Current National Recommendations for Breastfeeding in the Setting of Substance Use Disorder

Bonny Whalen, MD

Newborn Hospitalist, Dartmouth Health Children's
Clinical Assistant Professor, Dartmouth Geisel School of Medicine

2/15/24

Dartmouth Health Children's

Dartmouth GEISEL SCHOOL OF MEDICINE

Objectives

- Review current expert national recommendations for breastfeeding in presence of SUD
  - **Academy of Breastfeeding Medicine (ABM)**
  - American Academy of Pediatrics (AAP)
  - American College of Obstetrics & Gynecology (ACOG)

- As time allows: Identify barriers that people with SUD may have for breastfeeding & potential facilitators to overcome these

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

Background: The Academy of Breastfeeding Medicine (ABM) revised the 2015 version of the substance use disorder (SUD) clinical protocol to review the evidence and **provide updated literature-based recommendations** related to breastfeeding in the setting of substance use and SUD treatments.

Key Information: Decisions around breastfeeding are an important aspect of care during the peripartum period, and there are **specific benefits and risks for substance-exposed mother–infant dyads**.

Recommendations: This protocol provides breastfeeding recommendations in the **setting of nonprescribed opioid, stimulant, sedative-hypnotic, alcohol, nicotine, and cannabis use, and SUD treatments**. Additionally, we offer guidance on the utility of toxicology testing in breastfeeding recommendations. Individual programs and institutions should establish **consistent breastfeeding approaches that mitigate bias, facilitate consistency, and empower mothers with SUD**. For specific breastfeeding recommendations, given the complexity of breastfeeding in mothers with SUD, **individualized care plans** should be created in **partnership with the patient and multidisciplinary team** with appropriate clinical support and follow-up. 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**. Overall, enhancing breastfeeding education regarding substance use in pregnancy and lactation is essential to allow for patient-centered guidance.

ABM Protocol

Dartmouth Health Children's

Miriam Harris,[1,2] Davida M. Schiff,[3,4] Kelley Saia,[2,5] Serra Muftu,[3,4] Katherine R. Standish,[6] and Elisha M. Wachman[2,7]

BREASTFEEDING MEDICINE
Volume 18, Number 10, 2023

About ABM Protocols

A central goal of the Academy of Breastfeeding Medicine (ABM) is the development of clinical protocols for managing common medical problems that may impact breastfeeding success. These protocols **serve only as guidelines** for the care of breastfeeding mothers and infants and **do not delineate an exclusive course of treatment** or serve as standards of medical care. Variations in treatment may be appropriate according to the needs of an individual patient. The ABM empowers health professionals to **provide safe, inclusive, patient-centered, and evidence-based care**.

Women and others who are pregnant and lactating identify with a broad spectrum of genders, pronouns, and terms for feeding and parenting. There are two reasons ABM's use of gender-inclusive language may be transitional or inconsistent across protocols. First, gender-inclusive language is nuanced and evolving across languages, cultures, and countries. Second, foundational research has not adequately described the experiences of gender-diverse individuals. Therefore, ABM advocates for and will strive to use language that is as inclusive and accurate as possible within this framework.

For more explanation, please read ABM Position Statements:

Infant Feeding and Lactation-Related Language and Gender - https://doi.org/10.1089/bfm.2021.29188.abm

Breastfeeding as a Basic Human Right (https://doi.org/10.1089/bfm.2022.29216.abm

United Nations | UNITED NATIONS HUMAN RIGHTS OFFICE OF THE HIGH COMMISSIONER

Donate

What are human rights? | Topics | Countries | Instruments & mechanisms | Latest | About us | Get Involved

Latest / Media Center

STATEMENTS | MULTIPLE MECHANISMS

Joint statement by the UN Special Rapporteurs on the Right to Food, Right to Health, the Working Group on Discrimination against Women in law and in practice, and the Committee on the Rights of the Child in support of increased efforts to promote, support and protect breast-feeding

17 November 2016

Breastfeeding is a human rights issue for both the child and the mother Children have the right to life, survival and development and to the highest attainable standard of health, of which breastfeeding must be considered an integral component, as well as safe and nutritious foods. Women have the right to accurate, unbiased information needed to make an informed choice about breastfeeding. They also have the right to good quality health services, including comprehensive sexual, reproductive and maternal health services. And they have the right to adequate maternity protection in the workplace and to a friendly environment and appropriate conditions in public spaces for breastfeeding which are crucial to ensure successful breastfeeding practices.

BREASTFEEDING MEDICINE
Volume 17, Number 8, 2022
© Mary Ann Liebert, Inc.
DOI: 10.1089/bfm.2022.29216.abm

Open camera or QR reader and scan code to access this article and other resources online.

Academy of Breastfeeding Medicine Position Statement: Breastfeeding As a Basic Human Right

Lori Feldman-Winter,[1] Trina Van,[2] Daphna Varadi,[2] Amanda C. Adams,[3] Bahar Kural,[4] and Elien C.J. Rouw[5]

The ABM asserts that it is a moral imperative to protect the mother's and child's basic rights to breastfeed for their own health and wellness, as well as that of the nations in which

Public policies and laws should be established so that mothers can choose to breastfeed, be supported to breastfeed, and have their choice protected such that they are not denied this right either by laws, coercion, employment practices, or society. However, there is a stark lack of meaningful analysis

The ABM asserts that all health care providers, including medical doctors, have an essential role and obligation to implement this global statement. Members of the ABM should be regarded as experts in the field and, therefore, be able to engage public health and policy makers to maintain these rights, develop protections to uphold the right to breastfeed, and work through advocacy efforts to eliminate all forms of discrimination that would otherwise undermine breastfeeding and the provision of human milk.

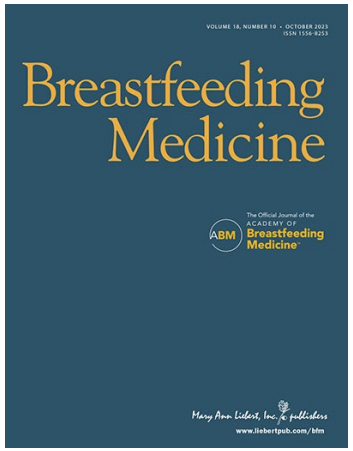
Joint statement by the UN Special Rapporteurs on the Right to Food, Right to Health, the Working Group on Discrimination against Women in law and in practice, and the Committee on the Rights of the Child in support of increased efforts to promote, support and protect breast-feeding | OHCHR

ABM Guideline Aims

- ***Support breastfeeding-decision making in setting of nonprescribed substance use and SUD:***
  - **Principles of patient-centered care**
    - Clinicians working in partnership w/ patients
    - Consistent w/ needs, values, & desires of patients
  - **Literature-based recommendations to aid in risk/benefit discussions:**
    - Substance- and SUD treatment-specific recommendations
    - Perinatal toxicology testing
    - BF initiation timing in setting of non-prescribed substance use

Dartmouth Health Children's

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



Background

- **Globally, SUD prevalence has increased b/w 2009-2016:** Highest rates of alcohol, opioid, and cannabis use disorders among women
- **US 2021 National Survey on Drug Use and Health:** *Past month use in pregnant women*
  - **Non-prescribed substance: 7.7%**
  - **Alcohol: 9.8%**
  - **Tobacco product: 10.8%**

Specific risks and benefits to consider among substance-exposed breastfeeding dyads

- **Well-established breastfeeding/breastmilk benefits** for general population
- **For substance/opioid exposed newborns:**
  - **Reduced NAS/NOWS severity** – decreased need for pharm Rx, LOS
  - **Enhanced bonding**
  - **May reduce stress**
  - **May support recovery**

Potential Risks in Presence of Nonprescribed Substance Use

- **Reduced parental ability to respond to infant feeding cues**
  … and potential unsafe sleep / fall risk
- **Risks of infant exposure through breastmilk w/ potential for toxicity**
- **Reduced "breastfeeding ability"**
  … and potentially lower milk supply
- **Potential alterations in neurodevelopment**

ABM Methods:

- **Search restricted to literature published after 2015 ABM guideline**
- **Articles reviewed for relevance and quality**
- **Level of evidence determined** using **"SORT" criteria**:
  - **Level 1** (highest quality) to **Level 3** (lowest quality)
  - **Grading:**

