

Substance use disorders in pregnancy and neonatal abstinence syndrome

Substance use disorders (SUDs) are on the rise and are of particular concern in women of childbearing age who are or may become pregnant. Women who use opioids in the following situations are at risk for delivering babies who are born preterm, have a low birth weight, and/or have neonatal abstinence syndrome (NAS)/neonatal opioid withdrawal syndrome (NOWS):

- Taking prescribed opioids for pain or addiction treatment
- Misusing prescribed opioid medications
- Using opioids illicitly
- Using opioids in combination with benzodiazepines, selective serotonin reuptake inhibitors (SSRIs) or tobacco

Caring for babies born with NAS

While traditional care for infants in withdrawal has included tapering doses of opioids, this should not be the first choice. Preliminary studies on preterm infants treated with morphine for pain and studies exposing laboratory animals to morphine, heroin, methadone and buprenorphine reveal some concerning structural brain changes and changes in neurotransmitters. While few follow-up studies exist, those that are available are worrisome for long-term deficits in cognitive function, memory and behavior. Reduction in any exposure to opioids should be the goal for the fetus and newborn.

Approaches to reducing the incidence and severity of NAS include:

- The use of nonpharmacologic techniques to calm and ameliorate symptoms.
- Adoption of, and strict adherence to, protocols to assess and treat with pharmacologic medications if nonpharmacologic care is not sufficient.
- Inter-rater reliability testing when using standard assessment tools (such as modified Finnegan).

Strict rooming in protocols, rather than placement in neonatal intensive care units, combined with extensive parent education programs improve family involvement and have been shown to reduce lengths of stay and the need for treatment of infants with NAS. When mothers are in stable treatment programs or are stable on safely prescribed medications, breastfeeding has also been shown to reduce the symptoms of NAS.

Caring for women with SUD

Pregnancy offers women an opportunity to break patterns of unhealthy behaviors. Providers have a unique opportunity to help break the pattern of opioid misuse and, thus, reduce health consequences for both mother and child.

Collaboration with community resources, behavioral health providers, addiction treatment centers and OB providers is imperative to designing programs that engage families at risk for SUDs. Women of childbearing age who are not pregnant and who do not wish to become pregnant should receive family planning counseling. Women who are already pregnant benefit from parenting education as early as possible in their pregnancies so they can be prepared to understand and care for their babies who might experience symptoms of NAS and who often require prolonged hospitalizations after birth. As these infants may remain symptomatic for several months after hospital discharge, they are at higher risk for abuse and maltreatment; therefore, close follow up with ongoing support is imperative.

Guidelines and programs which have been shown to improve the care of women at risk of SUDs in pregnancy and their infants include the following:

- **Center for Addiction in Pregnancy:** www.hopkinsmedicine.org/psychiatry/bayview > Clinical Services > Addiction and Substance Abuse > Center for Addiction and Pregnancy (CAP)
- **Fir Square Combined Care Unit:** www.bcwomens.ca > Our Services > Pregnancy & Prenatal Care > Pregnancy, Drugs & Alcohol
- **Improving Outcomes for Infants and Families Affected by NAS — A Universal Training Program:** <https://public.vtoxford.org> > Quality & Education > NAS Universal Training Program
- **Protecting Our Infants Act: Final Strategy:** <https://www.samhsa.gov> > Topics > Specific Populations > Age- and Gender-Based Populations > Pregnant Women and Infants > Protecting Our Infants Act: Final Strategy
- **Public Health Strategies to prevent Neonatal Abstinence Syndrome:** Ko JY, Wolicki S, Barfield WD, et al. "CDC Grand Rounds: Public Health Strategies to Prevent Neonatal Abstinence Syndrome," *MMWR Morb Mortal Wkly Rep* 2017 66: 242-245. doi: <http://dx.doi.org/10.15585/mmwr.mm6609a2>.
- **Rooming In to Treat Neonatal Abstinence Syndrome: Improved Family Centered Care at Lower Cost:** Volpe Holmes, A, et al. "Rooming-In to Treat Neonatal Abstinence Syndrome: Improved Family-Centered Care at Lower Cost," *Pediatrics* 137 (2016): 6. doi: 10.1542/peds.2015-2929
- **Sheway: A Community Program for Women and Children:** <http://sheway.vcn.bc.ca>
- **Snuggle ME webinar series:** www.mainequalitycounts.org > Programs > Snuggle ME Webinar Series

Support

We are here to support you, our pregnant members and their little ones on the way. If you would like more information about our OB Case Management Program or if you have a member who needs behavioral health case management, contact Provider Services at 1-800-454-3730.