



Breastfeeding and Substance Use: Evidence-based Practices Guidance Document

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The number of infants born prenatally exposed to substances has increased significantly in Indiana and across the United States. Mothers of these infants, who want to breastfeed, need evidence-based education about the known benefits and risks of breastfeeding. Physicians, advanced practice providers and hospital staff need accurate information on when breastfeeding is safe. Guidance for breastfeeding while using substances during the perinatal period helps promote breastfeeding when it's safe and optimize mother-infant attachment. Continued education and follow-up throughout pregnancy and the infant's first twelve months will enhance outcomes.

Note: This is a companion piece to the *Breastfeeding and Safe Sleep Guidance Document that can be found at* <https://www.in.gov/health/mch/files/ipqic/Breastfeeding-Safe-Sleep-Guidance-Document-2024.pdf>

Goals

1. For the health and safety of infants and to promote a standard guideline for all health care providers for best practices in breastfeeding when moms are taking prescribed and/or using illicit substances.
2. To establish guidelines for providers regarding counseling families on how to breastfeed when appropriate, and for promoting attachment for all babies even when breastfeeding is determined unsafe.
3. To evaluate the social and emotional factors as they relate to breastfeeding and perinatal substance use populations to determine appropriate patient-centered care plans.
4. To ensure families across Indiana have information and necessary resources to achieve success in both breastfeeding and recovery services during pregnancy and after hospital discharge.

Rationale:

Research on the importance of breastfeeding is well established. Infants who have been prenatally exposed to a substance are at risk for short-term and long-term effects from their exposure. Breastfeeding, when appropriate, can help to mitigate potential risks and improve outcomes for both infants and their mothers. Among other documented long-term benefits, we know that in the short term, breastfeeding can lessen the severity of Neonatal Abstinence Syndrome (NAS) in the infant, resulting in fewer pharmacologic interventions. In addition, breastfeeding can shorten the hospital stay of the infant. Determining eligibility for breastfeeding within this population will improve maternal and infant health outcomes across Indiana. Many factors need to be considered when counseling a mother about breastfeeding. Practitioners need to be aware of the benefits and risks to the infant depending on the substance/s being used and the mother's stage of recovery.

Prenatal Care

Perinatal period evaluation

Universal screening for SUDs during pregnancy, using a standardized validated screening tool is widely recommended, including by the World Health Organization (WHO) and the American College of Obstetrics and Gynecology (ACOG).¹ As required by Indiana PL 292, each health care provider shall use a validated and evidence based verbal screening tool to assess a substance use disorder (SUD) in pregnancy for all pregnant women at their first appointment and additionally through the pregnancy as needed.

A complete substance use history is essential to establishing a safe and appropriate treatment plan that the woman and the healthcare professionals can agree on (Federation of State Medical Boards [FSMB], 2013). This history combines interviews and results from standardized assessment instruments. Ideally, the history would include (SAMHSA, 2015):

- The nature of the patient's SUD.

¹ Academy of Breastfeeding Medicine Clinical Protocol # 21: Breastfeeding in the Setting of Substance Use and Substance Use Disorder (Revised 2023)

- Underlying or co-occurring medical or psychiatric diseases or conditions.
- The effect of substance use on the patient’s physical and psychological functioning.
- Outcomes of past treatment episodes.
- Drug use and substance use treatment histories, including medicines to treat maternal opioid use disorder (MOUD).
- Presence or absence of maternal family and community support systems.
- Plans for postpartum care and substance use treatment for the mother and pediatric care for the child.

