ACCESS For Moms Clinical Conversations Webinar: Breastfeeding and Substance Use Disorder

Sharon Ostfeld-Johns, MD, IBCLC

Assistant Professor of Clinical Pediatrics, Section of Hospital Medicine, Department of Pediatrics

Assistant Professor of Medicine, Program in Hospital Medicine, Department of Internal Medicine

Yale School of Medicine

Learning Objectives

- Discuss the in utero effects of substance use and substance use disorder to contextualize breastfeeding decision-making
- Understand the benefits of breastfeeding for the birthing person and for the infant
- Contextualize breastfeeding decision-making in the setting of prenatal substance exposure, including a review of the Academy of Breastfeeding Medicine's 2023 guidance
- Discuss current evidence regarding substance use disorder treatment in the context of post-partum health care, including contingency management related to breast milk
- Examine the challenges of supporting breast milk feeding for mothers and infants who are separated (i.e. incarceration or DCF custody)
- Review safe handling recommendations for expressed breast milk

Untreated maternal depression during pregnancy causes…

- Risks for baby: prematurity, low birth weight, and intrauterine growth restriction. Later in life: higher impulsivity, maladaptive social interactions, and cognitive, behavioral, and emotional difficulties
- Risks for parent: increased postpartum depression and suicidality, increased hospital admissions and pregnancy complications such as pre-eclampsia and high-risk health behaviors (ie smoking, illicit substance and alcohol abuse, and poor nutrition)

Chan J, Natekar A, Einarson A, Koren G. Risks of untreated depression in pregnancy. Can Fam Physician. 2014 Mar;60(3):242-3. PMID: 24627378; PMCID: PMC3952758.

Maternal depression has an impact on amygdala connection

- PMD symptoms were significantly correlated with amygdala–cerebellum connectivity.
- Enhanced amygdala–cerebellar coupling in utero may represent an early neural marker of risk for later emotional dysregulation.
- These findings extend models of prenatal programming by addressing the earliest stages of human brain development and by highlighting the cerebellum's role in emotional network development.

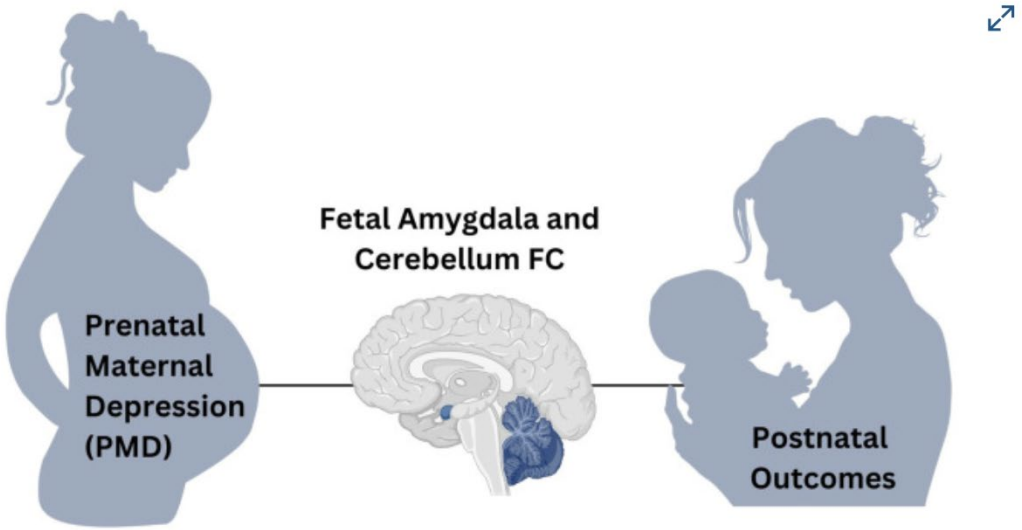


Figure 1 Study Conceptual Model

Individual discrimination and structural racism: same measured effect

Article | Published: 15 November 2023

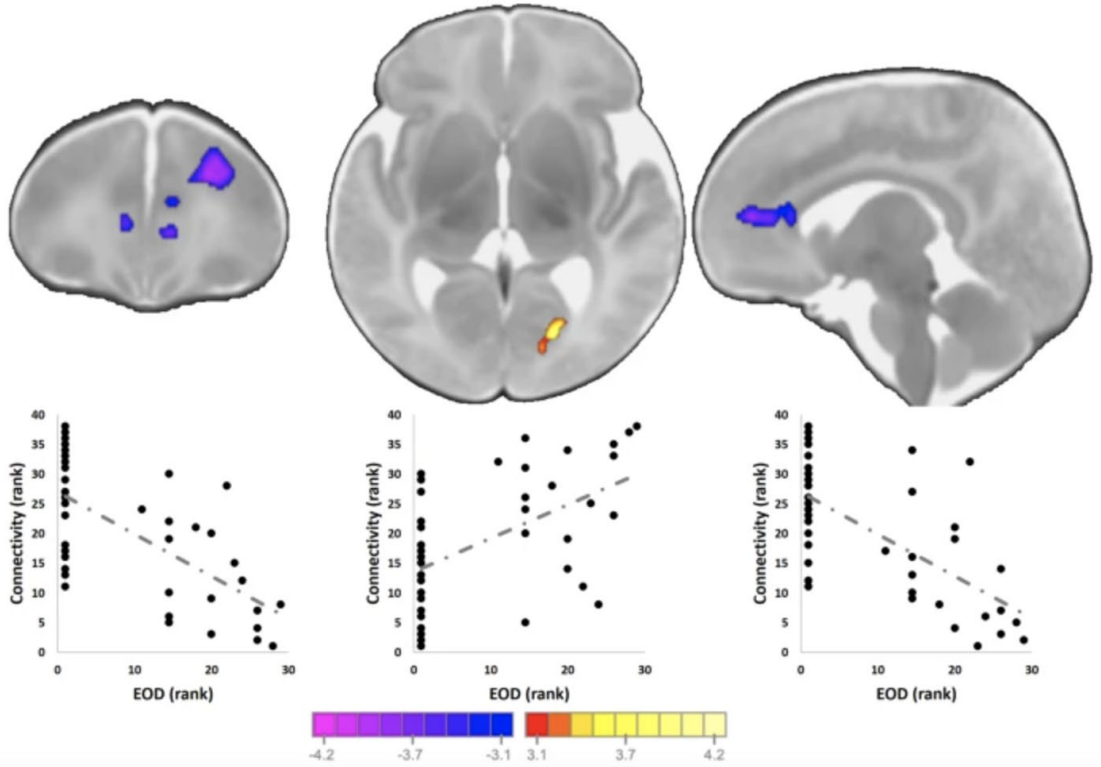
The effects of experience of discrimination and acculturation during pregnancy on the developing offspring brain

Marisa N. Spann, Kiarra Alleyne, Cristin M. Holland, Antonette Davids, Arline Pierre-Louis, Claire Bang, Victoria Oyeneye, Rebecca Kiflom, Eileen Shea, Bin Cheng, Bradley S. Peterson, Catherine Monk & Dustin Scheinost

Neuropsychopharmacology (2023) | Cite this article

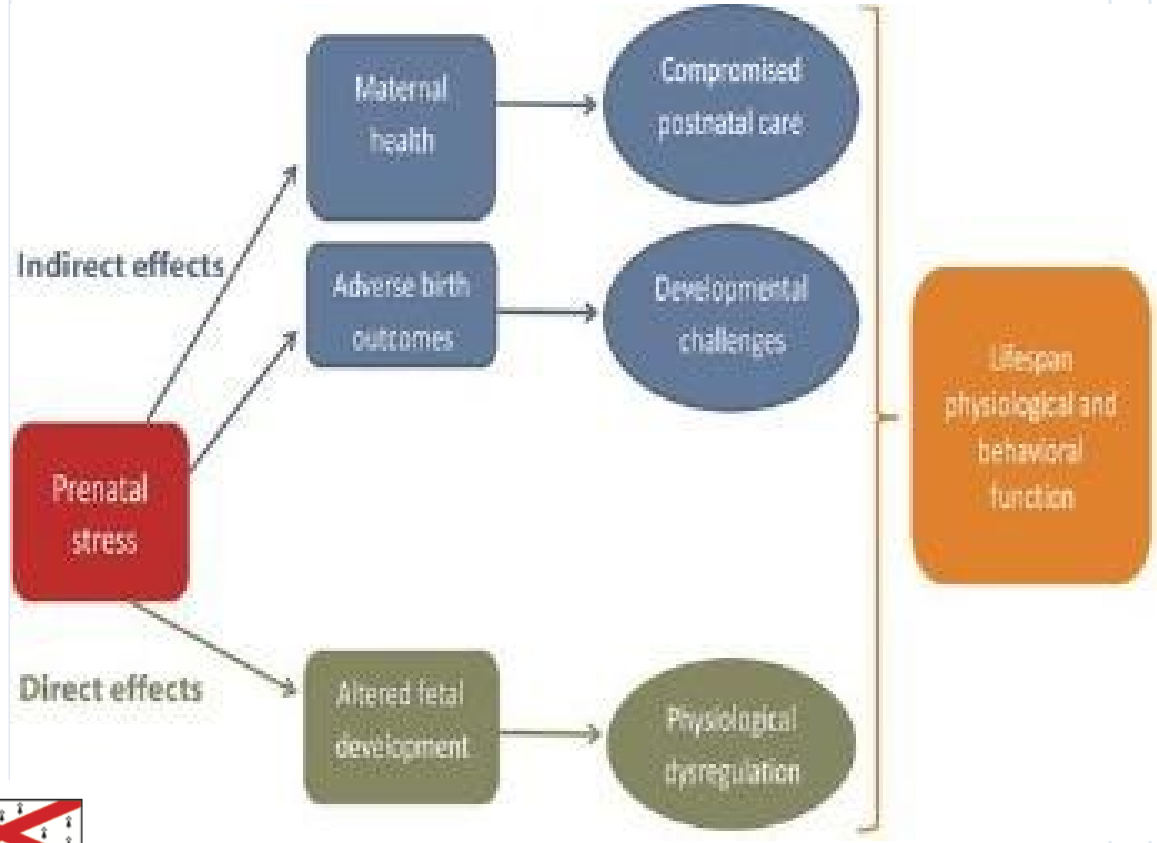
Associations between prenatal discrimination and offspring amygdala connectivity

Fig. 3: Associations prenatal experiences of discrimination and offspring amygdala connectivity.