    A: Consistent good-quality patient-oriented evidence

    B: Inconsistent or limited quality evidence

    C: Consensus, usual practice, case series evidence, or opinion).
- **Each recommendation required consensus from authorship committee**
- **Additional 2015 references included when no new evidence had emerged**

TABLE 3. GENERAL RECOMMENDATIONS FOR BREASTFEEDING AMONG INDIVIDUALS WHO USE SUBSTANCES OR WITH SUBSTANCE USE DISORDERS

Recommendation	*Level of evidence*	*Strength of recommendation*
Those who have SUD or use substances during pregnancy or the postpartum period should engage in multidisciplinary prenatal and postpartum substance use care.	2	B
Individuals who discontinue nonprescribed substance use by the delivery hospitalization can be supported in breastfeeding initiation with appropriate follow-up.	2	B
Targeted perinatal dyadic lactation care such as prenatal education, inpatient and postpartum lactation support, and ongoing multidisciplinary SUD treatment can facilitate breastfeeding continuation.	2	B
Individual programs and institutions should establish breastfeeding guidelines to mitigate bias, facilitate consistency across providers, and empower individuals with SUD.	3	C

J Am Board Fam Pract. 2004 Jan-Feb;17(1):59-67. doi: 10.3122/jabfm.17.1.59.

Strength of recommendation taxonomy (SORT): a patient-centered approach to grading evidence in the medical literature

Mark H Ebell [1], Jay Siwek, Barry D Weiss, Steven H Woolf, Jeffrey Susman, Bernard Ewigman, Marjorie Bowman

Support Breastfeeding for Patients who have Discontinued Nonprescribed Substance Use

- Prior ABM Guidelines: Discouraged BF if use w/in 30-90d
- **Updated guidance to support BF for those who discontinue non-prescribed use *by or during* delivery hospitalization with appropriate follow-up* based on:**
  - Poor predictive value of 3rd trim screening in predicting postpartum use (36%)
  - Urine drug testing at delivery = strongest association w/ ongoing non-prescribed use postpartum
  - **Most substances eliminated in hours-days** rather than days-weeks
  - Review of more current breastfeeding decision-making practices in other institutions

*e.g., postpartum SUD care + lactation support

Guidance in Setting of Recent Substance Use

- **Mothers motivated to breastfeed** who report **recent non-prescribed substance use** and/or have positive toxicology testing at delivery **should be supported in expressing milk to establish milk production.**
- The **decision of whether to give expressed milk to the infant and when to start breastfeeding** should be made using a **multidisciplinary approach involving birthing parent and clinicians for** parent–infant dyad.
- Ideally, before breastfeeding, **sufficient time should pass to allow for substance clearance** from breastmilk.
- If breastfeeding parent **returns to non-prescribed substance use** in postpartum period, a **similar approach of expressing + discarding milk** and **consultation with multidisciplinary team** should take place to inform breastfeeding decisions.

ABM Methods: Review of Pharmacokinetics + RID

- **Pharmacokinetics to guide timing of breastfeeding:** Timing of peak effect + half-life to determine time for substance clearance from breastmilk relative to maternal plasma concentration
- **Relative infant dose (RID)** dependent on:
  - drug pharmacology
  - maternal exposure + metabolism into breast milk
  - infant gestational age, gastric absorption, metabolism
- **Informed-decision making** to be based on evidence when available*
  - **RID <10%:** Generally considered safe in breastfeeding
  - **RID >25%:** Substance should be avoided

** Used pharmacokinetic/RID data for prescribed substances of similar properties when data not available for certain non-prescribed substances*

Table 1. Prescribed Opioids, Benzodiazepines, Stimulants, Non-Prescribed Stimulants, Alcohol, Nicotine, and Cannabis Pharmacokinetic Considerations to Inform Breastfeeding

Opioids	*Peak effect*[a]	*Half-life*[a]	*RID (%)*
Morphine	0.5–1 hour[237]	2–4 hours[237]	9.09–35[9]
Codeine	1–1.5 hours[237]	3 hours[237]	0.6–8.1[9]
Oxycodone	0.5–2 hours[237]	3–4 hours[237]	1.0–4.6[9]
Tramadol	2–3 hours[237]	6–7.5 hours[237]	2.9[9]
Benzodiazepines	*Peak effect*	*Half-life*	*RID (%)*
Diazepam	0.3–2.5 hours[237]	44–48 hours[237]	0.9–7.1[9]
Alprazolam	IR: 1–2 hours ER: 9 hours[237]	IR: 11 hours ER: 10–16 hours[237]	8.5[9]
Lorazepam	IR: 2 hours ER: 14 hours[237]	IR: 12 hours ER: 20 hours[237]	2.6–2.9[9]
Clonazepam	1–4 hours[237]	17–60 hours[237]	2.8[9]
Chlordiazepoxide	0.5–2 hours[237]	24–48 hours[237]	N/A
Stimulants	*Peak effect*	*Half-life*	*RID (%)*
Cocaine	0.5 hour[237]	1.5 hours[238]	N/A
Methamphetamine	2.5 hours[239]	4–5 hours[237]	N/A
MDMA	2–4 hours[237]	4–6 hours[237]	N/A
Cathinone	2.3 hours[240]	1.5 hours[240]	N/A
Amphetamine	IR: 3–4 hours ER:5–7 hours[237]	IR: 10–12 hours ER: 11–12 hours[237]	1.9–2.1[132]
Dexamphetamine	IR: 3 hours ER: 8 hours[237]	IR: 3–4 hours ER: 5–7 hours[237]	4.0–10.6[133]
Substance	*Peak effect*	*Half-life*	*RID (%)*
Alcohol	0.5–1.5 hours[237]	4–5 hours[237]	16[9]
Nicotine	0.25 hours[237]	1–2 hours[237]	N/A
Cannabis (THC)	0.25–0.5 hours[237]	25–36 hours[237]	0.4–8.7[9]

[a]Peak and half-life values reference adult pharmacokinetic data for a potential breastfeeding individual. The above prescribed opioid, benzodiazepine, and stimulant data are derived from oral route of administration. IV route of administration for equivalent IV medications have shorter peak effects, in the order of minutes. In intravenous route of administration, the half-lives for opioids may be shorter. For nicotine and cannabis, peak effect sand half-lives are for inhalation route of administration.

ER, extended release; IR, immediate release; IV, intravenous; MDMA, 3,4-methyl enedioxy methamphetamine; N/A, data not available; RID, relative infant dose; THC, delta-9-tetrahydrocannabinol.

Table 4. Summary of Breastfeeding Recommendations for Nonprescribed Substance Use

Recommendations	*Infant monitoring/potential harms*	*Maternal monitoring/potential harms*	*Additional considerations*
Opioids Breastfeeding should be avoided during the use of nonprescribed opioids. *Level of Evidence: 2* *Strength of Recommendation: B*	Sedation, respiratory depression, withdrawal, and associated feeding difficulties	Sedation, decreased responsiveness to infant, rare reports of delayed lactogenesis	Pumping/expressing milk should be recommended in cases of recent use if future abstinence is supported. Consider a relapse plan and other supportive measures.
Sedative hypnotics Breastfeeding should be avoided during the use of nonprescribed sedative-hypnotics *Level of Evidence: 3* *Strength of Recommendation: C*	Sedation, respiratory depression, withdrawal, inadequate weight gain	Sedation, decreased responsiveness to infant	Individuals prescribed benzodiazepines for the treatment of benzodiazepine use disorder or for anxiety disorders may safely breastfeed.
Stimulants Breastfeeding should be avoided during the use of nonprescribed stimulants. *Level of Evidence: 3* *Strength of Recommendation: B*	Gastrointestinal and cardiorespiratory symptoms, hypothermia, irritability, tremors, sleep disturbance, and seizures	Reduced breast milk production	May accumulate in greater quantities in breast milk than maternal serum. Individuals prescribed stimulants for the treatment of ADHD may safely breastfeed.
Alcohol Breastfeeding should be avoided after moderate-to-high alcohol consumption. Occasional intake of more modest amounts of alcohol during lactation and waiting 2 hours per drink consumed to resume breastfeeding is likely safe. *Level of Evidence: 1* *Strength of Recommendation: A*	Drowsiness, changes in sleep and eating behaviors, possible impact on long-term neurodevelopment	Decreased breast milk production	There is no accumulation of alcohol in breast milk due to alcohol's zero-order pharmacokinetic profile.
Nicotine Breastfeeding is recommended, but individuals should be counseled and supported to reduce or stop the use of nicotine products while breastfeeding. *Level of Evidence: 1* *Strength of Recommendation: A*	Altered feeding and sleep	Breast milk is less nutritional, decreased milk production	Second-hand smoke exposure is associated with an increased risk for upper respiratory infections, allergies, and SUID in the infants. Little data are available for vaping products.
Cannabis We encourage cessation and/or reduction of cannabis use during lactation. *Level of Evidence: 2* *Strength of Recommendation: B*	Possible neurodevelopmental effects	Changes in breast milk composition and decrease in duration of breastfeeding	For individuals who continue to use cannabis and wish to breastfeed, we recommend a shared decision-making process to discuss the risks and benefits.