Women on medications to treat opioid use disorder (MOUD)

Breastfeeding has many benefits for the infant born with Neonatal Abstinence Syndrome (NAS). We know that in the short term, breastfeeding can lessen the severity of NAS in the infant, result in fewer pharmacological interventions, and can shorten the hospital stay of the infant. Problems in the infant that may contribute to a mother’s ambivalence about breastfeeding include an infant’s hypertonicity and uncontrolled movements, which can cause position and latch difficulty, the infant’s poor sleep/wake control, as well as the infant’s poor suckle coordination. Furthermore, infants affected by NAS have psychological/behavioral problems, poor coordination (suck/swallow/breathe), increased uncoordinated movements, and nasal stuffiness, all which may contribute to increased challenges learning to breastfeed. An International Board Certified Lactation Consultant (IBCLC) should be available to assist the family.²

In general, breastfeeding is recommended among mothers who stop nonprescribed substance use by the time of delivery, and they should continue to receive ongoing postpartum care, such as lactation support and SUD treatment. It is important for healthcare providers and women with OUD who are pregnant to work together to manage medical care during pregnancy and after delivery. Coordination of care between a prenatal care provider and a specialist with expertise in opioid use is important for pregnant women

² 410 IAC 39-4-1 (c)(7)

with OUD.³ Overall, enhancing breastfeeding education regarding substance use in pregnancy and lactation is essential to allow for patient-centered guidance.⁴ Breastfeeding is to be encouraged and supported for women on opioid agonist therapy as both breastfeeding and skin-to-skin contact can reduce the severity and duration of NAS (American Society of Addiction Medicine (ASAM); Public Policy Statement).⁵ NAS can complicate or discourage breastfeeding (difficulty with latch/suck, sleepiness, tremors, etc.); these are expected breastfeeding behaviors with NAS and an International Board Certified Lactation Consultant (IBCLC) should be involved.

Plasma concentrations of methadone in infants are low (less than 3% of maternal trough concentrations) during the neonatal period and up to 6 months postpartum., and all authors have concluded that women on stable doses of methadone maintenance, regardless of maternal methadone dose, be encouraged to breastfeed (ABM Protocol #21). The amount of buprenorphine found in human milk is small, up to 2.4% of maternal weight-adjusted dose are unlikely to have short-term negative effects on the developing infant (ABM protocol). Breastfed infants had less severe NAS and were less likely to require pharmacological intervention than the formula-fed infants. Reducing the pharmacotherapy dosage can be considered for mothers stable in long-term recovery (generally considered several years) and a desire to taper medications. Consideration of tapering medications to treat opioid use disorder is generally avoided until *after* the infant is consistently sleeping through the night, has completed breastfeeding, and the dyad has multiple indicators of life stability (Jones et al., 2014).

Breastfeeding should be encouraged in women who:

- Are engaged in substance use disorder (SUD) treatment; provision of maternal consent to discuss progress in treatment with substance use provider.

³ https://www.cdc.gov/opioid-use-during-pregnancy/treatment/index.html?utm_source=chatgpt.com

⁴ BREASTFEEDING MEDICINE Volume 18, Number 10, 2023

⁵ <https://www.asam.org/advocacy/find-a-policy-statement/view-policy-statement/public-policy-statements/2017/01/19/substance-use-misuse-and-use-disorders-during-and-following-pregnancy-with-an-emphasis-on-opioids>

- Are adherent with MOUD.
- Plan to continue in SUD treatment in the postpartum period.
- Can maintain sobriety demonstrated in an outpatient setting.
- Have a negative urine confirmation toxicology test prior to utilization of breast milk which includes negative fentanyl screening.
- Engaged in and compliant with prenatal care.

Impact of Eat Sleep Console on Initiation of Breastfeeding

In a study a study cited by the National Institute of Child Health and Development, opioid exposed newborns, managed with the Eat Sleep Console (ESC) treatment methodology, were more likely than those receiving traditional treatment to breastfeed during their hospital stay and to continue through discharge. ESC emphasizes non-pharmacologic care and teaches parents to care for their child with a low-stimulation environment which includes swaddling, skin to skin contact and breastfeeding. ESC supports starting medication only if the non-pharmacologic interventions fail to improve the symptoms. ⁶

Mothers who are using Marijuana:

Mothers who are using marijuana should be counseled to cease or reduce use while breastfeeding. Advise them about the possible long-term neurobehavioral effects on their infant. The lack of long-term follow-up data on infants exposed to varying amounts of marijuana via human milk, coupled with concerns over negative neurodevelopmental outcomes in children with in-utero exposure, should prompt extremely careful consideration of the risks versus benefits of breastfeeding in the setting of moderate or chronic marijuana use. (ABM Protocol #21)

Mothers who are Hepatitis A, B or C positive:

These women can breastfeed unless they have cracked or bleeding nipples. If nipples are cracked or bleeding, the mother can pump and discard her milk until her nipples are not

⁶ Merhar, SL, et al. Infant feeding and weight trajectories in the eat, sleep, console trial: a secondary analysis of a randomized clinical trial. *JAMA Pediatrics*. 2024. Doi:10.1001/jamapediatrics.2024.2578

cracked or bleeding (Centers for Disease Control and Prevention, 2015). The mother can continue to offer the unaffected breast and/or supplement as needed. Perinatal transmission of Hepatitis A is rare (AAP Red Book) and there are no documented cases of Hepatitis C transmission via breast milk.

Mothers who are taking prescription opiates:

Information is lacking on the safety of breastfeeding when moderate to high doses of opioids are used for long periods of time. Management of mothers who use chronic opioid therapy should be closely supervised by a chronic pain physician who is familiar with pregnancy and breastfeeding. Judicious amounts of oral narcotic pain medication, when used in a time-limited situation for an acute pain problem, are generally compatible with continued breastfeeding if supervision and monitoring of the breastfeeding infant are adequate. (ABM 36, 37).

Lactation Risk Categories by Substance/Medication

Dr. Thomas Hale, the author of “Medications and Mother’s Milk” (along with Hilary E Rowe, PharmD), has written clinical practice guidelines that categorize medications based on several factors. His book should serve as a reference when a practitioner is advising women taking medications, substances, or with a substance use disorder. Hospitals can use the information in these resources as well as the descriptions below and table as references for common substances that are being tested in hospitals, and as guidance when making decisions on eligibility for breastfeeding based on evidence-based research by lactation researchers and professionals.

Comments:

Dr. Hale provides further details in his book which is frequently updated, including considerations when choosing the appropriate substance to prescribe or counseling women on the appropriateness of using substances while breastfeeding.

Hale's Lactation Risk Categories:

- **L1 Compatible:** Drug which had been taken by a large number of breastfeeding mothers without any observed increase in adverse effects on the infant. Controlled studies in breastfeeding women fail to demonstrate a risk to the infant and the possibility of harm to the breastfeeding infant is remote; or the product is not orally bioavailable in an infant.
- **L2 Probably Compatible:** Drug which has been studied in a limited number of breastfeeding women without an increase in adverse effects in the infant. And/or the evidence of a demonstrated risk which is likely to follow use of this medication in a breastfeeding woman is remote.
- **L3 Probably Compatible:** There are no controlled studies in breastfeeding women; however, the risk of untoward effects to a breastfed infant is possible, or controlled studies show only minimal non-threatening adverse effects. Drugs should be given only if the potential benefit justifies the potential risk to the infant. (New medications that have absolutely no published data are automatically categorized in this category, regardless of how safe they may be.)
- **L4 Potentially Hazardous:** There is positive evidence of risk to a breastfed infant or the breastmilk production, but the benefits from use in breastfeeding mothers may be acceptable despite the risk to the infant (e.g., if the drug is needed in a life-threatening situation or for a serious disease for which safer drugs cannot be used or are ineffective.)
- **L5 Hazardous:** Studies in breastfeeding mothers have demonstrated that there is significant and documented risk to the infant based on human experience, or it is a medication that has a risk of causing significant damage to the infant. The risk of using the drug in breastfeeding women clearly outweighs any possible benefit from breastfeeding. The drug is contraindicated in women who are breastfeeding an infant.