Stress during pregnancy has a direct impact on outcomes

Maternal Stress Pathways Model

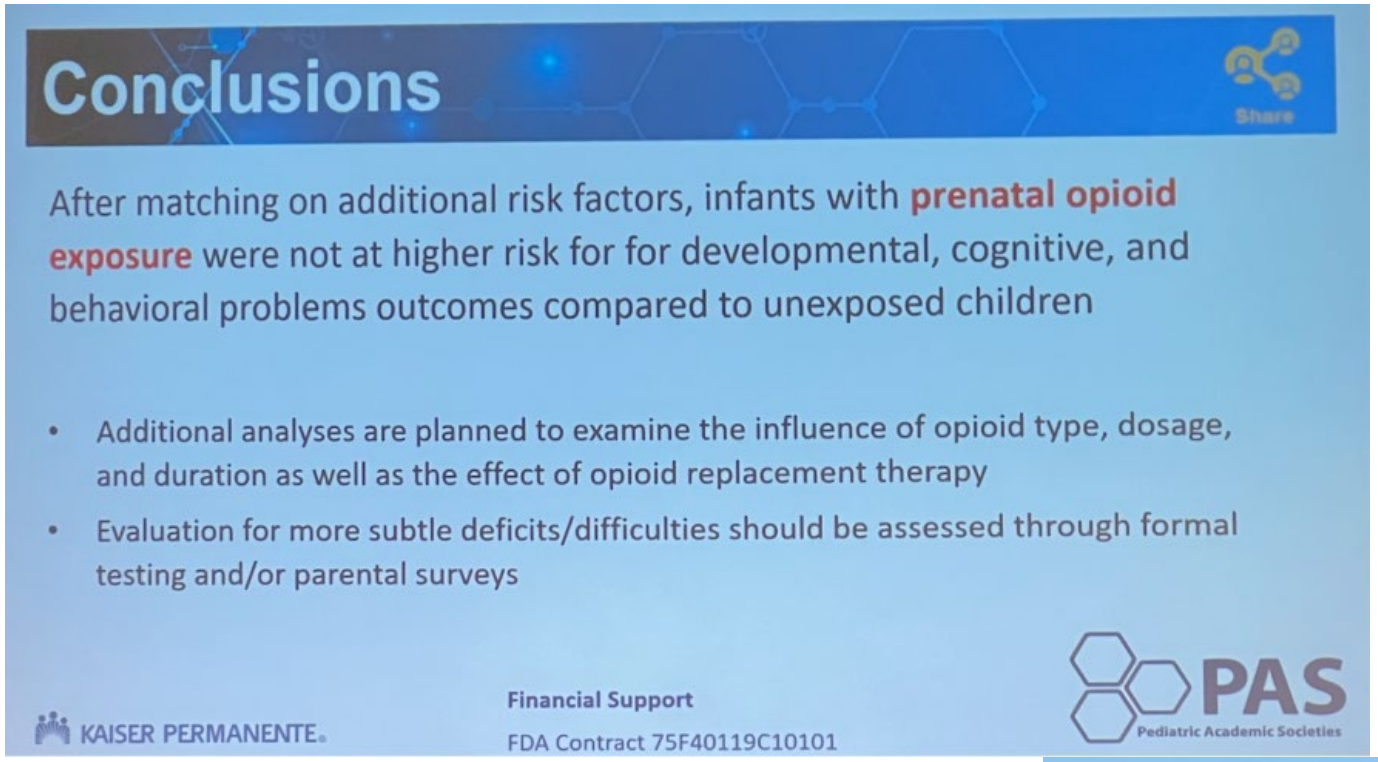


UPSIDE Cohort Study

Associations between neighborhood stress and maternal sex steroid hormones in pregnancy

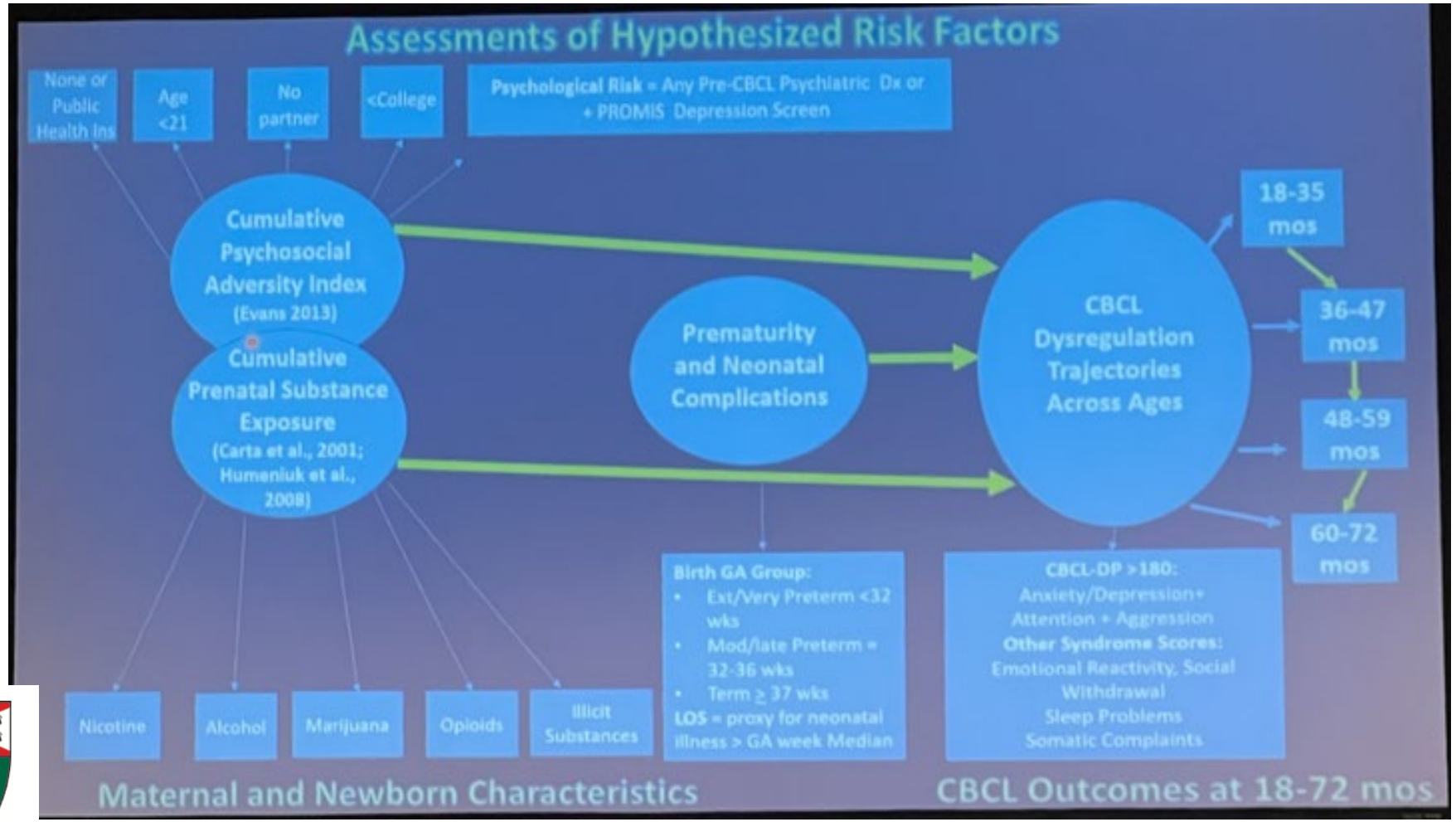
> “
>
> Our findings suggest that greater exposure to neighborhood disorder is associated with higher levels of testosterone across pregnancy, particularly among mothers carrying male fetuses.
>
> Our findings are relevant to perinatal outcomes given evidence linking sex steroid dysregulation and pregnancy complications, adverse birth outcomes, and adverse long-term child health outcomes.