- **Occasional alcohol use during lactation remains common:** up to 50–82% of breastfeeding people
- **Reported binge drinking** is **significantly lower:** 6–7%

Substance	*Peak effect*	*Half-life*	*RID (%)*
Alcohol	0.5–1.5 hours[237]	4–5 hours[237]	16[9]
Nicotine	0.25 hours[237]	1–2 hours[237]	N/A
Cannabis (THC)	0.25–0.5 hours[237]	25–36 hours[237]	0.4–8.7[9]

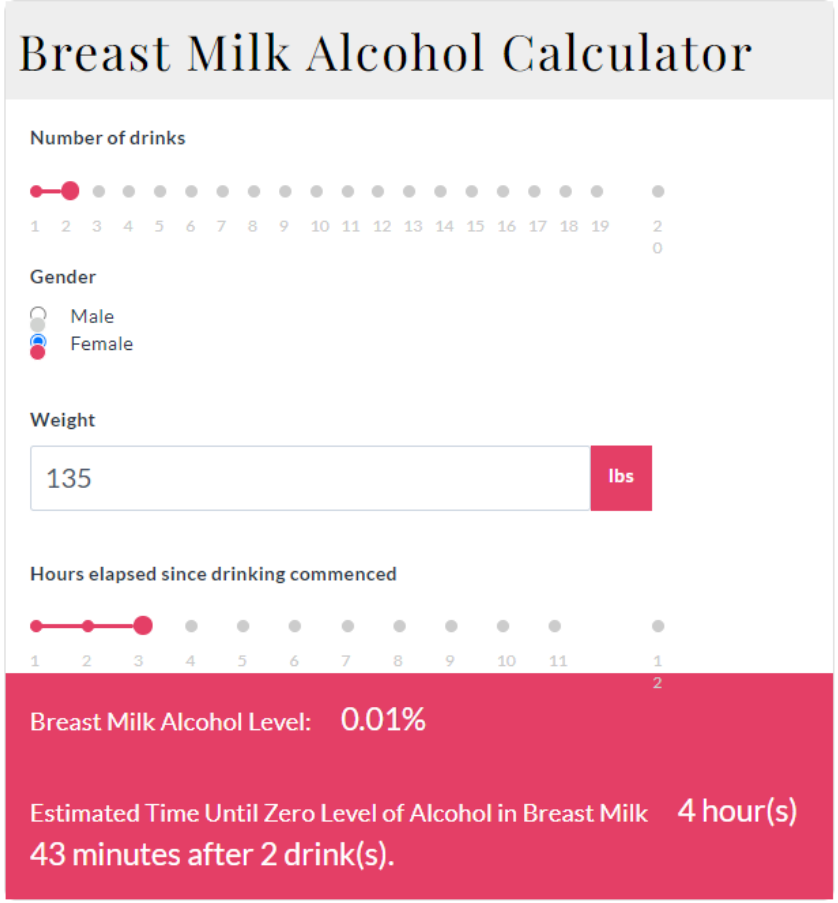
Alcohol Breastfeeding should be avoided after moderate-to-high alcohol consumption. Occasional intake of more modest amounts of alcohol during lactation and waiting 2 hours per drink consumed to resume breastfeeding is likely safe. *Level of Evidence: 1* *Strength of Recommendation: A*	Drowsiness, changes in sleep and eating behaviors, possible impact on long-term neurodevelopment	Decreased breast milk production	There is no accumulation of alcohol in breast milk due to alcohol's zero-order pharmacokinetic profile.
Nicotine Breastfeeding is recommended, but individuals should be counseled and supported to reduce or stop the use of nicotine products while breastfeeding. *Level of Evidence: 1* *Strength of Recommendation: A*	Altered feeding and sleep	Breast milk is less nutritional, decreased milk production	Second-hand smoke exposure is associated with an increased risk for upper respiratory infections, allergies, and SUID in the infants. Little data are available for vaping products.
Cannabis We encourage cessation and/or reduction of cannabis use during lactation. *Level of Evidence: 2* *Strength of Recommendation: B*	Possible neurodevelopmental effects	Changes in breast milk composition and decrease in duration of breastfeeding	For individuals who continue to use cannabis and wish to breastfeed, we recommend a shared decision-making process to discuss the risks and benefits.

Alcohol and breastfeeding: Time until Zero Level

Table 2. Alcohol and breast feeding: time (h:min) until the zero level in milk is reached for women at different body weights

Maternal weight		Drinks											
kg	lb	1	2	3	4	5	6	7	8	9	10	11	12
40.8	90	2:50	5:40	8:30	11:20	14:10	17:00	19:51	22:41				
43.1	95	2:46	5:32	8:19	11:05	13:52	16:38	19:25	22:11				
45.4	100	2:42	5:25	8:08	10:51	13:34	16:17	19:00	21:43				
47.6	105	2:39	5:19	7:58	10:38	13:18	15:57	18:37	21:16	23:56			
49.9	110	2:36	5:12	7:49	10:25	13:01	15:38	18:14	20:50	23:27			
52.2	115	2:33	5:06	7:39	10:12	12:46	15:19	17:52	20:25	22:59			
54.4	120	2:30	5:00	7:30	10:00	12:31	15:01	17:31	20:01	22:32			
56.7	125	2:27	4:54	7:22	9:49	12:16	14:44	17:11	19:38	22:06			
59.0	130	2:24	4:49	7:13	9:38	12:03	14:27	16:52	19:16	21:41			
61.2	135	2:21	4:43	7:05	9:27	11:49	14:11	16:33	18:55	21:17	23:39		
63.5	140	2:19	4:38	6:58	9:17	11:37	13:56	16:15	18:35	20:54	23:14		
65.8	145	2:16	4:33	6:50	9:07	11:24	13:41	15:58	18:15	20:32	22:49		
68.0	150	2:14	4:29	6:43	8:58	11:12	13:27	15:41	17:56	20:10	22:25		
70.3	155	2:12	4:24	6:36	8:48	11:01	13:13	15:25	17:37	19:49	22:02		
72.6	160	2:10	4:20	6:30	8:40	10:50	13:00	15:10	17:20	19:30	21:40	23:50	
74.8	165	2:07	4:15	6:23	8:31	10:39	12:47	14:54	17:02	19:10	21:18	23:26	
77.1	170	2:05	4:11	6:17	8:23	10:28	12:34	14:40	16:46	18:51	20:57	23:03	
79.3	175	2:03	4:07	6:11	8:14	10:18	12:22	14:26	16:29	18:33	20:37	22:40	
81.6	180	2:01	4:03	6:05	8:07	10:08	12:10	14:12	16:14	18:15	20:17	22:19	

Ho E, Collantes A, Kapur BM, Moretti M, Koren G. Alcohol and breast feeding: calculation of time to zero level in milk. Biol Neonate. 2001;80(3):219-22.



If you have decided to drink alcohol while breastfeeding, you might wonder how long alcohol stays in your system. We've developed this calculator to give you a *general* idea of what your breast milk alcohol level is based on what you've been drinking and how much time has elapsed. This is based on recommendations from the AAP, CDC, and InfantRisk.

