What are some evidence-based interventions to prevent and mitigate the effects of prenatal substance exposure?

About 20% of pregnant women reported the use of substances in 2021, representing an estimated 720,000 people per year in need of screening, assessment, and services.\(^1\) Approximately 11% of births (n=400,000) are affected by prenatal exposure to alcohol and approximately 8% are affected by prenatal exposure to illicit drugs (n=290,000).\(^2,3\)

The opioid epidemic has heightened the urgency to support affected children and families. Data show an increase in the number of pregnant women with opioid use or opioid use disorder,\(^4\) highlighting a need for prevention,
specialized prenatal care, substance use disorder treatment, medication-assisted treatment, and other services.

Prenatal substance exposure affects individuals in many ways across the developmental continuum and can lead to physical, cognitive, and socio-emotional effects. Effects vary depending on different factors, like exposure to multiple substances (including alcohol), the timing of the exposure, and the type of substance to which the fetus was exposed. A comprehensive service array is necessary to mitigate the various effects of prenatal substance exposure and requires a collaborative approach among various service providers and systems, including child welfare, maternal and infant care, substance use services and treatment and early childhood.

Families affected by prenatal substance exposure often face a multitude of challenges at different points in time. For example, the fear of having a child protection agency remove an infant from home may prevent a pregnant woman with a substance use disorder from seeking substance use disorder services, entering treatment, or engaging in prenatal care. This fear and subsequent hesitation to access services may be exacerbated among Black and American Indian families, which historically have been — and still currently are — disproportionately harmed by child welfare involvement. In addition, some pregnant and postpartum women may feel shame or guilt regarding their substance use during pregnancy, which also may affect their willingness to obtain treatment services.

In response, service providers can use strengths-based, person-first language to show empathy, connection, and understanding while interacting with parents and families affected by substance use disorders. For more information, see: Disrupting Stigma: How Understanding, Empathy, and Connection Can Improve Outcomes for Families Affected by Substance Use and Mental Disorders.

COMPANION BRIEFS

This brief highlights evidence-based practice and policy strategies for the prenatal, birth and postpartum periods. For more information on substance use disorder and interventions for families and infants affected by prenatal substance exposure, see the following companion strategy briefs:

- How can the child welfare system support families affected by substance use disorders?
- How can Plans of Safe Care help infants and families affected by prenatal substance exposure?
- What are some developmentally appropriate interventions for infants and children affected by prenatal substance exposure?

All who work in the field of child and family well-being — including child protection agency staff, medical professionals, and legal authorities — must always remember that substance use disorder is a disease of the brain that can be effectively treated and managed. Parental substance use alone never should be the primary determination behind a child removal decision, and neither should the presence of prenatal substance exposure in an infant. Instead, decisions on family separation must be based on a thorough assessment of how substance use disorder within a family is affecting child safety.

Prenatal, birth, and postpartum

Pregnancy and the postpartum phase bring multiple transitions, both for first-time parents learning to care for an infant and for parents adjusting to more than one child. These challenges are especially difficult for parents with an active substance use disorder or in early recovery. Parents who are not engaged in substance use disorder treatment may not have a supportive care network to assist them.
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Preventing or mitigating the effects of prenatal substance exposure involves early identification of pregnant and postpartum women with substance use disorders and engagement in quality treatment services, including the development of a Plan of Safe Care, medication-assisted treatment, and links to related supports. Prenatal and postpartum screening protocols should be equitable and developed with careful consideration of state statutes and regulations pertaining to parental substance use and prenatal substance exposure. The American College of Obstetricians and Gynecologists has several key recommendations to ensure specialized and equitable care is available to pregnant women using opioids, and that those seeking prenatal care are not criminalized. The recommendations stress the ethical responsibility of medical care providers to discourage separation of the parent from their child solely based on substance use disorder.

Unbiased universal screening

Various studies have established the existence of socioeconomic and racial biases in the reporting of families affected by prenatal substance exposure to child protection agencies and health departments, despite similar rates of substance use among whites and people of moderate or higher incomes. One study found that infants with prenatal substance exposure born at hospitals with larger populations of Medicaid beneficiaries were more likely to be reported to child welfare. A number of other studies show that Black and American Indian mothers of infants with prenatal substance exposure are more likely to be reported at birth to child protection agencies and health departments. Black and American Indian families also are disproportionately more likely to have a child protection agency remove their children from their care, as well as having disproportionately high rates of parental termination.

