# Treatment for Neonatal Abstinence Syndrome

A NACo Opioid Solutions Strategy Brief: CORE STRATEGY

"Collaborative planning and implementation of services that reflect best practices for treating opioid use disorders during pregnancy are yielding promising results in communities across the country."

—U.S. Substance Abuse and Mental Health Services Administration[1]

## What is Neonatal Abstinence Syndrome?

Approximately 1 in 20 people who become pregnant use drugs during pregnancy.[2] This translates to roughly 200,000 substance-exposed infants each year.

Neonatal Abstinence Syndrome or NAS (also called Neonatal Opioid Withdrawal Syndrome or NOWS) is a condition that sometimes affects newborns of parents who have taken opioids during pregnancy. In the absence of other health complications, NAS is a short-term condition that can be simple and inexpensive to treat[3,4] and poses no risks of long-term cognitive or physical deficit to the child.[5,6]

NAS is an expected outcome for the infants of parents who received medications for opioid use disorder (MOUD), the gold standard treatment for opioid use disorder (OUD), during pregnancy. However, because NAS does not cause long-term health consequences, treatment with MOUD – as opposed to withdrawal and abstinence – is safer for both parents and their infants.

## What are effective treatments for NAS?

Opioid-affected parents and their newborns are best served by treating parents and newborns as a unit.[7] This family-centered approach to care includes:

- MOUD treatment for the parent during pregnancy and after delivery;[8,9]
- Rooming in, or placing parents and infants in the same hospital room;[10]
- System-wide adoption of the eat-sleep-console model of NAS care; and
- Wraparound psychological and social support services for the parent or parents;[8]

Family-centered care does not include punitive responses to substance use for pregnant or parenting people, such as civil or criminal sanctions, as these invite greater health risks for both parents and infants.[4,8]

## What evidence supports treating parents and newborns with NAS as a unit?

Treating OUD with methadone and buprenorphine during pregnancy is encouraged by the American Society for Addiction Medicine (ASAM),[9] the American College of Obstetricians and Gynecologists (ACOG)[8] and the American Academy of Pediatrics.[11] Treatment with MOUD during pregnancy significantly reduces the risk of preterm birth[12] and virtually eliminates the risk of non-fatal overdose during pregnancy.[13]

Infants with NAS are not at risk of long-term physical or cognitive harm. There is no evidence linking fetal exposure to opioids (including MOUD[14]) to long term cognitive deficits,[5] negative birth outcomes[6] or other complex medical conditions[15] in the child born of that pregnancy.

The eat-sleep-console model is an evidence-based, in-patient model of postpartum care for families affected by NAS. The eat-sleep-console model is proven to reduce the length of hospital stays and reduce the use of withdrawal management medications for newborns, cutting the cost of hospital stays in half.[10,16–19]

## The Eat-Sleep-Console Model is a standardized approach to NAS.[20–22]

### SIMPLIFIED ASSESSMENT

**EAT:** Can the newborn eat ≥1 ounce per feed?

**SLEEP:** Can the newborn sleep ≥1 hour at a time?

**CONSOLE:** Can the crying newborn be consoled within 10 minutes?

If the answer to all of these questions is yes, the newborn is considered well-managed and no further intervention is needed.

### NON-MEDICATION INTERVENTIONS

- Low-stimulation environment (dimmed lights, reduced noise)
- Rooming-in with the parent(s)
- Parental presence
- Skin-to-skin contact
- Cuddling or holding by a caregiver or volunteer
- Swaddling
- Feeding on demand (breast-feeding when possible)
- Hospital staff continuously engages and supports parents in the care of their newborns

### OTHER COMPONENTS

**Prenatal counseling** to help parents know what to expect after delivery.

**Train staff** to support non-medication interventions and communicate empathetically with parents.

**Morphine as needed** and only as a second-line treatment if non-medication interventions fail.

**Empower parents** to see themselves as their newborn's best treatment.

A family-centered approach to care treats infants and their parent(s) as a unit whose health is interconnected. It preserves the parent-infant bond and supports optimal health outcomes.[10] Removing or threatening to remove infants from their parent(s) may increase lifetime risk of drug use, criminal justice involvement and other adverse outcomes for the child..[23] Child removal also puts birth parents at greater risk of overdose.[24]

## Are there risks to my community or institution if we don't use approaches that treat parents and newborns with NAS as a unit?

