In the United States, the prevalence of opioid use among pregnant women more than quadrupled from 1999 to 2014.\(^1\) An infant is born with neonatal abstinence syndrome (NAS) approximately every 15 minutes in the United States. Newborns with NAS require specialized care and typically have longer hospital stays after birth and increased healthcare costs.

Neonatal abstinence syndrome is a postnatal drug withdrawal syndrome exhibited by some opioid-exposed infants that is characterized by hyperactivity of the central and autonomic nervous system and gastrointestinal tract. The incidence of NAS among infants who were exposed prenatally has been estimated to be between 54 and 94 percent.\(^3\) While we cannot yet predict which infants will manifest signs of withdrawal, studies have connected polysubstance exposure - particularly antidepressants, benzodiazepines, and gabapentin - to the incidence and severity of neonatal drug withdrawal.\(^4\) The onset of withdrawal symptoms occurs within 24 and 72 hours after birth and can last up to five days.\(^5\) The severity of NAS is affected by factors including gestational age, and gestational exposure to benzodiazepines.
NAS Symptoms

<table>
<thead>
<tr>
<th>CNS</th>
<th>GI</th>
<th>Autonomic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inconsolability</td>
<td>Poor feeding</td>
<td>Sweating</td>
</tr>
<tr>
<td>High-pitched crying</td>
<td>Excessive sucking</td>
<td>Fever</td>
</tr>
<tr>
<td>Skin excoriation</td>
<td>Feeding intolerance</td>
<td>Nasal stuffiness</td>
</tr>
<tr>
<td>Hyperactive reflexes</td>
<td>Vomiting</td>
<td>Tachypnea</td>
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<tr>
<td>Tremors</td>
<td>Diarrhea</td>
<td>Mottling</td>
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<tr>
<td>Seizures</td>
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It has been estimated that over 80 percent of pregnancies are unintended among women with opioid use disorder, and women using opioids may not initially know they are pregnant. There are several distinct populations of women who can give birth to an infant who displays NAS symptoms, and they require different responses by the medical and child welfare systems. These five populations include women who are:

1. Maintained on medication due to chronic pain or other medical conditions;
2. Actively abusing or dependent on heroin;
3. Actively abusing their own prescribed medication;
4. Misusing non-prescribed medication; and
5. In recovery from opioid use disorder and maintained on buprenorphine or methadone.

There is generally no differentiation in how the medical and child welfare systems respond to these five different populations of women, particularly how hospitals notify child welfare, how risk and safety assessments are administered, and how plans of safe care, child welfare safety plans, and Substance Use Disorder (SUD) treatment plans are developed to reflect the variation in the risks and needs of these five distinct populations. Hospitals and states vary greatly in their approaches to pregnant women with opioid use disorder and infants with NAS.

Federal and State Laws and Policies

The Child Abuse Prevention Treatment Act of 1974 (CAPTA) provides federal funding to states in support of child abuse and neglect prevention, assessment, investigation, prosecution, and treatment activities. CAPTA, among other things, provides standards of practice for child welfare and sets a minimum definition of child abuse and neglect.

The Keeping Children and Families Safe Act of 2003 amended CAPTA to create new conditions for state receipt of CAPTA funds that required the Governor of each state to assure they had policies and procedures to: (1) make appropriate referrals to address the needs of infants “born with and identified as being affected by illegal substance abuse or withdrawal symptoms resulting from prenatal drug exposure”; (2) notify CPS; and (3) develop a Plan of Safe Care for the infant and immediate risk and safety screening, and prompt investigation. The 2016 Comprehensive Addiction Recovery Act made several changes to CAPTA, including removing the term illegal in regard to the population requiring a Plan of Safe Care and now requiring that the Plan of Safe Care address the needs of both the infant and the family/caregiver. Ideally, a Plan of Safe Care is developed before birth, but it is intended to address the infant and mother’s medical care, the mother’s substance use and mental health needs, and the family/caregiver’s history and needs. A Plan of Safe Care is developed and structured to help ensure coordination of, access to, and engagement in services. A Plan of Safe Care is distinguished from a hospital discharge plan, a child welfare services service plan, a
substance use disorder treatment plan, and a therapy treatment plan.