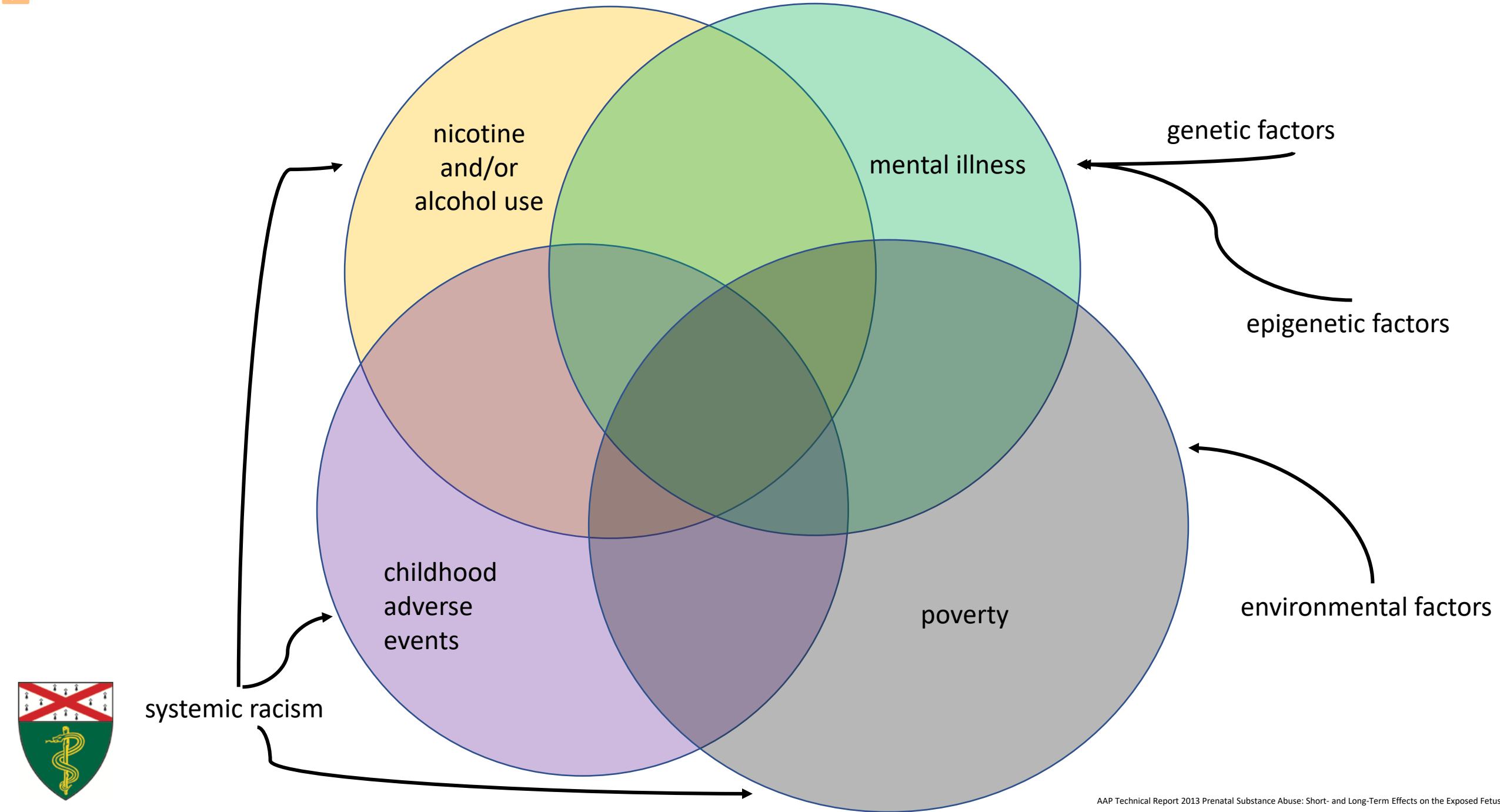
Prenatal opioid exposure: interpreting developmental risk and vulnerability



Over half (52%) of infants exposed to *in-utero* opioids, regardless of NAS diagnosis, were ≥2 standard deviations below the mean for all 6 domains of the BDIST. (Table 2)

Overlapping factors mediate outcomes





AAP Technical Report 2013 Prenatal Substance Abuse: Short- and Long-Term Effects on the Exposed Fetus

Protective Factors: Positive Parenting Interventions

Neuropsychiatric **effects due to prenatal exposure are highly mitigated by positive parenting interventions** postnatally.[19]

Infant and Child Development. The role of mother's prenatal substance use disorder and early parenting on child cognition at school age. Volume 30, Issue 3. May/June 2021.

Summing Up

The physiologic impact of maternal substance use on the fetus is highly variable

What may be most harmful to fetuses about many substances is their legal status and context of use, leading to:

- barriers in communication and access to prenatal care,
- social stress,
- stigma,
- poverty,
- incarceration,
- etc.

Infant and Child Development. The role of mother's prenatal substance use disorder and early parenting on child social cognition at school age Volume30, Issue3 May/June 2021

Implications

- Goal is to support people maximally during pregnancy
  - Prenatal care
  - Social support, connect with appropriately matched services
  - Mental health support, disorder identification and treatment
  - Substance use/use disorder identification with universal validated screening questionnaires
  - Substance use/use disorder treatment
    - Alcohol use cessation, tobacco use cessation, medications for opioid use disorder, etc
  - Mitigation of stressors, including experiences of discrimination
  - Preparation for parenting
  - Identification of and mitigation of barriers to dyads remaining together after delivery

Caitlin E. Martin, Tawany Almeida, Bhushan Thakkar & Tiffany Kimbrough (2022) Postpartum and addiction recovery of women in opioid use disorder treatment: A qualitative study, Substance Abuse, 43:1, 389-396, DOI: 10.1080/08897077.2021.1944954

NYU Review of Law & Social Change 2019 The Harm of Child Removal Shanta Trivedi

Mical Raz, Alan Dettlaff, Frank Edwards; The Perils of Child “Protection” for Children of Color: Lessons From History. *Pediatrics* July 2021; 148 (1).

The goal is a healthy baby…

- …therefore a healthy pregnancy, which may mean taking medications
- The risk of those medications (to the fetus) may be outweighed by the harms of the condition they are treating (to the fetus)
- If medications are leading to a healthy pregnancy, they will most likely continue to lead to a healthy post-partum period
- Healthy mom → healthy baby

Now we'll talk about breastfeeding!

- Why breastfeed?
  - If there is a history of maternal depression
  - If there is a history of substance use
  - If parent has been taking MOUD
- Challenges for infants at risk for NOWS
- How medications transfer into breastmilk
- What this means
    - For maternal medications
    - If there is a history of substance use
    - If substance use continued until delivery
- How to support families with a history of substance use disorder

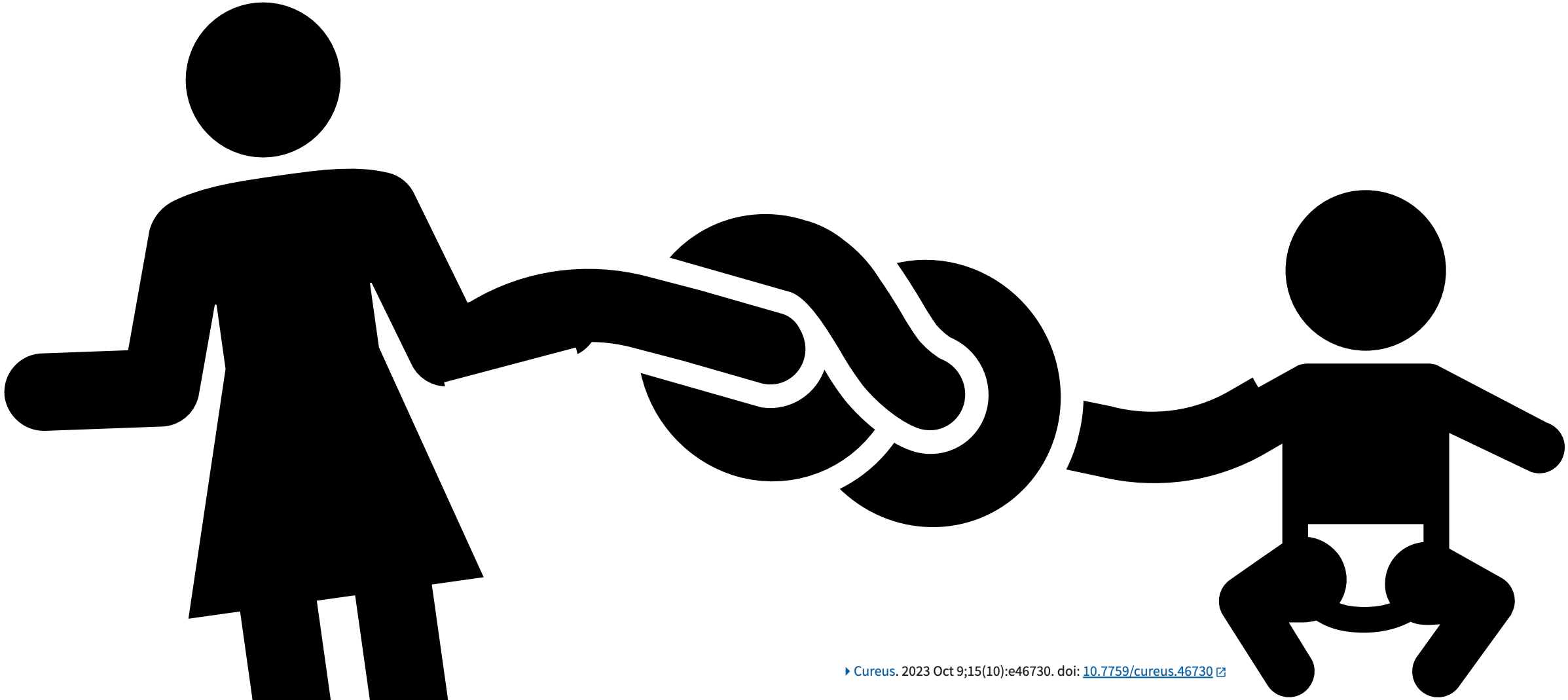


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Why breastfeed?