Consider that drugs may transfer into human milk if they: attain high concentrations in maternal plasma; are low in molecular weight (<800) or low in protein binding; pass into the brain easily.

General considerations include:

- Adult dosage of medication and Relative Infant dose: Use the smallest adult dosage to treat conditions therapeutically.
- Chronic user vs Occasional Use: consider allowing to pump and dispose of milk of occasional user until out of milk.
- Compliant vs non-compliant: consider if in treatment or risk factors for relapse/non-compliance with MAT.
- Length of time for medication use: short-term vs long-term.
- Prescribed medication vs illicit use: illicit use of medications/substances is a high-risk behavior that needs to be evaluated when determining eligibility for breastfeeding.
- Route of medication: can affect how the baby absorbs the medication or transfer into the milk.

Relative Infant Dose:

The Relative Infant Dose (RID) is calculated by dividing the infant's dose via the milk in "mg/kg/day" by the maternal dose in "mg/kg/day."

This weight-normalizing method indicates approximately how much of the "maternal dose" the infant is receiving. Many authors now use this preferred method because it gives a better indication of the relative dose transferred to the infant. Hale reports RID ranges to give an estimate of all the RIDs published by various authors. Note: Authors may use different methods to calculate RID.

Recommendations for health care workers:

- Identify symptoms of depression through EPDS or other measure.
 - Excessive crying
 - Despondent

- Irritable
- Poor appetite
- Sleeping too much/too little
- Excessive feelings of guilt
- Lack of interest in /attachment to her baby
- Suicidal
- Identify symptoms of PTSD:
 - Nightmares
 - Flashbacks
 - Avoidance of certain people (including infant), places, or situations
 - Emotionally 'numb'
- Identifying possible indicators of sexual abuse:
 - feeding infant only pumped breast milk,
 - conflicting statements and actions regarding the desire to breastfeed then being unable to put infant to breast,
 - maternal discomfort with her body, especially touching her breasts.
- Adaptations in approaches when assisting these mothers:
 - limited breast exposure,
 - asking permission to touch their breast,
 - recognizing maternal discomfort with medical procedures,
 - minimizing male nursing support,
 - limiting staff from being in rooms when it is night or dark,
- Formula feeds may be needed until the patient is comfortable with breastfeeding,
- Use active listening and sensitive exploration versus unintended nontherapeutic communication implying "it's your fault".
- Make no assumptions about what mother would like to do:
 - Ask if she would like to breastfeed.
 - Ask if she would like help with breastfeeding.
 - Ask if she needs anything to make her more comfortable with breastfeeding.
 - Validate her responses to these questions.

If mother decides to try to breastfeed, recommendations for improved success of breastfeeding:

- Help mom with the feelings that come with breastfeeding.
- Use relaxation and guided imagery to help mother enjoy her breastfeeding experience more.
 - Apps that can be helpful for relaxation include the following:
 - -Calm
 - -Stop, Breathe and Think
 - -Simply Being—guided meditation for relaxation and presence
- Encourage patience with infant, especially if NAS symptoms interfere with breastfeeding.
- Help mother manage any frustrations with difficulties of breastfeeding: relaxation techniques, soothing music, skin-to-skin contact with infant, words of encouragement.
- Help mother understand that infant's difficulty with breastfeeding is not a rejection of her.
- Educate mother about the NAS specifics: poor feeding, vomiting, rigidity, tremors, and congestion, which all contribute to difficulty with breastfeeding.
- Educate mother about pumping if breastfeeding is desirable later, but not possible at first.

If mother cannot breastfeed, help her with the psychosocial aspects of mother-infant dyads who don't breastfeed.

- Attachment: Help mom attach to her infant through their 5 senses: touch, smell, sound, sight, and taste. Validate her experience in this.
- Skin-to-skin contact: Encourage mother to have skin-to-skin contact with her infant as much as possible to reduce the symptoms of NAS. Validate the positive effects this has on her infant as well as on her (infant soothes, she relaxes).
- Guilt/shame: Mother may feel guilty about her baby having NAS and mother may have guilt over not breastfeeding.