Substance	*Peak effect*	*Half-life*	*RID (%)*
Alcohol	0.5–1.5 hours[237]	4–5 hours[237]	16[9]
Nicotine	0.25 hours[237]	1–2 hours[237]	N/A
Cannabis (THC)	0.25–0.5 hours[237]	25–36 hours[237]	0.4–8.7[9]

Alcohol Breastfeeding should be avoided after moderate-to-high alcohol consumption. Occasional intake of more modest amounts of alcohol during lactation and waiting 2 hours per drink consumed to resume breastfeeding is likely safe. *Level of Evidence: 1* *Strength of Recommendation: A*	Drowsiness, changes in sleep and eating behaviors, possible impact on long-term neurodevelopment	Decreased breast milk production	There is no accumulation of alcohol in breast milk due to alcohol's zero-order pharmacokinetic profile.
Nicotine Breastfeeding is recommended, but individuals should be counseled and supported to reduce or stop the use of nicotine products while breastfeeding. *Level of Evidence: 1* *Strength of Recommendation: A*	Altered feeding and sleep	Breast milk is less nutritional, decreased milk production	Second-hand smoke exposure is associated with an increased risk for upper respiratory infections, allergies, and SUID in the infants. Little data are available for vaping products.
Cannabis We encourage cessation and/or reduction of cannabis use during lactation. *Level of Evidence: 2* *Strength of Recommendation: B*	Possible neurodevelopmental effects	Changes in breast milk composition and decrease in duration of breastfeeding	For individuals who continue to use cannabis and wish to breastfeed, we recommend a shared decision-making process to discuss the risks and benefits.

Stimulants and Breastfeeding

- Internationally: **0.1-1% deliveries with stimulant use disorder in pregnancy**
- In US (2019 NSDUH): **1.79 million 15-44 yr women used non-prescribed stimulants** (cocaine, methamphetamine, amphetamines, MDMA) and/or had **non-medical use of stimulant medications** in the past month
- **Deliveries affected by amphetamine use have doubled** while cocaine use has declined
- **Little data exist** on prevalence of non-prescribed stimulant use **among breastfeeding dyads**

Stimulants and Breastfeeding

- **Limited data on pharmacokinetics of cocaine and methamphetamine** in breast milk
- **Animal and lab data suggest** LMW, solubility in nonpolar solvents, lipid solubility, and high bioavailability of substances may contribute to a **high RID**
- **Clinical data are limited to** the case report level with minimal maternal dose information to **inform the RID of cocaine and methamphetamine**
- **Limited research examining effects of non-prescribed use of stimulants** (amphetamine and dexamphetamine) during breastfeeding
- **Prescribed amphetamines accumulate** in breast milk at **rates higher than maternal plasma levels** during lactation

Stimulants	*Peak effect*	*Half-life*	*RID (%)*
Cocaine	0.5 hour[237]	1.5 hours[238]	N/A
Methamphetamine	2.5 hours[239]	4–5 hours[237]	N/A
MDMA	2–4 hours[237]	4–6 hours[237]	N/A
Cathinone	2.3 hours[240]	1.5 hours[240]	N/A
Amphetamine	IR: 3–4 hours ER:5–7 hours[237]	IR: 10–12 hours ER: 11–12 hours[237]	1.9–2.1[132]
Dexamphetamine	IR: 3 hours ER: 8 hours[237]	IR: 3–4 hours ER: 5–7 hours[237]	4.0–10.6[133]

Risks of Nonprescribed Stimulant Use in Breastfeeding

- **Chronic use: Risk for reduced breast milk production** due to hypoprolactinemia
- **Case report level data describe potential harms in infants exposed to non-prescribed stimulants:** diarrhea, vomiting, abdominal pain, weight loss, tachycardia, tachypnea, hypertension, hypothermia, irritability, tremors, sleep disturbance, and seizures
- **Three documented cases of infant death** related to methamphetamine breast milk exposure
- **Data on long-term effects lacking** for cocaine and methamphetamine exposure during breastfeeding

Stimulants Breastfeeding should be avoided during the use of nonprescribed stimulants. *Level of Evidence: 3* *Strength of Recommendation: B*	Gastrointestinal and cardiorespiratory symptoms, hypothermia, irritability, tremors, sleep disturbance, and seizures	Reduced breast milk production	May accumulate in greater quantities in breast milk than maternal serum. Individuals prescribed stimulants for the treatment of ADHD may safely breastfeed.

With Substances with Significant Concern:

Wait 4-5 half-lives before resuming breastmilk feeding

1-806-352-2519

Infant Risk Center
AT TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER

7. With shorter half-life drugs, it is possible to reduce the infant's exposure to the drug by waiting for 2-3 hours or longer afte dosing before feeding the infant. Remember, the milk level is directly proportional to the maternal plasma level. Determine the time-to-peak interval, as this will indicate how long the mother must wait before feeding. However, you must first determine the dosage form administered. If the tablet formulation is a prolonged release form, then all prior assumptions about half-life are worthless, and you must assume that the drug has a long half-life (12-24 hrs).

8. With radioactive compounds, and for any dangerous drug, wait 4-5 half-lives before starting breastfeeding. After 5 half-lives, approximately 98% of a drug or radioisotope is eliminated. But to be sure, just check the table put out by the Nuclear Regulatory Commission, it's really accurate.

MEDSAFE
New Zealand Medicines and Medical Devices Safety Authority

For drugs that have an infant dose greater than the arbitrary cut-off of 10% of the weight-adjusted maternal dose, it may be reasonable to reduce infant exposure by alternating breast and bottle-feeding. For drugs that are not considered safe in breastfeeding, breast milk may be expressed and discarded for the treatment duration. Breastfeeding may be resumed after the drug has been eliminated from the maternal blood stream. A period of approximately four half-lives will reduce maternal concentrations to around 10% of steady-state concentrations.

https://www.medsafe.govt.nz/profs/puarticles/lactation.htm#:~:text=Breastfeeding%20may%20be%20resumed%20after,%25%20of%20steady%2Dstate%20concentrations.

Stimulants	*Peak effect*	*Half-life*	*RID (%)*
Cocaine	0.5 hour[237]	1.5 hours[238]	N/A
Methamphetamine	2.5 hours[239]	4–5 hours[237]	N/A
MDMA	2–4 hours[237]	4–6 hours[237]	N/A
Cathinone	2.3 hours[240]	1.5 hours[240]	N/A
Amphetamine	IR: 3–4 hours ER:5–7 hours[237]	IR: 10–12 hours ER: 11–12 hours[237]	1.9–2.1[132]
Dexamphetamine	IR: 3 hours ER: 8 hours[237]	IR: 3–4 hours ER: 5–7 hours[237]	4.0–10.6[133]

Dartmouth Health Children's

Dartmouth GEISEL SCHOOL OF MEDICINE

Breastfeeding in Setting of OUD Rx: What is Already Known

- **Medications for Opioid Use Disorder are considered safe in breastfeeding**
  - Buprenorphine
  - Buprenorphine + Naloxone
  - Methadone
- **Few case reports of methadone-exposed young infants experiencing NOWS after abruptly decreasing or weaning BF**
  - Recommend weaning slowly & under direction of a health care professional

Malpas & Darlow. *N Z Med J.* 1999. Isemann et al. *J Perinatol.* 2011.

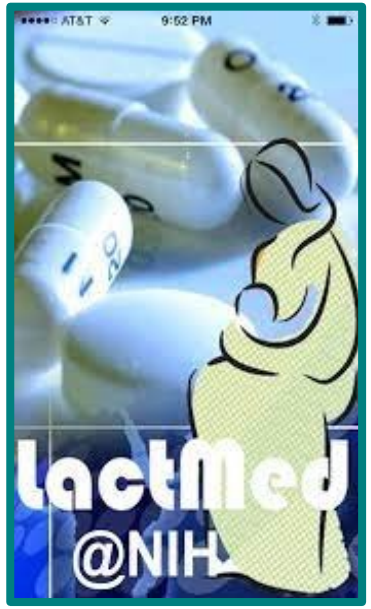


Table 5. Summary of Breastfeeding Recommendations for Substance Use Disorder Treatments

SUD treatment	*Recommendations*	*Level of evidence*	*Strength of recommendation*
Methadone	Compatible with breastfeeding, regardless of dose.	2	A
Buprenorphine (SL)	Compatible with breastfeeding, regardless of dose.	2	A
Naltrexone	Compatible with breastfeeding.	3	B
Acamprosate	Likely compatible with breastfeeding.	3	C
Disulfiram	Not recommended given potential toxicity.	3	C
NRT	Compatible with breastfeeding	2	B
Varenicline	Use cautiously with a shared decision-making approach.	3	C
Bupropion	Compatible with breastfeeding.	2	B

NRT, nicotine replacement therapy; SL, sublingual.