Cureus. 2023 Oct 9;15(10):e46730. doi: 10.7759/cureus.46730

The Psychological Benefits of Breastfeeding: Fostering Maternal Well-Being and Child Development

Anushree Modak [1,✉], Vaishnavi Ronghe [1], Kavita P Gomase [2]

Editors: Alexander Muacevic, John R Adler

Author information · Article notes · Copyright and License information

PMCID: PMC10631302 PMID: 38021634

Breastfeeding is a human right

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 (2016)

Feldman-Winter L, Van T, Varadi D, Adams AC, Kural B, and C.J. Rouw ECJ. Academy of Breastfeeding Medicine Position Statement: Breastfeeding As a Basic Human Right. BREASTFEEDING MEDICINE Volume 17, Number 8, 2022

- …and a choice
- …and part of optimal health outcomes

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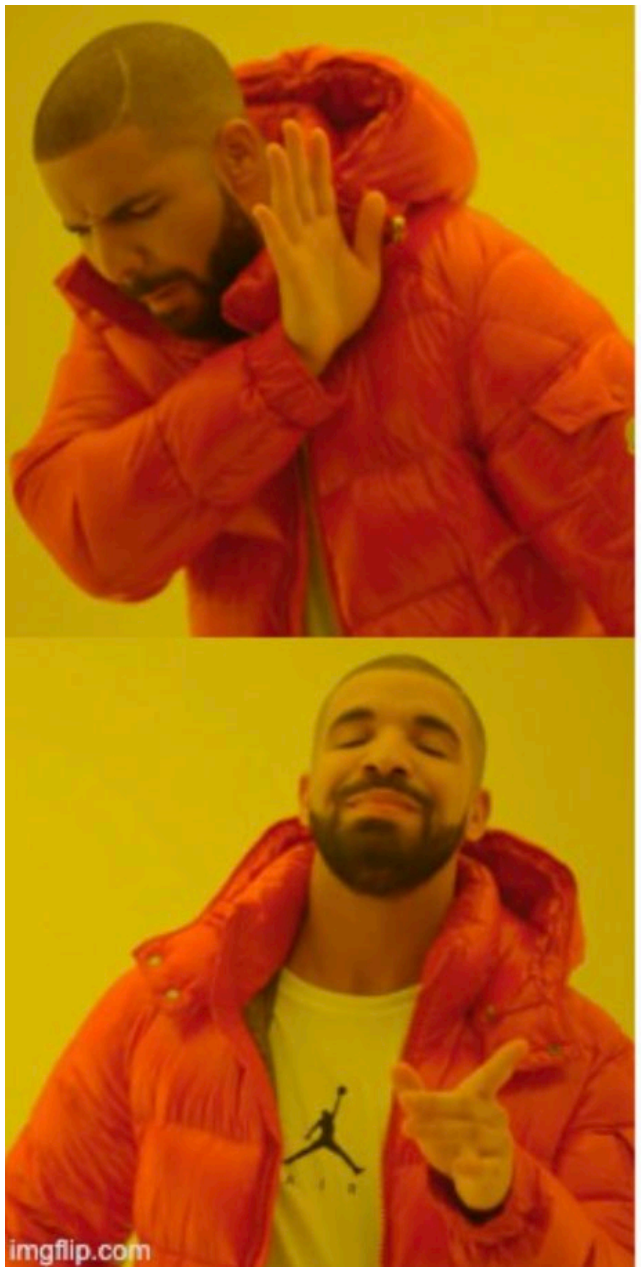


Maternal mental health and breastfeeding

A first parenting milestone…

Un-met breastfeeding goals are bidirectionally associated with higher rates of maternal mental illness and can lead to impaired bonding with the child.

- Nardella D, Shabanova V, Sharifi M, Taylor SN. Met and Unmet Breastfeeding Goals Following Full-Term Deliveries. JAMA Netw Open. 2026;9(9):e2632783. doi:10.1001/jamanetworkopen.2026.32783
- Nonacs, R. (2024, August 12). Breastfeeding and Maternal Mood: Exploring a Complex, Bidirectional Relationship. https://womensmentalhealth.org/posts/breastfeeding-and-maternal-mood-exploring-a-complex-bidirectional-relationship/
- Roth MC, Humphreys KL, King LS, Gotlib IH, Robakis TK. Breastfeeding Difficulties Predict Mothers' Bonding with Their Infants from Birth to Age Six Months. Matern Child Health J. 2021 May;25(5):777-785. doi: 10.1007/s10995-020-03036-9. Epub 2021 Feb 2. PMID: 33528724; PMCID: PMC11884927.


assume
a parent's
infant
feeding goals
assess and
quantify a
parent's infant
feeding goals
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avoid
breastfeeding to
not risk worsening
mental health
support
breastfeed
to help
mental health
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ACADEMY OF Breastfeeding Medicine

ABM Protocol

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

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

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]

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.
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.

ADHD, attention deficit hyperactivity disorder; SUID, sudden unexpected infant death.

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DOI: 10.1089/bfm.2023.29256.abm

For parents in remission from substance use

- Parents know and understand that breastfeeding is not compatible with substance use
- Supporting breastfeeding can be an acknowledgement of challenges overcome, distance traveled, and of positive health and parenting ability

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I'M TELLING WHY IT'S GOOD FIRST



THEN I'LL TELL YOU WHY IT'S SAFE

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Benefits for mom…

“I’m Doing the Best That I Can for Her”

- “…**mothers with OUDs experienced significant shame and guilt for having exposed their infants to opioids…**
- …**the participants believed that their human milk alleviated their infants’ NAS symptoms, which in turn helped alleviate their feelings of shame and guilt**.
- …research…suggests that breastfeeding may reduce the severity and duration of NAS symptoms in neonates, no studies have explored what this means to the mother and what possible impact this might have on her recovery.
- We found that women regarded **breastfeeding as a facilitator in their recovery**.
- They **wanted to do what was best for their infants** and this required them to remain in treatment and abstain from the use of illicit substances.”

McGlothen KS, Cleveland LM, Gill SL. “I’m Doing the Best That I Can for Her”: Infant-Feeding Decisions of Mothers Receiving Medication-Assisted Treatment for an Opioid Use Disorder. Journal of Human Lactation. 2018;34(3):535-542. doi:10.1177/0890334417745521

BONDING

- "…particularly for mothers with substance use disorders, is associated with improved maternal mental health and improved maternal-infant bonding."

-forthcoming ABM Position Statement

Martin CE, Almeida T, Thakkar B, et al. Postpartum and Addiction Recovery of Women in Opioid Use Disorder Treatment: A Qualitative Study. Subst Abus 2022;43(1):389–396; doi: 10.1080/08897077.2021.1944954.

Consider:

- **The benefits of breastfeeding as an adjuvant treatment for OUD are underexplored**

- Empowering messages to use:
  - *“Your milk is the best thing for your baby”*
  - *“We know that breastfeeding helps babies with withdrawal symptoms”*

Benefits for baby…

A Meta-Analysis of Breastfeeding Effects for Infants With Neonatal Abstinence Syndrome

	Breastfeeding			Nonbreastfeeding				Std. mean difference
								IV, random,
Severity of NAS symptoms								
Liu et al. (2015)	5.1	1.3	32	5.4	1.1	150	57.1%	–0.26 [–0.65, 0.12]
McQueen et al. (2011)	4.9	2.9	8	6.9	4.2	11	9.7%	–0.51 [–1.44, 0.42]
O'Connor et al. (2013)	8.83	3.56	65	9.56	2.58	20	33.2%	–0.22 [–0.72, 0.29]
Total (95% CI)			105			181	100.0%	–0.27 [–0.56, 0.02]
Abdel-Latif et al. (2006)	85.4	71.7	85	108.2	81.8	105	31.2%	–0.29 [–0.58, –0.01]
Favara et al. (2019)	15.5	6.5	430	18	8	1308	48.1%	–0.33 [–0.44, –0.22]
Welle-Strand et al. (2013)	28.6	19.1	95	46.7	26.7	29	20.7%	–0.85 [–1.28, –0.42]
Total (95% CI)			610			1442	100.0%	–0.43 [–0.68, –0.17]
Heterogeneity. $Tau^2 = 0.03$; $Chi^2 = 5.60$, $df = 2$ ($p = .06$); $I^2 = 64\%$								
with NAS								
Abdel-Latif et al. (2006)	14.7	14.9	85	19.5	15	105	17.1%	–0.32 [–0.61, –0.03]
Favara et al. (2019)	20.5	7.5	430	22	9	1308	20.1%	–0.17 [–0.28, –0.06]
Isemann et al. (2011)	27	24	56	29	20	66	15.7%	–0.09 [–0.45, 0.27]
MacVicar et al. (2018)	10.8	6.7	11	30	11.8	3	2.7%	–2.31 [–3.94, –0.68]
O'Connor et al. (2013)	7.08	4.39	65	6.6	1.7	20	12.6%	0.12 [–0.38, 0.62]
Short et al. (2016)	12	7	1576	13.5	8.5	1968	20.5%	–0.19 [–0.26, –0.12]
Wachman et al. (2013)	15.8	4.3	38	27.4	4.9	48	11.3%	–2.47 [–3.04, –1.91]
Total (95% CI)			2261			3518	100.0%	–0.47 [–0.75, –0.18]
Heterogeneity. $Tau^2 = 0.10$; $Chi^2 = 70.54$, $df = 6$ ($p < .00001$); $I^2 = 91\%$								
Test for overall effect: $Z = 3.23$ ($p = .001$)								

Note. *SD* = standard deviation; IV = inverse variance; NAS = neonatal abstinence syndrome; CI = confidence interval.

