Drug Use and Health 2016 (NSDUH-2018-DS0001). Retrieved from https://datafiles.samhsa.gov/

- According to the National Survey on Drug Use and Health (NSDUH), approximately 2.1% of pregnant women surveyed in the state of FL in 2003 reported past month marijuana use. By 2018, that percentage had risen to 14.6%--- an alarming increase of 595%.
- The American College of Obstetricians and Gynecologists asserts that there is no safe level of marijuana use during pregnancy, yet in a system ripe for abuse, lax governmental oversight coupled with unscrupulous physicians has resulted in skyrocketing rates of marijuana use among pregnant women in FL.

Volkow ND, Compton WM, Wargo EM. The Risks of Marijuana Use During Pregnancy [published correction appears in JAMA. 2017 Apr 11;317(14):1482]. JAMA. 2017;317(2):129-130.

- Infants born to women who used marijuana during pregnancy are more likely to have lower birth weight, suffer tremors, and require placement in neonatal intensive care than infants of mothers who did not use marijuana.
- Studies have also shown links between prenatal marijuana exposure and impaired higher-order executive functions such as impulse control, visual memory, and attention during school years, all of which can negatively impact exposed infants throughout the lifespan.