Unbiased universal screening of all pregnant women promotes equitable identification of substance use disorders, access to clinical assessment and treatment services, and linkages to appropriate specialized health and prenatal care. Universal screening also may help reduce biases and discrimination that might otherwise cause some individuals to be screened at a disproportionate rate, and promotes the engagement of pregnant persons and infants needing intervention without fear of criminal justice intervention.

The World Health Organization recommends that health care professionals ask all pregnant women about their use of alcohol and other substances as early as possible in the pregnancy and at every follow-up visit. Screening should include asking about illicit substance use before and during pregnancy, as well as high-risk behaviors, such as injection drug use, exposure to interpersonal violence and trauma, and symptoms of mental health disorders.

The American College of Obstetricians and Gynecologists recommends the use of Screening, Brief Intervention, and Referral to Treatment, a comprehensive integrated approach to the delivery of substance use prevention, early intervention, and treatment services. The approach has evidence supporting its effectiveness and offers a pathway from screening through connection to treatment services. The intervention, which is approved for child welfare prevention services under the Family First Prevention Services Act, requires follow-up with motivational enhancement techniques to help connect identified patients with appropriate care and is composed of: 1) a validated and standardized screening tool that can be incorporated into prenatal and postpartum care in various formats, 2) a brief intervention to engage individuals identified with substance use in a short conversation, providing feedback and advice; and 3) referrals for substance use assessment and treatment services, as clinically indicated. For more information, see: Screening, Brief Intervention, and Referral to Treatment (SBIRT) for Pregnant and Postpartum Women.

It is important to note that the American College of Obstetricians and Gynecologists cautions against using the results of urine and other toxicology testing when making decisions about infant safety with the parent or caregiver. That’s because urine and toxicology testing sometimes leads to inaccurate results, often due to the timing of the sample collection. For more information, see: Considerations for Developing a Child
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**Comprehensive care coordination**

When a potential substance use disorder is identified in the prenatal or postpartum period, the mother must be referred for a comprehensive assessment and, if indicated, engaged in quality treatment services that are *culturally responsive, trauma-informed, and family-centered*. States using funding from the [Substance Abuse Prevention and Treatment Block Grant](https://www.casey.org) must prioritize pregnant women for substance use disorder treatment services and provide access to treatment or interim services within 48 hours.

Substance use disorder treatment for pregnant and postpartum women requires a coordinated approach among maternal and infant health care, substance use disorder treatment, and other service providers to ensure healthy birth and post-birth outcomes.

Plans of Safe Care can assist with care coordination across systems for pregnant women and parents. Several examples of collaborative-based interventions offer comprehensive care coordination for pregnant women and parents:

- **Maternal Opioid Misuse (MOM) Model** focuses on pregnant and postpartum women with opioid use disorders. MOM provides coordinated service delivery in which individuals receive a variety of services, including specialized medication-assisted treatment, intensive case management, individual and group counseling, and recovery supports.

- **Parent-Child Assistance Program** is an evidence-informed program for pregnant women and parents with substance use disorders — and their infants and children — that offers case management, home visits, and support services. Research shows it to be *cost-effective and result in faster family reunification*. 

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- **Children and Recovering Mothers (CHARM) Collaborative** is a multidisciplinary group of service providers that work with pregnant and postpartum women with opioid use disorders to ensure access to treatment and related services. CHARM outcomes include enhanced access to treatment and improved health outcomes for parents and their infants.

- **Peer-support services** by persons in recovery from substance use disorder and who have lived expertise with the child welfare system offer a relatable ally and invaluable encouragement to pregnant women and parents with a substance use disorder. See: The Use of Peers and Recovery Specialists in Child Welfare Settings and Peer Recovery Staff’s Role in Engaging Families and Supporting their Recovery Journey.

To learn more, visit Questions from the field at Casey.org.

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