Table 2. Substance Use Disorders Treatment Pharmacokinetics

SUD treatment	*Peak effect*[a]	*Half-life*[a]	*RID (%)*
Buprenorphine (SL)	1–3 hours[237]	27–37 hours[237]	0.1–2.5[9]
Methadone	1–7.5 hours[237]	8–59 hours[237]	1.9–6.5[9]
Naltrexone	PO: 2 hours[237] IM: 2 hours (first peak), 2–3 hours (second peak)[237]	PO: 4 hours IM: 5–10 days[237]	1[9]
Acamprosate	3–8 hours[237]	20–33 hours[237]	N/A
Disulfiram	12 hours[237]	60–120 hours[237]	N/A
NRT	Transdermal: 4 hours Gum: 0.5 hours[237]	Transdermal: 4 hours[237]	N/A
Varenicline	3–4 hours[237]	24 hours[237]	N/A
Bupropion	3–4 hours[237]	21 hours[237]	2.0–11[9,220]

[a]Peak and half-life values reference adult pharmacokinetic data for a potential breastfeeding individual.
IM, intramuscular; NRT, nicotine replacement therapy; PO, by mouth; RID, relative infant dose; SL, sublingual; SUD, substance use disorder.

Breastfeeding Recommendations in the Setting of Substance Use Treatment

1. *Methadone: Breastfeeding is compatible with methadone treatment, regardless of dose, and recommended in mothers taking methadone. During periods of titration, breastfeeding mothers should be counselled to monitor for infant sedation.*
   Level of Evidence: 2. Strength of Recommendation: A.
2. *Buprenorphine sublingual: Breastfeeding is compatible with sublingual-buprenorphine formulations and is recommended in mothers taking sublingual-buprenorphine.*
   Level of Evidence: 2. Strength of Recommendation: A.
3. *Buprenorphine injectable: Safety data for injectable extended-release buprenorphine formulations are lacking. Decisions around and treatment changes to support breastfeeding should be made in consultation with the patient and addiction provider given the risks associated with changes in OUD treatment.*
   Level of Evidence: 3. Strength of Recommendation: C.
4. *Naltrexone: Breastfeeding is compatible with naltrexone and is recommended in mothers taking naltrexone.*
   Level of Evidence: 3. Strength of Recommendations: B.
5. *Acamprosate: Breastfeeding appears compatible with acamprosate, but there is little evidence; thus, providers should pursue a risk–benefit discussion with patients to guide decision-making.*
   Level of Evidence: 3. Strength of Recommendation: C.
6. *Disulfiram: Breastfeeding does not appear compatible with disulfiram given risk of infant exposure and risk of alcohol toxicity in the breastfeeding mother. Thus, other AUD treatments should be pursued over disulfiram in the setting of breastfeeding.*
   Level of Evidence: 3. Strength of Recommendation: C.
7. NRT*: Breastfeeding is compatible with NRT and is recommended in mothers taking NRT. The type of NRT should be determined by the clinical needs of the breastfeeding mother.*
   Level of Evidence: 2. Strength of Recommendation: B.
8. *Varenicline: Animal data suggest there may be some harms associated with varenicline exposure through breast milk, though clinical data are lacking. Providers should pursue a risk–benefit discussion with patients to guide decision-making based on the severity of tobacco use disorder and the clinical context.*
   Level of Evidence: 3. Strength of Recommendation: C.
9. *Bupropion: Breastfeeding is compatible with bupropion, and bupropion is recommended in the setting of breastfeeding.*
   Level of Evidence: 2. Strength of Recommendation: B.

General breastfeeding recommendations in the setting of maternal substance use

1. *Multidisciplinary care: Those who have SUD or use substances during pregnancy or the postpartum period should engage in multidisciplinary prenatal and postpartum substance use care.*
   Level of Evidence: 2. Strength of Recommendation: B.
2. *Breastfeeding initiation timing: Individuals who discontinue nonprescribed substance use by the delivery hospitalization can be supported in breastfeeding initiation.*
   Level of Evidence: 2. Strength of Recommendation: B.
3. *Perinatal breastfeeding support: Targeted perinatal dyadic breastfeeding care such as prenatal education, inpatient and postpartum lactation support, and ongoing multidisciplinary SUD treatment can facilitate breastfeeding continuation.*
   Level of Evidence: 2. Strength of Recommendation: B.
4. *Establish consistent approaches: Individual programs and institutions should establish breastfeeding guidelines to mitigate bias, facilitate consistency across providers, and empower individuals with SUD.*
   Level of Evidence: 3. Strength of Recommendation: C.

Breastfeeding Recommendations in the Setting of Nonprescribed Substance Use

1. *Opioids: Breastfeeding should be avoided during the use of nonprescribed opioids.*
   Level of Evidence: 2. Strength of Recommendation: B.
2. *Sedative hypnotics: Breastfeeding should be avoided during the use of nonprescribed sedative hypnotics.*
   Level of Evidence: 3. Strength of Recommendation: C.
3. *Prescribed benzodiazepines: In breastfeeding mothers who stop nonprescribed use but remain on prescribed benzodiazepine tapers for the treatment of benzodiazepine use disorder, or for anxiety disorders, mothers may return to breastfeeding.*
   Level of Evidence: 2. Strength of Recommendation: B.
4. *Stimulants: Breastfeeding should be avoided during the use of nonprescribed stimulants.*
   Level of Evidence: 3. Strength of Recommendation: B.
5. *Alcohol: Breastfeeding should be avoided immediately after moderate-to-high alcohol consumption. Occasional intake of modest amounts of alcohol (two 150 mL glasses of wine or 1.5 pints of beer) during lactation and waiting for 2 hours per drink consumed to resume breastfeeding is likely safe.*
   Level of Evidence: 1. Strength of Recommendation: A.
6. *Combustible tobacco and nicotine vaping: We recommend breastfeeding to be continued in those mothers who smoke or vape, given the documented benefits, but suggest they reduce their use as much as possible and avoid tobacco smoking and nicotine vaping product use around their infants.*
   Level of Evidence: 1. Strength of Recommendation: A.
7. *Cannabis: We encourage cessation and/or reduction of cannabis use during breastfeeding.*[234–236]
   Level of Evidence: 2. Strength of Recommendation: B.
8. *For mothers who continue to use cannabis and wish to breastfeed, we recommend a shared decision-making process to discuss the risks and benefits of breastfeeding. Discussions may be guided by examining the route and type of cannabis product use, potency of product use, and frequency of use.*
   Level of Evidence: 3. Strength of Recommendation: C.

Marijuana Use During Pregnancy and Breastfeeding: Implications for Neonatal and Childhood Outcomes

Sheryl A. Ryan, MD, FAAP,[a] Seth D. Ammerman, MD, FAAP, FSAHM, DABAM,[b] Mary E. O'Connor, MD, MPH, FAAP,[c,d]
COMMITTEE ON SUBSTANCE USE AND PREVENTION, SECTION ON BREASTFEEDING

Pharmacokinetics of Marijuana in Human Milk

The excretion of medications into human milk depends on chemical factors about the drug, including ionization, the molecular weight, the solubility in lipids and water, and the pH of the drug. The major psychoactive cannabinoid of marijuana, THC, is 99% protein bound, is lipid soluble, and has a molecular weight of 314.[89] The low molecular weight and high lipid solubility combine to cause marijuana transfer into human milk. It also causes storage of THC in lipid-filled tissues such as the brain. Little is known about the other cannabinoids in marijuana and their transfer into human milk. There are few data about the transfer of THC into human milk. With Table 1, we list the results from the only 2 primary references about concentrations of THC in human milk. These limited data by Perez-Reyes and Wall[90] and Marchei et al[91] reveal that THC transfers into human milk. There is no information about how the amount transferred is related to the concentration of THC in the marijuana, the frequency of use, or the concentration in maternal plasma.