Chu, Liangliang; McGrath, Jacqueline M.; Qiao, Jianhong; Brownell, Elizabeth; Recto, Pamela; Cleveland, Lisa M.; Lopez, Emme; Gelfond, Jonathan; Crawford, Allison; McGlothen-Bell, Kelly. A Meta-Analysis of Breastfeeding Effects for Infants With Neonatal Abstinence Syndrome. Nursing Research 71(1):p 54-65, 1/2 2022. | DOI: 10.1097/NNR.0000000000000555

Why is breastfeeding so good?

- Mechanisms
  - Skin-to-skin time
  - Bonding
  - Milk-related factors
  - Medication in milk

Chu, Liangliang; McGrath, Jacqueline M.; Qiao, Jianhong; Brownell, Elizabeth; Recto, Pamela; Cleveland, Lisa M.; Lopez, Emme; Gelfond, Jonathan; Crawford, Allison; McGlothen-Bell, Kelly. A Meta-Analysis of Breastfeeding Effects for Infants With Neonatal Abstinence Syndrome. Nursing Research 71(1):p 54-65, 1/2 2022. | DOI: 10.1097/NNR.0000000000000555

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Challenges that can arise

- Poor suck-swallow-breath coordination and/or dysregulation
  - OT/SLP evaluation and follow up
  - Potential need for NG tube use
- Excessive weight loss
  - Is it really excessive?
  - Pre- & post-weights to assess transfer (only once expected volumes are large enough ie not in first days)
  - Maternal pumping to assess production (drops expected in first days)
  - → if issues with production or transfer, offer supplementation (DBM or formula)
  - → if production & transfer normal (ie due solely to increased caloric needs), consider fortification of EBM to 22kcal/oz or 24kcal/oz
  - Early evidence suggesting fortification up front can lead to greater success with breastfeeding
  - Potential need for NG tube use

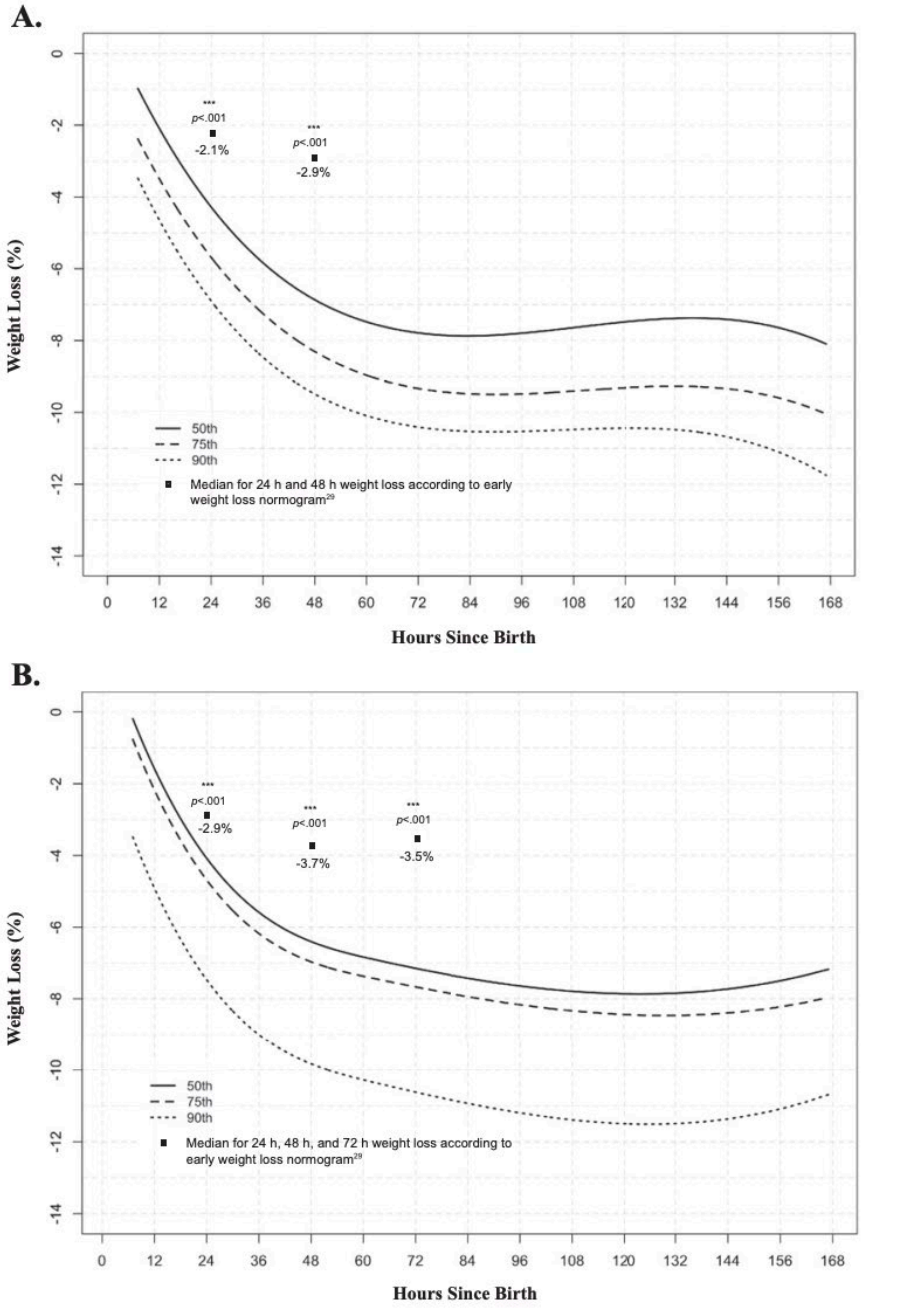


FIGURE 2 A, Early weight loss percentile curves for infants with NOWS delivered vaginally. B, Early weight loss percentile curves for infants with NOWS delivered by cesarean delivery.

Cheng FY, Shabanova V, Berkwitt AK, Grossman MR. Early Weight Loss Percentile Curves and Feeding Practices in Opioid-Exposed Infants. Hosp Pediatr. 2022 Oct 1;12(10):857-866. doi: 10.1542/hpeds.2021-006137. PMID: 36073203.

Challenges that can arise

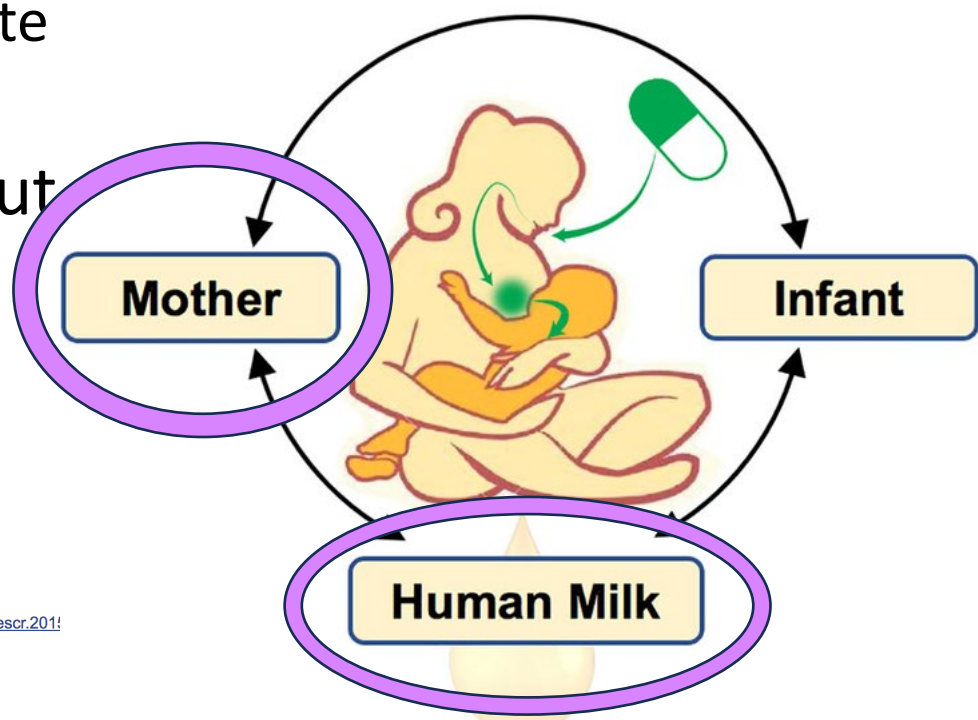
- Parental fatigue
  - Difficulty distinguishing fussiness from feeding cues leading to frequent and/or unsuccessful feeds → consider recommending pacifier initiation depending on latch quality assessment
- Family/support people with other perspectives or opinions on breastfeeding
  - Offer positive messaging and education in their presence
  - Ask breastfeeding person privately if they want you to address this directly with the individual
- Poor social support post-hospitalization
  - Engagement with SW and care team
  - If available, refer to peer support programs (ie WIC)
- Other barriers
  - Be creative, supportive, and kind!