- Minimize guilt over NAS: Substance Use Disorders are a disease, like diabetes or cancer. Nobody chooses to be addicted. It is not a failure of will or morality. She did not do this to her infant willingly. Help her move forward by being there for her child to improve NAS symptoms with attachment and skin-to-skin contact.
- Minimize guilt over bottle-feeding: a mother's decision to breastfeed is a complex one and has many conscious and unconscious facets. Encourage her to maximize other attachment behaviors and enjoy her baby. There are many ways to be a good mother, and breastfeeding is not the only way! Many happy, healthy, and successful citizens in our world were bottle fed!

Discharge Planning

Comprehensive standardized peri-partum and post-partum care and expectations help to ensure that women with substance use disorders have appropriate resources and supports post discharge. Nurses, social workers, case managers, and other appropriate hospital staff can use this information to aid discharge planning. There are three components to high quality discharge planning:

- Education.
- Identification of ongoing social and mental health support as well as treatment for substance use disorder.
- Establishment of a feeding plan.

Education

Prior to discharge, all new mothers should receive the following education:

- Outpatient pediatric follow-up plan;
- Newborn safe sleep;
- Family Planning/ Contraception plan; and
 - With assistance at getting this contraception while admitted, if appropriate
- Information regarding the role and actions of the Department of Child Services (DCS).

Identification of ongoing social and mental health support as well as treatment for substance use disorder

For the best chance of success in getting healthy and parenting their child, all women with substance use need a plan for ongoing social and mental health support as well as treatment for substance use disorder. The plan will vary depending on the patient’s circumstances, local resources and the mother’s stage of recovery. The following items should be addressed in the plan:

• Individualized plan for SUD treatment
• Smoking cessation assistance
• Direct assistance to mother with admission to recovery residential care
• Evaluation by mental health or addiction specialist
• Active referral to behavioral health/recovery services
• Referral and/or next appointment with Medication Assisted Treatment (MAT)/MOUD provider
• Schedule and location of community support group meetings where patient wants to engage
• Appointment scheduled with peer recovery coach, consult while inpatient if appropriate
• Referral to Healthy Families
• Referral to Pregnancy Promise and patient has called them, so they know how to access them
• SDOH addressed such as safety, housing, food, clothing, and more
• Lactation access resources provided
• Legal aid
• Patient is oriented to their local community-based recovery hub for continued services in their area

Feeding Plan

The third component of high-quality discharge planning is a focused set of questions and/or actions that support getting appropriate resources related to breastfeeding. The following information should be included.

What Feeding Plan was established? Check which feeding plan applies.:

- Breastfeeding and bottle-feeding expressed milk
- Bottle-feeding expressed milk
- Breastfeeding and supplementing with fortified expressed milk
- Breastfeeding and supplementing with Pasteurized Donor Human Milk (PDHM)
- Breastfeeding and supplementing with formula
- Exclusive formula feeding

If Mother has decided to breastfeed:

- Mother taught how to hand express breast milk
- Personal use breast pump has been obtained for mother's home use
- Mother has received one on one lactation discharge education from lactation consultant staff
- Follow-up lactation phone call set up for 36-48 hours post discharge.
 - Mother's phone # and date for phone call to occur _____
- Follow-up lactation outpatient visit scheduled.
 - Date and time of scheduled appointment _____
- Reminder call concerning upcoming appointment made
- Education and information training completed on the benefits of skin-to-skin time, baby wearing, infant massage, and stress reduction techniques.
- Discussion completed regarding the importance of gradual weaning (when weaning)
- Lactation Resources list given to mother (to include but not be limited to):
 - Hospital based private breastfeeding Facebook page
 - Hospital and community-based breastfeeding support group information
 - Local WIC office/drop in center information
 - Baby Friendly approved breastfeeding website list
 - Milk Bank www.milkbank.org

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