States also vary in their approaches to whether prenatal substance exposure constitutes criminal child abuse and whether it can provide grounds for dependency and terminating parental rights due to child abuse or neglect. Further, some states authorize civil commitment of pregnant women who use drugs. Many states also require healthcare professionals to report or test for prenatal drug exposure. The Supreme Courts in Alabama and South Carolina have upheld convictions ruling that a woman’s substance use during pregnancy constitutes criminal child abuse. Twenty-three states and the District of Columbia consider substance use during pregnancy to be child abuse under civil child welfare laws, and three states (MN, SD, WI) consider it grounds for civil commitment. Twenty-five states and the District of Columbia require healthcare professionals to report suspected prenatal drug use, and eight states require infants to be tested for prenatal drug exposure if it is suspected.7

Strategies

1. Cross-system Collaboration

Critical to ensuring positive outcomes for pregnant women with SUDs and their infants is a system of coordinated care and cross-system linkages between SUD treatment, healthcare providers including OBGYN and pediatrics, child welfare, the court system, public health, mental health providers early intervention, and other service providers. The Substance Abuse and Mental Health Services Administration’s (SAMHSA) Five-Point Intervention Framework to reduce the potential harm of prenatal substance exposure provides a guide to jurisdictions working on cross-systems reform in this area. The Framework includes: Pre-pregnancy, Prenatal, Birth, Neonatal, Throughout Childhood and Adolescence, and serves as a guide to help jurisdictions identify and develop intervention opportunities and strategies.8

Program Snapshot: New Collaborative Community Court Teams Demonstration Sites

The National Quality Improvement Center for Collaborative Community Court Teams is a new national initiative to address the needs of infants and families affected by substance use disorders and prenatal substance exposure.9 The initiative is funded by the Children’s Bureau and operated by the Center for Children and Family Futures and its partners, the National Center for State Courts, Advocates for Human Potential, American Bar Association Center on Children and the Law, and the Tribal Law and Policy Institute. The initiative goals are to: (1) enhance the capacity of collaborative court teams, such as family drug courts and infant-toddler dependency courts, to appropriately implement the provisions of the Comprehensive Addiction and Recovery Act amendments to the CAPTA regarding the implementation of Plans of Safe Care; and (2) enhance and expand these collaborative court teams’ capacity to implement and coordinate services across multiple agencies to address the needs of infants, young children, and their families/caregivers affected by substance use disorders and prenatal substance exposure. Fifteen court demonstration sites across nine states were selected in the spring of 2018 and have begun to implement policy and practice improvements.10
2. Improving the Treatment Model for NAS

An estimated 95% of U.S. hospitals use the Finnegan Neonatal Abstinence Scoring System (FNASS) to guide treatment, based on 21 symptoms of opioid withdrawal. These symptoms include tremors, seizures, excessive crying, diarrhea, vomiting, congestion, sneezing and other symptoms that can make it difficult for the baby to eat and sleep. Babies with severe symptoms are started on pharmacologic therapy, typically morphine or methadone. Despite its wide acceptance, the FNASS has never been validated nor have its widely used score cutoffs been tested. The standard of care to manage these infants has not varied since this FNASS came out, including NICU stays, staff caring for the infants, and pharmacological treatment.

New research suggests that a new “common sense” approach to treating infants with NAS may safely reduce the length of hospitalization they need. The focus of this approach is on non-pharmacological care instead of scoring systems, including keeping mom and baby together by “rooming in,” swaddling, breastfeeding when appropriate, and a calm, low-stimulus environment. One new approach to NAS treatment gauges whether the baby can eat, sleep and be consoled within 10 minutes before deciding to administer medications to treat the NAS symptoms. Researchers at Yale-New Haven Children’s Hospital examined the effectiveness of more non-pharmacologic interventions for NAS in a modified approach called the Eat, Sleep, Console model. This model includes providing a low-stimulation environment, having mothers room-in with their infants and feeding them frequently.

The American Academy of Pediatrics recommends that infants with NAS not be initially treated with medication, but instead with behavioral treatment as the first approach. Pharmacologic treatment, such as the use of liquid methadone, morphine, or other pharmacological interventions, may be necessary only for the treatment of more severe signs of NAS and should be determined using a standardized scoring protocol. Instead, the recommendations highlight the primary goal of soothing the infant’s discomfort and promoting mother-infant bonding.

3. Strengthen SUD Treatment for Pregnant Women

The integration of medical services, SUD treatment, mental health treatment, and social support is essential in providing effective care for pregnant women with Opioid Use Disorder (OUD). Some of the recognized gaps in programs and service delivery for this population include:

- Concerns among pregnant women about the legal ramifications associated with disclosing substance use;
- Limited knowledge about how to identify SUD and OUD among pregnant women;
- Barriers in accessing MAT, the standard of care for pregnant women with OUD;
- Workforce shortages among service providers;
- The limited availability of family-centered services that address the full continuum of care (e.g., residential treatment facilities that allow pregnant women to bring their children);
- The fact that many treatment programs do not specifically target women with OUD or infants at risk for NAS, and there are currently very few programs that target pain management for pregnant women.
4. Plans of Safe Care: What Do Judges Need to Know?