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Physiology of lactation → pharmacology of lactation

- Breastmilk is in constant contact/exchange with blood
  - Time removes things, not pumping
- Breastmilk concentration is a reflection of plasma concentration
  - If a drug has a high volume of distribution, it will have a low BM concentration
  - If a drug is highly protein bound, it will not concentrate warfarin)
- Small drug molecules diffuse easily, fast in/fast out
  - Small = alcohol, caffeine, nicotine
- Large drug molecules do not get in
  - Large = heparin, insulin, MAbs
  - Don't need to study every new Mab to know it's safe



Aust Prescr. 2015 Oct; 38(5): 156–159.
Published online 2015 Oct 1. doi: 10.18773/austprescr.201

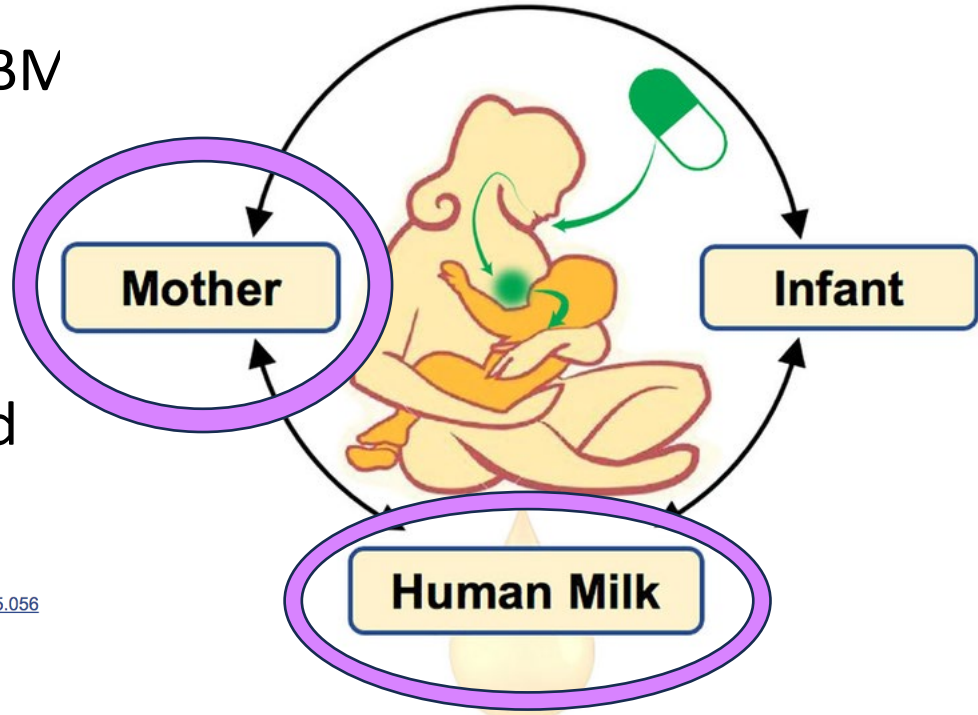
Drugs in breastfeeding

Neil Hotham, Specialist editor

Physiology of lactation → pharmacology of lactation Cont'd

- Breastmilk is high in fat
  - Lipophilic medications concentrate in BM (eg dilaudid more lipophilic than morphine)
- Breastmilk is slightly acidic
  - Weak bases will be trapped and concentrate in BM
- It has to get to the serum first…
  - Meds with local action are generally safe
  - No dermatologic preparation that isn't

  directly applied to breast/nipple is contraindicated



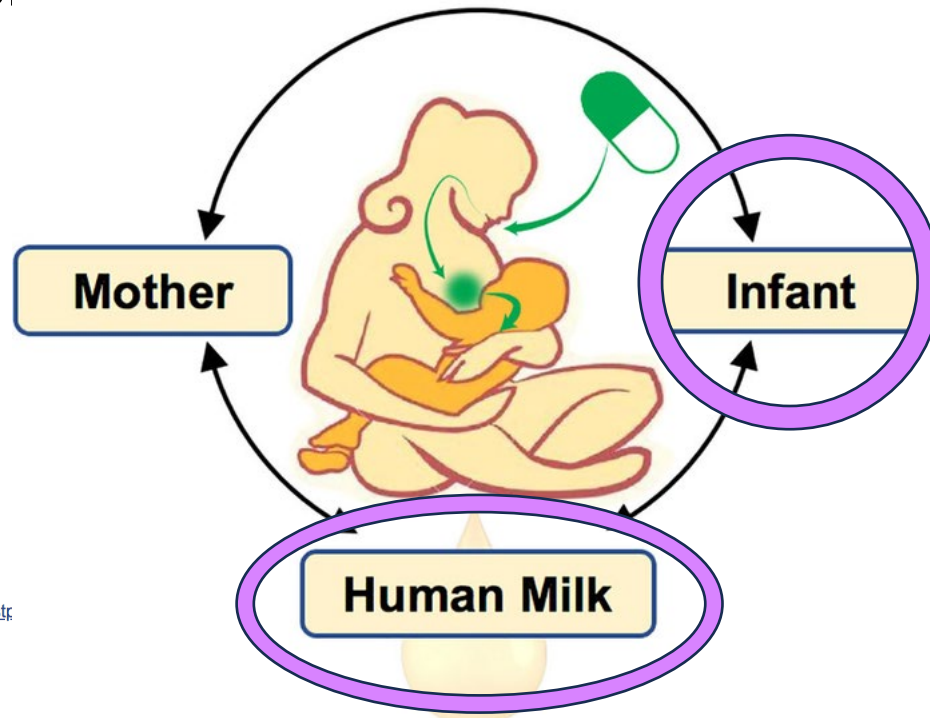
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Published online 2015 Oct 1. doi: 10.18773/austprescr.2015.056

Drugs in breastfeeding

Neil Hotham, Specialist editor

Physiology of BF → pharmacology of BF

- Age matters
  - Young/premature infant with immature gut = decreased/increased absorption
  - Young/premature infant with immature liver/kidneys = decreased ability to metabolize and excrete (most adverse effects occur <2 months old)
  - Amount of breastmilk consumed increased with age fo
    then decreases as BF tapers off/baby is weaned
- Availability matters
  - IV drug in mom → very low bioavailability in BM
  - Enteric-coated drugs (in their maternal formulation) will be rapidly broken down when ingested via BM
- Taste matters
  - Metronidazole tastes bitter



Aust Prescr. 2015 Oct; 38(5): 156–159.
Published online 2015 Oct 1. doi: 10.18773/austp

Drugs in breastfeeding

Neil Hotham, Specialist editor

Relative Infant Dose

- Summarizing many of these concepts into numeric form

$$\frac{\text{mg/kg/day ingested by baby}}{\text{mg/kg/day maternal dose}} = \text{RID}$$

- Concerning level is >10%

- Why breastfeed?
  - If there is a history of maternal depression
  - If there is a history of substance use
  - If parent has been taking MOUD
- Challenges for infants at risk for NOWS
- How medications transfer into breastmilk
- What this means
  - For maternal medications
  - If there is a history of substance use
  - If substance use continued until delivery
- How to support families with a history of substance use disorder



The goal is a healthy baby…

- …therefore a healthy pregnancy, which may mean taking medications
- The risk of those medications (to the fetus) may be outweighed by the harms of the condition they are treating (to the fetus)
- If medications are leading to a healthy pregnancy, they will most likely continue to lead to a healthy post-partum period
- The risk of those medications (transmitted via breastmilk to the infant) may be outweighed by the harms of the condition they are treating (to the infant mediated by harms to the health of the breastfeeding parent)

Principles of prescribing to lactating patients

- Treating medical concerns for lactating patients is priority #1
- Do not withhold or delay medical care (including pain/symptom management) for patients who are breastfeeding
- Breastfeeding rarely needs to be disrupted to support the health of the dyad
- Lowest effective dose
- Select acceptable alternatives (eg non-absorbed fiber laxative to stimulant laxative)
- Choose short half-lives when possible (eg sertraline >> fluoxetine)
- Once breastfeeding patterns are established, advise patients to BF prior to taking medication

Aust Prescr. 2015 Oct; 38(5): 156–159.
Published online 2015 Oct 1. doi: 10.18773/austprescr.2015.056

Drugs in breastfeeding

Neil Hotham, Specialist editor

- Why breastfeed?
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ACADEMY OF Breastfeeding Medicine

ABM Protocol

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

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

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]

ACADEMY OF Breastfeeding Medicine

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

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ARTICLES| JANUARY 01 2008

Methadone Maintenance and Breastfeeding in the Neonatal Period Available

Lauren M. Jansson, MD et al.
School of Medicine, 4940 Eastern Ave, D5, Baltimore, MD 21224.

Pediatrics (2008) 121 (1): 106–114.
https://doi.org/10.1542/peds.2007-1182

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*	Gastrointestinal and cardiorespiratory symptoms, hypothermia, irritability, tremors,	Reduced breast milk production	May accumulate in greater quantities in breast milk than maternal serum. Individuals prescribed stimulants for the
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*	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.
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*	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.

ADHD, attention deficit hyperactivity disorder; SUID, sudden unexpected infant death.



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- Why breastfeed?
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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.

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When opioid use has persisted during pregnancy.