Pediatrics. 2018;142(3):e20181889
https://publications.aap.org/pediatrics/article/142/3/e20181889/38625/Marijuana-Use-During-Pregnancy-and-Breastfeeding

Policy Statement: Breastfeeding and the Use of Human Milk

Joan Younger Meek, MD, MS, RD, FAAP, FABM, IBCLC,[a] Lawrence Noble, MD, FAAP, FABM, IBCLC,[b,c] and the Section on Breastfeeding

Marijuana Use

Current data are insufficient to assess the effects of exposure of infants to maternal marijuana use during breastfeeding. As a result, maternal marijuana use while breastfeeding is discouraged. Because the potential risks of infant exposure to marijuana metabolites are unknown, women should be informed of the potential risk of exposure during lactation and encouraged to abstain from using any marijuana products and avoid second-hand marijuana smoke exposure.[36]

Pediatrics. 2022;150(1):e2022057988
Policy Statement: Breastfeeding and the Use of Human Milk | Pediatrics | American Academy of Pediatrics (aap.org)

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™

The Effect of Marijuana on Breastfed Infants

There are 2 small studies by Tennes et al[92] and Astley and Little[93] from the 1980s in which the authors attempt to evaluate the effect of maternal marijuana use while breastfeeding on the infant. Both studies included mothers who also used alcohol, other drugs, and tobacco. Tennes et al[92] studied 258 mothers using marijuana and compared them to mothers who did not use marijuana. They examined the infants at 24 to 72 hours of age and a subgroup at 1 year of age. They found the following results: (1) marijuana users were more likel to use illicit drugs and alcohol with a significant linear dose-response relationship between the use of marijuana and alcohol ($R = 0.45$; $P < .01$); (2) infants exposed to marijuana were slightly shorter; (3) most mothers decreased use of marijuana during pregnancy; and (4) no differences were noted in the 1-year growth and scores on the Bayley Scales of Infant Development; however, only 27 of the infants tested at 1 year were exposed to marijuana while being breastfed. These results are limited by the small number

TABLE 1 Primary Sources for the Concentrations of THC Transmission Into Human Milk

Mother	Maternal Marijuana Dose	Amount of THC in Maternal Plasma	Amount of THC in Human Milk
A[91]	Smoked in pipe 1 time per day	—	105 ng/mL
B[91]	Smoked in pipe 7 times per day	7.2 ng/mL	60.3 ng/mL
C[90]	No information	—	86 ng/mL

—, not applicable.

Marijuana Use During Pregnancy and Breastfeeding: Implications for Neonatal and Childhood Outcomes

Sheryl A. Ryan, MD, FAAP,[a] Seth D. Ammerman, MD, FAAP, FSAHM, DABAM,[b] Mary E. O'Connor, MD, MPH, FAAP,[c,d]
COMMITTEE ON SUBSTANCE USE AND PREVENTION, SECTION ON BREASTFEEDING

INTERIM UPDATE

The American College of Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

ACOG COMMITTEE OPINION

Number 722 • October 2017

(Replaces Committee Opinion No. 637, July 2015)

Committee on Obstetric Practice

This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed.

INTERIM UPDATE: This Committee Opinion is updated as highlighted to reflect a limited, focused change in the language and supporting evidence regarding marijuana use and neonatal outcomes.

Introduction

Cannabis sativa (marijuana) is the illicit drug most commonly used during pregnancy. The self-reported prevalence of marijuana use during pregnancy ranges from 2% to 5% in most studies but increases to 15–28% among young, urban, socioeconomically disadvantaged women (1–5). Higher rates of use are found when querying women at the time of delivery rather than at prenatal visits because some users may not seek prenatal care (5). Notably, 34–60% of marijuana users continue use during pregnancy, with many women believing that it is relatively safe to use during pregnancy and less expensive than tobacco (3, 4, 6, 7). A recent study noted that 18.1% of pregnant women reporting marijuana use in the past year met criteria for marijuana abuse, or dependence, or both. (8). A growing number of states are legalizing marijuana for medicinal or recreational purposes, and its use by pregnant women could increase even further as a result.

Dartmouth Health Children's

Effects of Marijuana Use on Lactation

There are insufficient data to evaluate the effects of marijuana use on infants during lactation and breastfeeding, and in the absence of such data, marijuana use is discouraged (42). Breastfeeding women should be informed that the potential risks of exposure to marijuana metabolites are unknown and should be encouraged to discontinue marijuana use. The American College of Obstetricians and Gynecologists' Breastfeeding page, available at www.acog.org/About-ACOG/ACOG-Departments/Breastfeeding, provides more resources about breastfeeding for clinicians and patients.

Medical Marijuana

Because marijuana is neither regulated nor evaluated by the U.S. Food and Drug Administration, there are no approved indications, contraindications, safety precautions, or recommendations regarding its use during pregnancy and lactation. Likewise, there are no standardized formulations, dosages, or delivery systems. Smoking, the most common route of administration of THC, cannot be medically condoned during pregnancy and lactation. Therefore, obstetrician–gynecologists should be discouraged from prescribing or suggesting the use of marijuana for medicinal purposes during the period before pregnancy, and during pregnancy and lactation. Rather, pregnant women or women contemplating pregnancy

Cannabis and Breastfeeding

- **2021 NSDUH: 7.2% US pregnant women** report past-month cannabis use
- **Regulated and illicit cannabis supply more potent**
- **Other adulterants may be present** in illicit supplies

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

Cannabis and Breastfeeding

- **Concentration of THC in human milk may exceed maternal plasma concentrations** due to **high lipid content** in human milk + **lipophilic nature** of cannabinoids
  - RID estimates: 0.4-8.7%
  - Peak concentrations occur w/in 1-hr post-ingestion
  - Dissipate over time w/ half-life of 17 hr + up to 6 weeks for clearance

Substance	*Peak effect*	*Half-life*	*RID (%)*
Alcohol	0.5–1.5 hours[237]	4–5 hours[237]	16[9]
Nicotine	0.25 hours[237]	1–2 hours[237]	N/A
Cannabis (THC)	0.25–0.5 hours[237]	25–36 hours[237]	0.4–8.7[9]

Risks and Medical Recommendations re: Cannabis Consumption Require Individualized Assessment

- **Factors:** Mom's PMHx, drug formulation, potency, duration, and route of ingestion
- **Decreased BF duration noted**: Cannabis use vs other social-structural factors?
- **Cannabis may affect breast milk composition**: Decreased immunoglobulins + increased lactose
- **Limited data exist describing acute or long-term effects** related to infant cannabis exposure through breast milk
  - 2020 systematic review found **only two observational studies** on infant outcomes each reporting **conflicting results on infant motor development at 12 months** - *unable to control for prenatal cannabis exposure, thus further limiting data on cannabis exposure by breast milk alone*

Cannabis We encourage cessation and/or reduction of cannabis use during lactation. *Level of Evidence: 2* *Strength of Recommendation: B*	Possible neurodevelopmental effects	Changes in breast milk composition and decrease in duration of breastfeeding	For individuals who continue to use cannabis and wish to breastfeed, we recommend a shared decision-making process to discuss the risks and benefits.

