

## **Facts about Opioid Use in Pregnancy**

## What is Neonatal Abstinence Syndrome (NAS)?

Neonatal Abstinence Syndrome (NAS) is a condition that occurs when a newborn show signs of withdrawal from exposure to a substance, like opioids, before birth. Some drugs that can cause NAS include morphine, methadone, or heroin. Withdrawal symptoms can vary widely across infants. **Possible symptoms include:** 



Sneezing, stuffiness

Hyperactivity, hyperarousal

Sleep disturbances/wakefulness

Respiratory signs - rapid breathing

Sweating, Irritability

Back arching, stiffness

Frequent crying; high-pitched cry

Gastrointestinal problems (diarrhea, vomiting)

### How is NAS treated?

A healthcare provider should determine whether the infant needs medical intervention. If NAS is not severe, it can be managed with supportive care. Non-medication methods of treatment include:

- use of effective soothing approaches such as swaddling, and skin to skin contact
- low lights or other modifications of mother-infant interaction while the infant adjusts to the physiological changes.

In cases where NAS symptoms are severe, infants can be treated in the hospital with medications that contain a small amount of an opioid-based drug. The drug dose is gradually decreased over time until it is no longer needed.

# What is known about long term effects of exposure to opioids during pregnancy?

What we know is based on studies of exposure to heroin and methadone in pregnancy. These studies are complicated because factors such as whether the mother used alcohol or other drugs in pregnancy and the quality of the home environment may influence outcomes for the child.

- Some studies show that effects on physical growth (weight, head circumference) persist, but others suggest that catch-up growth occurs.
- Motor coordination, tenseness, and attention have been shown to be affected in the first year.
- Results on tests of cognitive function have not been consistent. While exposure is often related to lower cognitive function, these effects may be due to influence of the home environment.
- In a study of school-age children, exposure was related to parent reports of behavior problems and Attention-Deficit/Hyperactivity Disorder (ADHD) characteristics. Children raised by mothers with Opioid UseDisorders scored higher than those in adoptive homes; both scored higher than non-exposed children.

While misuse of legal prescription pain relievers has increased recently, data on long term effects are not available yet.

#### **Resources:**

- SAMHSA: Treating Opioid Use Disorder During Pregnancy Factsheet
- Centers for Disease Control and Prevention (CDC): Opioid Basics





## What are opioids?

Opioids are a class of depressant drugs including both illegal and legal opioid-based prescription drugs that are used to manage pain. When used inappropriately they can negatively impact the brain and spine and cause users to become dependent on the drug.

Drugs in the group include:

- Heroin, Fentanyl
- Other prescription pain relievers like oxycodone, hydrocodone, morphine, methadone

## How frequently are these drugs used?

- In 2017, about 70,237 individuals in the U.S. died from overdoses of prescription opioid pain relievers. This rate has more than quadrupled since 1999. These alarming numbers have caused the U.S. Department of Health and Human Services (HHS) to declare this issue a national emergency.
- According to the National Survey on Drug Use and Health (2018), about 808,000 individuals aged 12 or over reported
  past-year use of heroin. Within the same year 10.3 million individuals reported misusing prescription pain relievers and
  heroin.
- In 2017, there were 59 prescriptions written for every 100 individuals across the U.S. Sales of opioid pain relievers to outlets (e.g., pharmacies, doctors' offices, hospitals) in 2017 were four times higher than in 1999.
- In this national sample, 22,000 pregnant women reported using opioids in the past 30 days.
- Nearly 86% of unplanned pregnancies are from women who have used opioids.

## How does opioids exposure during pregnancy affect the newborn?

Studies of use of opioids\* during pregnancy suggest that infants may:

- Be born too early, weigh less and/or have smaller head circumference
- Experience withdrawal symptoms or neonatal abstinence syndrome (NAS). After delivery, infants may have to be given other medications to treat the withdrawal symptoms and decrease their dependence on the opioids (see other side).
- No relationship has been shown between use of opioids during pregnancy and physical birth defects in newborns.
- Some studies show a relationship between first-trimester use of opioid pain relievers and congenital heart defects, but this risk appears to be small.
- Heroin and methadone use have been related to more severe outcomes, including effects on a newborn's eyes, increased risk of sudden infant death syndrome (SIDS) and increased rates of infant death within the first month of life.

\*Most studies have been completed with infants exposed to heroin or methadone during pregnancy.

## Medication Assisted Treatment (MAT) during Pregnancy is an Option

Pregnant women who have an Opioid Use Disorder (OUD) can be treated with methadone or buprenorphine. These medications can reduce cravings and prevent withdrawals for mothers during pregnancy. Babies of mothers who undergo MAT during pregnancy may still have withdrawal symptoms at birth. However, babies do better when the mother is treated with medication than they do when mom has no treatment at all for her OUD. Hospitals do have to report to child welfare agencies when a woman giving birth uses drugs; getting treatment for opioid use while pregnant and after birth shows a commitment to creating a safe environment for a baby.