- During the newborn hospital stay:
  - “women who discontinue nonprescribed substance use by or during the delivery hospitalization can be supported in breastfeeding initiation.”
  - “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 the patient and clinicians of both the parent–infant dyad.”
- After discharge
  - “If a breast-feeding mother returns to nonprescribed substance use in the postpartum period, a similar approach of expressing milk and discarding milk and consultation with a multidisciplinary team should take place to inform breastfeeding decisions.”

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Clinical Perspective

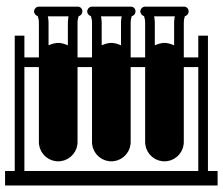
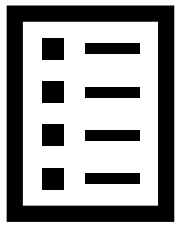
Safely Supporting the Establishment of Breastfeeding in the Setting of Fentanyl Use Before the Birth Hospitalization

Sharon Ostfeld-Johns, MD, IBCLC, Davida Schiff, MD, MSc, Dominika Seidman, MD, MAS, Marcela C. Smid, MD, MS, and Vania Rudolf, MD, MPH

Ostfeld-Johns S, Schiff D, Seidman D, Smid MC, Rudolf V. Safely Supporting the Establishment of Breastfeeding in the Setting of Fentanyl Use Before the Birth Hospitalization. Obstet Gynecol. 2026 Mar 12. doi: 10.1097/AOG.0000000000006235. Epub ahead of print. PMID: 41818755.





Key Recommendations	
	72 hours after last use, the amount of fentanyl in breastmilk is likely safe for the newborn, and the parent's decision to breastfeed should be supported during the birth hospitalization in the context of parental treatment for substance use disorder.
	With maximal support from the treatment team, early breastfeeding can form positive bonds for life and has the potential to optimize parenting self-efficacy and support substance use cessation.
	Toxicology testing prior to initiation of breastfeeding, to evaluate for the presence of stimulants which would make breastfeeding unsafe, may be considered, particularly in areas of co-use or areas where non-prescribed opioid supplies are often contaminated. We do not recommend urine toxicology testing be required to be negative for fentanyl prior to breastfeeding.
	We recommend developing contingency plans with patients during pregnancy or the birth hospitalization to be prepared for possible return to use of illicit substances while breastfeeding (see Contingency Plan Box). These conversations can promote trust that providers want to increase recovery supports, rather than penalize periods of return to use, allowing patients to utilize harm reduction and access care early in a potential relapse.

Ostfeld-Johns S, Schiff D, Seidman D, Smid MC, Rudolf V. Safely Supporting the Establishment of Breastfeeding in the Setting of Fentanyl Use Before the Birth Hospitalization. Obstet Gynecol. 2026 Mar 12. doi: 10.1097/AOG.0000000000006235. Epub ahead of print. PMID: 41818755.

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- How medications transfer into breastmilk
- What this means
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    - If substance use continued until delivery
- How to support families with a history of substance use disorder



The Goal: Holistically Support Patients During Pregnancy

Prenatal & Family Care

- **Prenatal Care**
  Comprehensive clinical care and medical monitoring throughout pregnancy.
- **Preparation for Parenting**
  Education, resource guidance, and skill-building for post-delivery parenthood.

Social & Mental Health

- **Social Support**
  Connect with appropriately matched community and social services.
- **Mental Health Care**
  Mental health support, disorder identification, and ongoing treatment.
- **Stressor Mitigation**
  Addressing life stressors, including experiences of discrimination.

Substance Use Care

- **Universal Screening**
  Substance use/disorder identification with universal validated questionnaires.
- **Comprehensive Treatment**
  Alcohol/tobacco cessation, medications for opioid use disorder (MOUD), and treatment.
- **Dyad Preservation**
  Identification and mitigation of barriers to dyads remaining together after delivery [30, 31, 32]

What is CAPTA/CARA?

The **Child Abuse Prevention and Treatment Act of 1974** is landmark **legislation to prevent child abuse and neglect**, as updated by the **Comprehensive Addiction and Recovery Act of 2016**.

State Mandates: Requires each state to develop a protocol & submit annual reports to the Federal Government documenting:

01

Affected Newborn Data Collection

of newborns “affected by” substance use or withdrawal symptoms

02

CPS Systems

that CPS systems are notified of delivery of such newborns

03

Family Care Plans

that these newborns have Family Care Plans

04

Plan Content

what is in these Family Care Plans

CAPTA Reporting Requirements in Connecticut [35]

PREGNANT

Testing Not Required by Law

A drug test on a pregnant or birthing person is **NOT** required by law.

Informed Consent: If screening indicates the need for a drug test, providers should ask for and get informed consent prior to drug testing a pregnant or birthing person.

NEWBORN TESTING

Testing Not Required by Law

A drug test on a newborn is **NOT** required by law.

No statutory mandate exists requiring universal or non-consensual drug screening of infants at birth.

CAPTA NOTIFICATION & REPORTING

Does NOT Trigger Mandatory Report / DCF Referral

A positive drug test or indication that a newborn is substance-affected does NOT trigger a mandatory report.

- CAPTA Online Portal: Providers must make a CAPTA notification through an online portal for any newborn known to be exposed to substances during pregnancy.
- Anonymized Information: If there are no safety concerns, this information is anonymized and does **NOT** equate to a DCF referral.

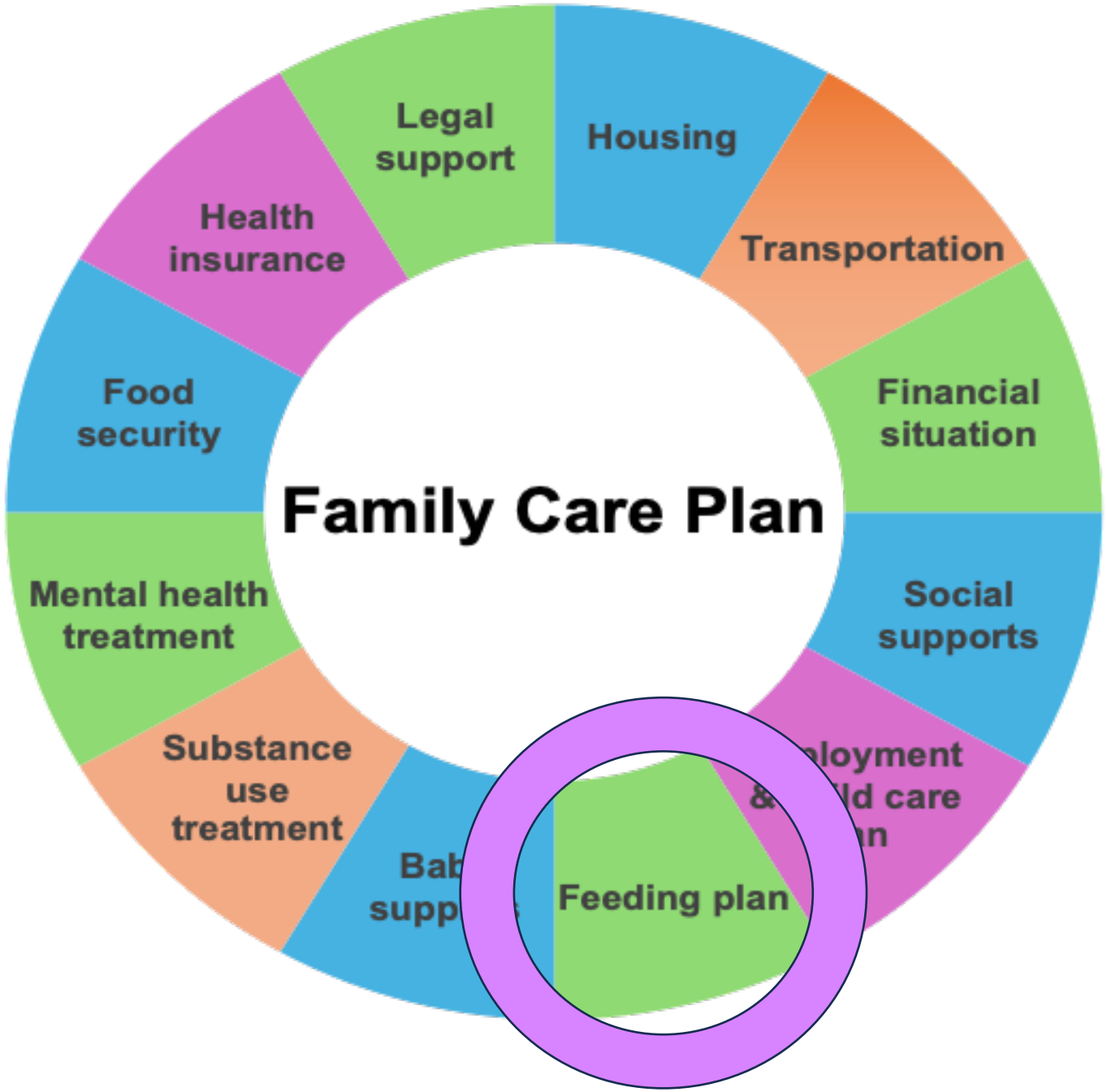
Family Care Plans as Protective for Patients and Neonates

A Family Care Plan is an arrangement developed between family and care providers which addresses:

- Infant Safety: Immediate safety and treatment needs
- Parent Health: Health and substance misuse treatment needs
- Household Support: Treatment needs of all members with routine caregiving responsibilities

Family Care Plans [previously Plan of Safe Care) were significantly associated with decreased later confirmed reports of child maltreatment.

