



Understanding Effects of Illicit Drugs Used During Pregnancy



It can be difficult to draw conclusions from studies on the use of drugs during pregnancy because some women use multiple drugs of abuse at the same time, or have increased risks because of poverty, poor nutrition, lack of prenatal care, or mental illness. Additionally, alcohol and tobacco products are often used concurrently with other illicit drugs.

Cocaine Facts

Cocaine is a pain killer and powerful stimulant of the central nervous system, which crosses the placenta during pregnancy, and enters the developing baby's blood circulation.

Estimates suggest that there are around 750,000 cocaine-exposed pregnancies every year.

Any amount of cocaine should be avoided during pregnancy as it can cause serious harm to the mother and baby, including:

- **Pregnancy problems.** Cocaine use during pregnancy can lead to serious problems such as high blood pressure, miscarriage, preterm labor, low birth rate, placental abruption, and difficult delivery.
- **Intracranial hemorrhage.** Cocaine use can increase the risk for intracranial hemorrhage (bleeding in the brain) in the baby's brain before or soon after birth, which can cause permanent brain damage or disability for the baby.
- **Birth defects.** There is possible increased risk of birth defects including abnormalities of the brain, heart, intestines, and limbs, though most babies exposed to cocaine do not have birth defects.
- **Poor growth.** Babies tend to have poor growth (weigh less, be shorter in length, and have smaller heads) as it can lower the supply of food and oxygen that need to reach the developing baby.
- **Withdrawal symptoms.** There has been reported symptoms of withdrawal in the newborn baby with late term use of cocaine. Symptoms include irritability, tremors, muscle stiffness, poor feeding, sleeplessness, high-pitched cry, vomiting, diarrhea, seizures, and hyperactivity.
- **Long-term outcomes.** Infants and young children exposed to cocaine during pregnancy, especially close to delivery have an increased chance for irritability, interrupted sleep patterns, problems with sensory stimulation, impulsive behavior, poor attention span, learning difficulties, and language difficulties.

Methamphetamine Facts

Methamphetamine is a psychoactive drug, meaning it changes brain function by exciting the brain with chemicals that can make people "feel good." The drug acts as a stimulant, causing a fast heart rate, sweating, loss of appetite, hallucinations, anxiety, paranoia, trouble sleeping and dizziness. Methamphetamine overdoses can cause death or brain damage and long-term use causes many health problems.

According to the National Survey on Drug Use and Health, approximately 758,000 women over the age of 12 reported past-year use of methamphetamines in 2018.

Methamphetamine use should be avoided during pregnancy as it can cause serious problems for the mother and baby, including:

- **Pregnancy problems.** Increased risk for pregnancy loss, premature delivery, high blood pressure (preeclampsia), placental abruption, and sudden infant death syndrome (SIDS).
- **Poor growth.** Newborns have an increased risk low birth weight or small head size.
- **Withdrawal symptoms.** When mothers use methamphetamines near the end of pregnancy, babies could show signs of withdrawal after they are born. Symptoms may include trouble eating, sleeping too little or too much, having poor muscle control or tight muscles, being jittery, or difficulty breathing. Symptoms can last for a few weeks to a few months.
- **Long-term outcomes.** Children exposed to methamphetamine in utero could have a higher chance for delayed motor development, cognitive delays, increased emotional reactivity, anxiety and depression, attention problems, learning difficulties, and behavior problems.

Stopping methamphetamine suddenly could cause withdrawal. Expecting mothers who use methamphetamine should seek help from a health care provider for help quitting.



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Heroin Facts

Heroin is a highly addictive illegal drug made from the opioid morphine. It is in the same class of drugs as legal prescription opioids, like oxycodone, morphine, and codeine, which are used as painkillers and require a prescription from a health care provider.

According to the National Survey on Drug Use and Health, approximately 292,000 women over the age of 12 reported past-year use of heroin in 2018 and 22,000 pregnant women reporting opioid use (including heroin) in the past month.

Heroin should be avoided during pregnancy as it can cause serious problems for both the mother and baby, including:

- **Pregnancy problems.** Increased risk for poor growth of the baby, low birth weight, stillbirth, premature delivery, and C-section.
- **Sudden Infant Death Syndrome (SIDS).** Higher rates of SIDS and increased rates of infant mortality within the first month of life.
- **Neonatal Abstinence Syndrome (NAS).** NAS describes the withdrawal symptoms in newborns which occur when an opioid passes through the placenta to the fetus during pregnancy, causing the baby to become dependent. Symptoms include excessive crying, fever, irritability, seizures, slow weight gain and poor feeding, rigid or loose muscle tone, tremors, diarrhea, vomiting, and possibly death. NAS requires hospitalization and treatment with medication to relieve symptoms; the medication is gradually tapered off until the baby adjusts to being opioid-free. These symptoms may last more than 2 weeks.
- **Long-term outcomes.** Studies suggest that children exposed to opioids were more likely to have a developmental delay or speech or language impairment in early childhood.

Treatment is available to help expecting mothers stop using heroin. Stopping heroin suddenly without proper treatment could cause withdrawal, which could be harmful to the mother and may increase the chance of a miscarriage or stillbirth. Treatment from a health care provider with drugs, such as methadone or buprenorphine, can help reduce dependence on heroin in a way that is safe for the baby.

Marijuana Facts

Marijuana comes from a plant called cannabis. The main active chemical in marijuana is delta-9-tetrahydrocannabinol (THC), which is what causes a person to feel "high," is known to cross the placenta during pregnancy, meaning it reaches the baby. Marijuana is the drug most commonly used by pregnant women.

In 2018, approximately 111,000 pregnant women between ages 15-44 reported past-year marijuana use. A recent study also suggested that cannabis use more than doubled among pregnant women in the United States from 2010-2017.

The use of cannabidiol (CBD), THC, and marijuana in any form for recreational or medicinal purposes is strongly advised against during pregnancy and while breastfeeding, as no amount of marijuana has been proven safe. It may pose risks to both the mother and baby, including:

- **Pregnancy problems.** Women who use marijuana have 2.3 times greater risk of stillbirth and studies have suggested there is also an increased risk of miscarriage or premature birth among mothers who smoked marijuana regularly.
- **Poor growth.** Smoking marijuana can decrease the amount of oxygen and nutrients the baby receives. There is an increased chance for fetal growth restriction, low birth weight, short body length, or small head size.
- **Sleeping issues.** Exposure to marijuana during pregnancy may cause problems with sleeping for your baby after birth.
- **Withdrawal symptoms.** Some newborns exposed to marijuana have been reported to have temporary withdrawal-like symptoms, such as tremors, changes in sleeping patterns, and long periods of crying. These symptoms usually go away within 30 days after birth.
- **Long-term outcomes.** Prenatal exposure to marijuana may have an effect on behavior, attention span, academic performance, impulsivity, hyperactivity, aggression, depression, anxiety, and short-term memory of children.

Resources

- Center for Maternal Substance Abuse and Child Development (msacd.emory.edu)
- MotherToBaby (mothertobaby.org)
- March of Dimes (marchofdimes.org)
- National Institute on Drug Abuse (NIDA) (drugabuse.gov)
- Substance Abuse and Mental Health Services Administration (SAMHSA) (samhsa.gov)