Barriers to Breastfeeding in Setting of SUD

- **Women with SUD are less likely to initiate and maintain breastfeeding** compared to those without SUD
- **High rates of co-occurring mental illness, trauma, + social and structural inequities** among pregnant people with SUD
  - High co-occurrence of medical and psychiatric conditions impacting lactation
  - Pharmacotherapy may impact breast milk production
  - Pain with BF in the context of a SUD, and/or physical and sexual trauma histories that complicate breastfeeding experiences
  - Risk with polysubstance use
- **May be distrustful of BF recommendations** they receive from providers

BREASTFEEDING AND MENTAL HEALTH TREATMENT

Most medications for co-occurring psychiatric conditions are safe & in most cases, benefits of BF outweigh potential risks

- **Aim for medication safest in BF for maternal condition being treated**
  (e.g., Paxil or Zoloft for depression/anxiety/PTSD rather than Prozac)
- **Use meds w/ shorter half lives** and w/ shorter peak intervals
- **Attempt to minimize exposure to infant**
  - Take med at time of BF or just after
  - Try to avoid BF infant when med reaches max plasma concentration

TABLE 4 Medications and Breastfeeding References

Reference	Website
Drugs and Lactation Database (LactMed), National Library of Medicine/National Institutes of Health, available via the internet or through mobile applications	https://www.ncbi.nlm.nih.gov/books/NBK501922/?report=classic
Dr Thomas Hale's Medications and Mother's Milk; Infant Risk Center at Texas Tech University	https://www.infantrisk.com/
MotherToBaby medication fact sheets	https://mothertobaby.org/fact-sheets-parent/
Sachs HC; American Academy of Pediatrics, Committee on Drugs. Clinical report: The transfer of drugs and therapeutics into human breast milk: an update on selected topics. Pediatrics. 2013;132(3):e796-e809. Reaffirmed May 2018	https://pediatrics.aappublications.org/content/132/3/e796

Barriers to Breastfeeding in Setting of SUD

- **Women with SUD are less likely to initiate and maintain breastfeeding** compared to those without SUD
- **High rates of co-occurring mental illness, trauma, + social and structural inequities** among pregnant people with SUD
  - High co-occurrence of medical and psychiatric conditions impacting lactation
  - Pharmacotherapy may impact breast milk production
  - Pain with BF in the context of a SUD, and/or physical and sexual trauma histories that complicate breastfeeding experiences
  - Risk with polysubstance use
- **May be distrustful of BF recommendations** they receive from providers

Positive Regard: Assume that people are inherently good

Unconditional positive regard can be a great tool for boosting people's self-esteem and showing them you **believe they can be good parents.** The concept of unconditional positive regard assumes that people are inherently good. It means that **when you talk to someone you address the whole person, instead of just focusing on their substance use.**

When you have unconditional positive regard for someone:

- **You respect their right to make important decisions** about their body and their health.
- **You want what is best** for them.
- **You believe that they are competent and capable of choosing what is right** for them based on their unique circumstances.

NATIONAL HARM REDUCTION COALITION

THE MOVEMENT WHO WE ARE

Training Guide

PREGNANCY AND SUBSTANCE USE: A HARM REDUCTION TOOLKIT

https://harmreduction.org/issues/pregnancy-and-substance-use-a-harm-reduction-toolkit/

Dartmouth Health Children's

Special thanks to Dr. Sharon Ostfeld-Johns for recognition of "Positive Regard"
https://dhvideo.webex.com/webappng/sites/dhvideo/recording/fb493d3e937a103cbe1ba60682dd3eea/playback

Provider Impact on Breastfeeding Initiation

- **Women encouraged to breastfeed are > 4x more likely to initiate breastfeeding than those who do not receive encouragement**
  - **Among those traditionally less likely to BF, provider encouragement significantly ↑ BF initiation by:**
    - **> 3x** Low-income, young, less-educated women
    - **~ 5x** African American women
    - **~11x** Single women

Dartmouth Health Children's

Lu. *Obstetrics and Gynecol.* 2001.

Provider Impact on Breastfeeding Exclusivity

- **Mothers who perceive OB or pediatric provider favors mixed feeding are ~ 2/3 less likely to be exclusively BF (EBF) at 1 & 3 mo**
  - **but ~ 1.5 x more likely to EBF if they perceive provider favors this**

Ramakrishnan *et al. J Hum Lact.* 2014.

Dartmouth Health Children's

MOTIVATIONAL INTERVIEW METHODS

ASK	permission	*Can we talk about...*
	open question	*What do you think about...*
	closed question	*Would you want to...*
TELL	education	*We know that...*
	information	*Some of the choices are...*
	recomendations	*You might want to...*
LISTEN	appreciate	*You know what you...*
	reflect	*You want to, but...*
	summarize	*So your plan is...*

BEST PRACTICES TO AVOID USING STIGMATIZING LANGUAGE

Don't Use	Do Use	Why
"addict" *"abuser"* *"junkie"*	*"person who uses heroin"* *"person with cocaine use disorder"*	*Using "person-first" language demonstrates that you value the person, and are not defining them by their drug use.*
"got clean"	*"no longer uses drugs"*	*"Clean," although a positive word, implies that when someone is using they are "dirty."*
"addicted newborn" *"born addicted"* *"crack baby"*	*"newborn opioid withdrawal (NOW)"* *"baby with prenatal cocaine exposure"*	*Infants are not addicted; they have prenatal substance exposure and/or physiological dependence.*
"medication replacement therapy (MRT)" *"medication assisted therapy (MAT)"*	*"opioid agonist therapy (OAT)"* *"medication for opioid use disorder (MOUD)"* *"medication for alcohol use disorder"*	*These categories are value-neutral and precise.* *When discussing a specific medication, refer to it by both its generic and brand names.*

https://harmreduction.org/issues/pregnancy-and-substance-use-a-harm-reduction-toolkit/

Barriers to Breastfeeding in Presence of SUD

- **Infant factors can complicate breastfeeding** in substance exposed parent-infant dyads
- **Infants with NOWS:**
  - **May experience greater difficulty with latch**
  - **Have significantly more weight loss** leading to formula supplementation
  - **Have long hospitalizations** resulting in greater parent-infant separation

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

Facilitators to Breastfeeding in Presence of SUD

- **Comprehensive prenatal and addiction care** to support substance use stabilization by delivery
- **Trauma-informed approach** spanning prenatal, intrapartum, & postpartum
- **Prenatal breastfeeding education specific to context of SUD** may encourage more parents with SUD to breastfeed
- **Interdisciplinary care models with mental health care, addiction treatment, case management, and social support services + prenatal care**:
  - Yield **better perinatal outcomes**
  - Can **support shared decision-making process** that facilitates informed, individualized discussions regarding specific benefits and potential risks of breastfeeding

Dartmouth Health Children's

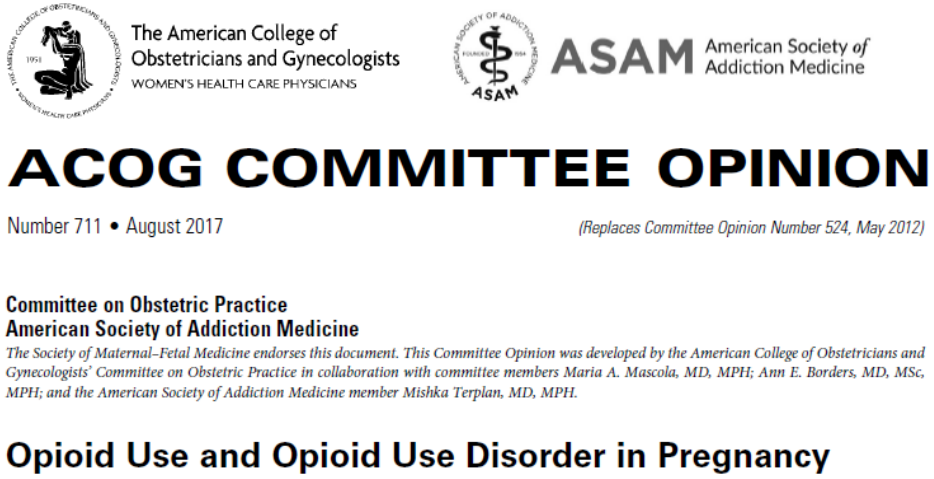
Academy of Breastfeeding Medicine Clinical Protocol #21: Breastfeeding in the Setting of Substance Use and Substance Use Disorder (Revised 2023)

Dartmouth GEISEL SCHOOL OF MEDICINE

Facilitators to Breastfeeding in Presence of SUD

- **Implement consistent, supportive institutional policies**
- **Promote STS + rooming-in**
- **Counsel on impact of:**
  - Infant withdrawal
  - Co-occurring conditions and treatments
  - Smoking
- **Provide specialized lactation support in hospital and after discharge** responsive to social and mental health needs

Other Helpful Resources


The American College of Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

ASAM American Society of Addiction Medicine

ACOG COMMITTEE OPINION

Number 711 • August 2017 (Replaces Committee Opinion Number 524, May 2012)

Committee on Obstetric Practice
American Society of Addiction Medicine

The Society of Maternal–Fetal Medicine endorses this document. This Committee Opinion was developed by the American College of Obstetricians and Gynecologists' Committee on Obstetric Practice in collaboration with committee members Maria A. Mascola, MD, MPH; Ann E. Borders, MD, MSc, MPH; and the American Society of Addiction Medicine member Mishka Terplan, MD, MPH.