### Yes.

Earlier approaches to NAS, like separating parents and infants, placing infants in neonatal intensive care units and using morphine as a first-line treatment for infants, require longer hospital stays and are generally more expensive than the eat-sleep-console approach.[25] This can impose significant burdens on the personnel and financial resources of local hospitals.

Further, discrimination against persons receiving MOUD treatment, including pregnant and parenting people, is considered a violation of the Americans with Disabilities Act (ADA) and could be grounds for legal action. The U.S. Department of Justice has entered into legal settlements and arrangements with several healthcare and child welfare systems for failing to accommodate persons receiving MOUD, sometimes resulting in civil monetary penalties paid to the persons affected.[26]

## Are there best practices for addressing the needs of infants with NAS and their parents?

- Support local hospitals with implementing the eat-sleep-console model:
  - Provide funding and support for staff education through remote services like Project ECHO.[27]
  - Encourage use of an Eat-Sleep-Console Care Tool as part of the system-wide implementation strategy.
  - Consider configuring hospital facilities to support rooming-in as a standard of care for all birth families.

Watch how healthcare providers in Spokane, Wash. are using Eat-Sleep-Console to treat NAS with fewer or no medications and shorter hospital stays.

- Build relationships with healthcare providers, child welfare professionals and other relevant stakeholders to support collaborative care models during the perinatal period and as the children grow.[28,29]
- Develop a template for Plans of Safe Care in accordance with the Child Abuse and Prevention Treatment Act of 2016 (CAPTA), as state laws allow, to reduce child-welfare involvement and improve health outcomes for the whole family.[30]

- Expand free and affordable family housing options for pregnant and parenting people receiving treatment for OUD,[31] including (but not limited to) residential treatment options that allow parents and their children to reside together.
- Fight stigma and misinformation by voicing strong, unambiguous support for MOUD during and after pregnancy, and by raising awareness that NAS is a short-term and relatively easy-to-manage condition.[4,32]

## What are some examples of programs successfully meeting the needs of infants with NAS and their parents?

These and many other model programs are described online at the Brandeis Opioid Resource Connector.

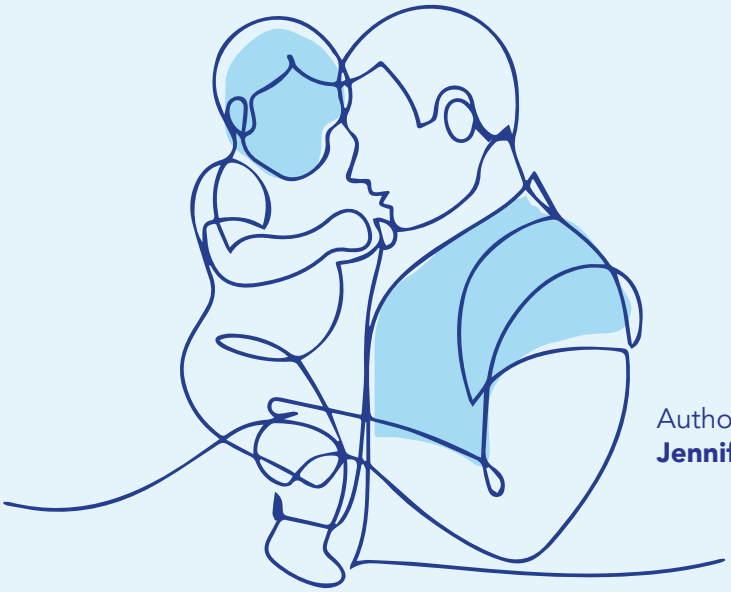
The Yale New Haven Children's Hospital was the first to implement the eat-sleep-console model. As a result, the percent of infants with NAS receiving morphine dropped from 98% to 14%, and the infants' average length of stay dropped from three weeks to 6 days.[20]

Enhancing Permanency in Children and Families (EPIC) is a multi-agency, coordinated system of care in Ohio that provides substance-involved families with peer recovery supports, incentivized participation in family treatment court, access to MOUD and home-based parenting support.[33]

The Department of Social Services in Buncombe County, N.C. operates the Sobriety Treatment and Recovery Team (START) Program. START pairs Child Protective Services (CPS) professionals trained in family engagement with peer support specialists who have lived experience undergoing a CPS case. These teams are embedded at local hospitals to support in-home placement, improve parental engagement, accelerate linkage with evidence-based substance use treatments for parents and keep families together.[34]

**ADDITIONAL RESOURCES:**

Please visit the Opioid Solutions Center for a curated list of resources, technical assistance opportunities and the sources referenced in this brief.



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