Judicial officers presiding over child protection cases should understand the difference between standard child protective services safety plans, substance use treatment plans, mental health treatment plans, and hospital discharge plans. Safety plans focus on the immediate safety of a child or infant, while Plan of Safe Care (POSC) focus not only on the safety of the infant but also the infant’s medical and developmental needs and the medical, mental health, and SUD treatment needs of the affected parent, family and/or caregiver. Substance use disorder treatment plans and mental health treatment plans focus on treatment of adults, while POSC may include the treatment and broad services of the whole family including the child and parent-child dyad. Hospital discharge plans may focus on the health and well-being of the infant, while POSC include the ongoing health and development of the infant as well as the educational and substance use disorder treatment needs of the family/caregiver who will be caring for the infant.\(^{16}\) By understanding how POSC differ from other care plans, judicial officers can more effectively inquire regarding the establishment, existence or effectiveness of a POSC in place for the infant and family/caregiver.

Program Snapshot: Delaware’s Aiden’s Law

Signed into law in June 2018, “Aiden’s Law” addresses prenatal substance exposure by improving the coordinated response. Specifically, in Delaware, child welfare staff are now assigned to posts at every hospital to engage families and to support hospital staff in the development of POSC. MAT providers lead the development and monitoring of prenatal POSC for pregnant women in treatment.\(^{17}\) Delaware has also developed a statewide POSC template: [http://www.cffutures.org/wp-content/uploads/2018/12/Delaware-POSC-Template.pdf](http://www.cffutures.org/wp-content/uploads/2018/12/Delaware-POSC-Template.pdf).

5. Primary Prevention: Preventing Pregnancy Among Women with OUD

It is imperative that women of childbearing age with SUD or OUD are counseled on contraceptive options. SAMHSA’s 2018 Clinical Guidance for Treating Pregnant and Parenting Women with OUD and Their Infants emphasizes the importance of healthcare professionals discussing various forms of contraception with all women, including those with OUD, before they are discharged from the hospital. Services that include education and awareness for pregnant women and women of child-bearing age and their partners regarding prenatal substance exposure and family planning should also be provided.

Program Snapshot: Tennessee’s Department of Health Collaborates with Justice System

In an effort to reduce the rate of NAS in the state through primary prevention, the Tennessee Department of Health worked with the justice system to develop pilot programs in county jails across the state. These efforts began in 2014 in eastern Tennessee’s Sevier and Cocke counties. Programs provided inmates with health education sessions on NAS and ways to prevent it. Those who desired more reproductive health counseling were transported to their local health department for reproductive health services and education, including a range of contraceptive options, including long-lasting reversible contraceptives, such as IUDs. In 2015, a year after the pilot program in Sevier County began, the county noted a 57 percent reduction in NAS cases compared to the previous year. Although there were several NAS reduction initiatives ongoing at the same time, the ability to create healthy birth spacing options for these women has improved regional outcomes. Given the success in these pilot counties, the programs were expanded to other counties across the state, and as of early 2017, 41 jails were offering similar programs.\(^{18}\) From January 2014 to 2017, 5,847 women in the East Region attended these education sessions, 1,012 of the women requested referrals for further services, and 935 (92.4 percent) of those women selected a method from the full range of options, ranging from the birth control pill and the shot to the IUD and the implant.
6. Seven Steps Judges Can Take to Improve Outcomes for Substance Exposed Infants and Their Families

1. Convene healthcare providers, along with child welfare and the treatment community and other service providers, to talk about the needs of this population and strategize on how to collectively improve outcomes.

2. Understand the latest research on treating NAS in infants.

3. Learn more about the implementation of POSC in their state and local jurisdiction. For example, has their state or local jurisdiction developed a POSC template?

4. Through their role as convener and community leader, work to expand the availability of family-centered treatment in their jurisdiction.

5. Where relevant, ask “has a POSC been developed in this case?” and ask to see it.

6. Ensure reasonable efforts were made in individual child protection cases. This includes ensuring that POSC were established when required, and strengths, needs, resources, and supports were identified to help keep parents and infants safely together.19

7. Encourage building a network of support for mom and infant, including family finding efforts and father engagement to include locating fathers, the early establishment of paternity, and engaging fathers in case planning, visitation, and services.20

Endnotes

2 State Inpatient Database, Healthcare Cost and Utilization Project, 28 states, 2013-2014. Prevalence reported are for 2014, except Massachusetts and South Carolina for which 2013 data is reported instead.
9 https://www.cffutures.org/qic-ccc/
10 States with demonstration sites include Alaska, Alabama, Arizona, California, Florida, Georgia, Texas, Ohio, and Oklahoma.
13 Id, at note 11.
19 https://cbexpress.acf.hhs.gov/index.cfm?event=website.viewArticles&issueid=202&sectionid=1&articleid=5239
20 Pennsylvania’s Office of Children and Families in the Courts identified the issue of father engagement as a priority and has developed numerous resources, including a report identifying best practice recommendations, available at: http://www.ocfcapacourts.us/childrens-roundtable-initiative/state-roundtable-workgroupcommittees/father-engagement