Opioid Use and Opioid Use Disorder in Pregnancy

ACOG
The American College of Obstetricians and Gynecologists

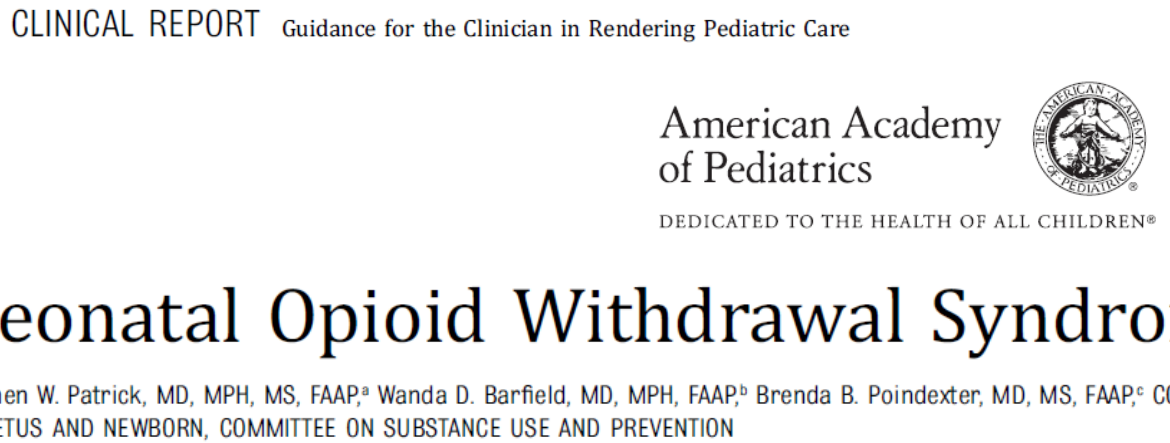
ACOG COMMITTEE OPINION

Number 820

Committee on Obstetric Practice
Breastfeeding Expert Work Group

This Committee Opinion was developed by the American College of Obstetricians and Gynecologists' Breastfeeding Expert Work Group and the Committee on Obstetric Practice in collaboration with work group members Adetola F. Louis-Jacques, MD; Andrea B. Joyner, MD, IBCLC; and Susan D. Crowe, MD.

Breastfeeding Challenges


CLINICAL REPORT Guidance for the Clinician in Rendering Pediatric Care

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®

Neonatal Opioid Withdrawal Syndrome

Stephen W. Patrick, MD, MPH, MS, FAAP,[a] Wanda D. Barfield, MD, MPH, FAAP,[b] Brenda B. Poindexter, MD, MS, FAAP,[c] COMMITTEE ON FETUS AND NEWBORN, COMMITTEE ON SUBSTANCE USE AND PREVENTION

Pediatrics. 2020;146(5):e2020029074

Dartmouth Health Children's

Dartmouth GEISEL SCHOOL OF MEDICINE

NNEPQIN

NORTHERN NEW ENGLAND
PERINATAL QUALITY IMPROVEMENT NETWORK

The following guidelines are intended only as a general educational resource for hospitals and clinicians, and are not intended to reflect or establish a standard of care or to replace individual clinician judgment and medical decision making for specific healthcare environments and patient situations.

NNEPQIN Breastfeeding Guidelines for Women with a Substance Use Disorder

Recommendations and Guiding Principles:

1. Mothers with substance use disorders (including those receiving medication assisted treatment with methadone or buprenorphine) with no other medical contraindication to breastfeed should be encouraged to breastfeed unless the risks of substance use clearly outweigh the medical, psychosocial, and financial benefits of breastfeeding. Women using alcohol or drugs should be advised, educated, and supported to cease alcohol or drug use due to risks of harm to infant during parenting and breastfeeding.
2. Decisions related to initiation and/or continuation of breastfeeding for women with substance use disorders should be made together with the woman, her obstetrical and treatment providers, lactation consultant(s), social worker(s), and infant provider(s) in an informed and individualized manner based on existing evidence available.
3. Communication with pregnant women with a history of substance use regarding nutritional recommendations should emphasize solidarity with and respect for the woman in order to support continued engagement in her needed care and support for high quality parenting.
4. Although substance use carries with it potential risk to the infant, substance use is not necessarily a contraindication to breastfeeding (WHO 2014). Therefore, a recommendation should be made to abstain from breastfeeding only if a woman expresses an intent to continue substance use *and* refuses substance use treatment.
5. Rapid urine drug screening is associated with a significant rate of false positives and thus confirmatory testing should be performed if screening results are inconsistent with maternal self-report.

Guidelines for the identification and management of substance use and substance use disorders in pregnancy

https://iris.who.int/bitstream/handle/10665/107130/9789241548731_eng.pdf;jsessionid=9FFB8A7762CC09FE8FA53691828DC8F2?sequence=1

Dartmouth Health Children's

World Health Organization

Dartmouth GEISEL SCHOOL OF MEDICINE

References/Recommended Readings

- AAP BF/Human Milk: https://publications.aap.org/pediatrics/article/150/1/e2022057988/188347/Policy-Statement-Breastfeeding-and-the-Use-of
- AAP NOWS: https://publications.aap.org/pediatrics/article/146/5/e2020029074/75310/Neonatal-Opioid-Withdrawal-Syndrome
- AAP MJ in Preg/BF: https://publications.aap.org/pediatrics/article/142/3/e20181889/38625/Marijuana-Use-During-Pregnancy-and-Breastfeeding
- ABM BF + SUD: https://abm.memberclicks.net/assets/DOCUMENTS/PROTOCOLS/ABM%20Clinical%20Protocol%2021%20SUD_English.pdf
- ACOG OUD in Preg: https://dh.sharefile.com/d-s31b3c21dd6ae4ca995f2eff36dfda26c
- ACOG MJ in Preg/BF: https://dh.sharefile.com/d-s43aea645966f4222846468775e69c553
- ACOG Breastfeeding Challenges: https://dh.sharefile.com/d-s00643ac7766f4b2cb1b9cc4432aedc67
- NNEPQIN BF + SUD: NNEPQIN-Breastfeeding-Guidelines-2.21.17-final.pdf
- WHO SUD in preg: https://iris.who.int/bitstream/handle/10665/107130/9789241548731_eng.pdf;jsessionid=9FFB8A7762CC09FE8FA53691828DC8F2?sequence=1

Academy of Breastfeeding Medicine

THE AMERICAN ACADEMY OF PEDIATRICS

ACOG The American College of Obstetricians and Gynecologists

NNEPQIN

World Health Organization

CLINICAL INFO HIVgov

Enter Your Search Term...

In affiliation with HIV.gov

About | Guidelines | Drug Database | Glossary | News | Resources | Contact Us | Language (EN)

HOME > GUIDELINES > PERINATAL HIV CLINICAL GUIDELINES > What's New in the Guidelines

Recommendations for the Use of Antiretroviral Drugs During Pregnancy and Interventions to Reduce Perinatal HIV Transmission in the United States

The information in the brief version is excerpted directly from the full-text guidelines. The brief version is a compilation of the tables and boxed recommendations.

- Individuals with HIV who are on ART with a sustained undetectable viral load and who choose to breastfeed should be supported in this decision **(AIII).**

Rating of Recommendations: *A = Strong; B = Moderate; C = Optional*

Rating of Evidence: *I = One or more randomized trials with clinical outcomes and/or validated laboratory endpoints; II = One or more well-designed, nonrandomized trials or observational cohort studies with long-term clinical outcomes; III = Expert opinion*

Dartmouth Health Children's

Dartmouth GEISEL SCHOOL OF MEDICINE

Questions?