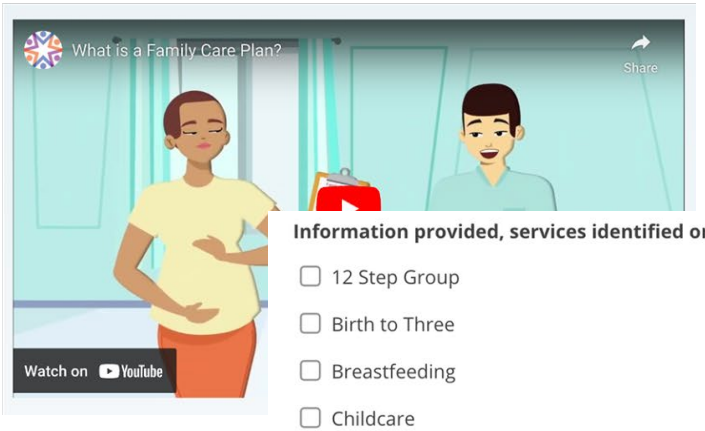



Legal support
Housing
Health insurance
Transportation
Food security
Financial situation
Family Care Plan
Mental health treatment
Social supports
Substance use treatment
Feeding plan

The Connecticut Family Care Plan

SEPI-CT Substance Exposed Pregnancy Initiative of Connecticut





Information provided, services identified or services referred * (Please check all that apply)

- [ ] 12 Step Group
- [ ] Birth to Three
- [ ] Breastfeeding
- [ ] Childcare
- [ ] Co-parenting
- [ ] Depression during/after pregnancy
- [ ] Developmental Milestones
- [ ] Financial Assistance
- [ ] Food Insecurity
- [ ] Home Visiting
- [ ] Housing Assistance
- [ ] Identified Pediatrician
- [ ] Immunizations
- [ ] Infant Car Seat Safety
- [ ] Medication Assisted Treatment
- [ ] Mental Health -Parent
- [ ] Mental Health-Early Childhood
- [ ] Nutrition
- [ ] Oral Health Care
- [ ] Parenting Groups
- [ ] Prenatal Health Care
- [ ] Recovery Supports
- [ ] Safe Sleep Plan
- [ ] Second Hand Smoke
- [ ] SNAP Benefits
- [ ] Substance Use Counseling
- [ ] Transportation
- [ ] WIC
- [ ] Other (specify)

Family Care Plans: Data in Connecticut





Ostfeld-Johns S, Schiff D, Seidman D, Smid MC, Rudolf V. Safely Supporting the Establishment of Breastfeeding in the Setting of Fentanyl Use Before the Birth Hospitalization. Obstet Gynecol. 2026 Mar 12. doi: 10.1097/AOG.0000000000006235. Epub ahead of print. PMID: 41818755.

Discharge environment

- Parenting
  - Neglect and non-accidental trauma

    True risk over baseline is unknown due to research challenges, co-occurring risk factors, and systemic biases

    Austin AE, Gest C, Atkeson A, Berkoff MC, Puls HT, Shanahan ME. Prenatal Substance Exposure and Child Maltreatment: A Systematic Review. *Child Maltreatment.* 2021: 1-26.
  - Development of secure attachment is protective (strongly supported by breastfeeding)
- Substance exposure (accidental/environmental)
  - Counsel on safe storage

Collaboration with appropriate care team members (potentially including pediatrician, SW, DCF) to establish a Family Care Plan



Forthcoming:

Academy of Breastfeeding Medicine Position Statement:

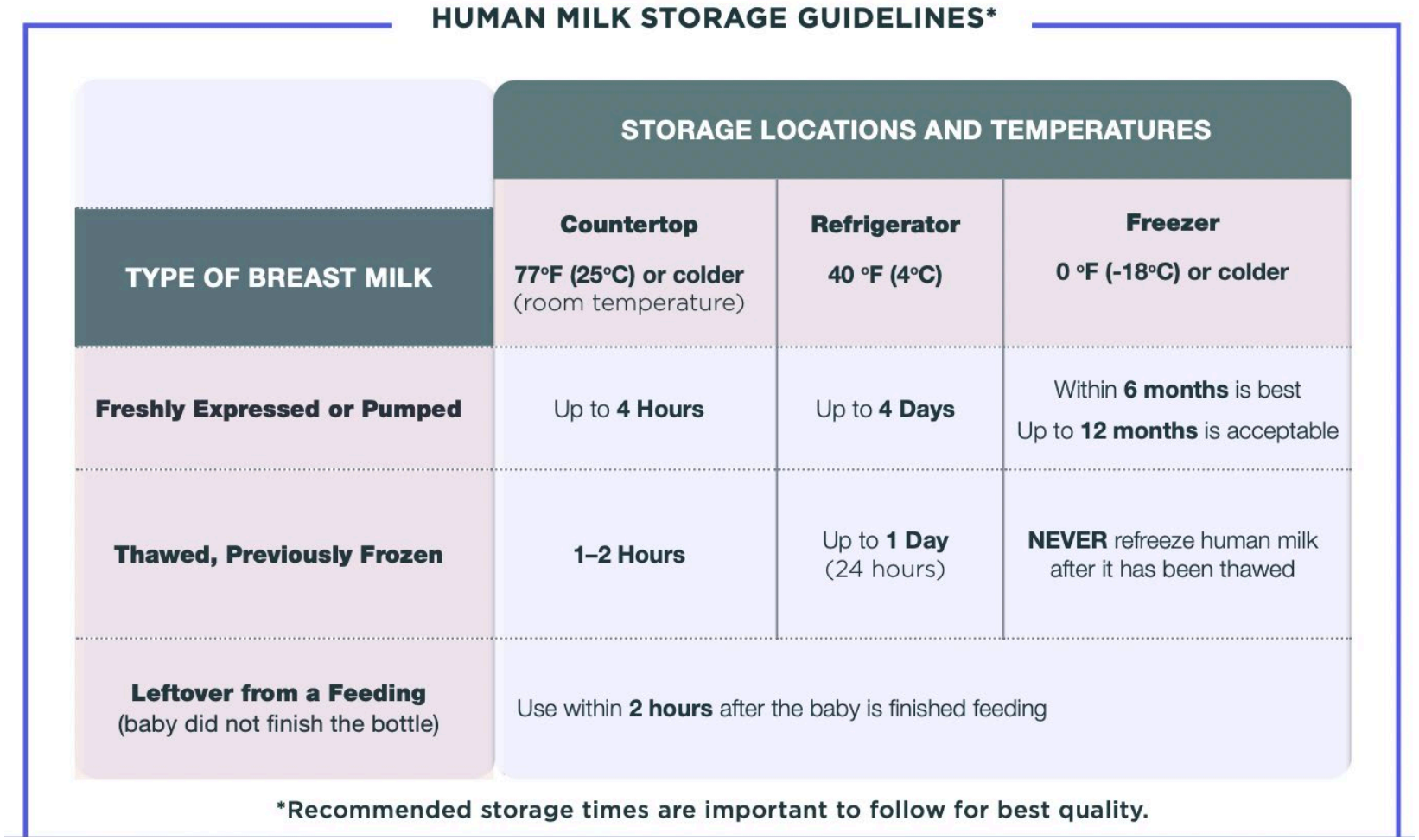
Maintaining Togetherness to Support the Breastfeeding Dyad: Guidance for Decision-Makers Considering Imposed or Custodial Separations

Table 2: Recommendations for Specific Situations of Potential Breastfeeding Dyad Separation	
Shared Custody	•Uninterrupted time together, ideally until 6 months, at minimum until at least 3 months •Limit separation to no more than 2 consecutive hours in the first 6 months •Minimize nighttime separation •Provide breast milk by preferred method when separated •Review arrangements at least every 2 months •Support breastfeeding until at least 2 years or when desired by breastfeeding parent
Foster Care Placement	•All of the above per "Shared Custody" •Prioritize togetherness to support bonding and healing •Frequent, long visits in first 3-6 months with lactation support •Ensure visits are conducive to breastfeeding •Support for breast milk expression, collection, and storage for the breastfeeding mother •Incorporation of the breastfeeding benefits to the child and the breastfeeding-related efforts of the mother in reunification decisions
Incarceration or Detention	•All of the above per "Shared Custody" and "Foster Care Placement" •Consider alternative sentencing or institutional co-habitation until at least 2 years •Incorporation of the breastfeeding benefits to the child and the breastfeeding-related efforts of the mother in sentencing & release decisions

NOT TO BE SHARED OR REPRODUCED/NOT YET PUBLISHED

Sharon Ostfeld-Johns,[1] Alison Barrett,[2] Elizabeth Brooks,[3] Amanda Dornfeld,[4] and Yvonne LeFort[5]

Expressed breast milk handling safety



HUMAN MILK STORAGE GUIDELINES*

TYPE OF BREAST MILK	STORAGE LOCATIONS AND TEMPERATURES		
	Countertop 77°F (25°C) or colder (room temperature)	**Refrigerator** 40 °F (4°C)	**Freezer** 0 °F (-18°C) or colder
Freshly Expressed or Pumped	Up to **4 Hours**	Up to **4 Days**	Within **6 months** is best Up to **12 months** is acceptable
Thawed, Previously Frozen	**1–2 Hours**	Up to **1 Day** (24 hours)	**NEVER** refreeze human milk after it has been thawed
Leftover from a Feeding (baby did not finish the bottle)	Use within **2 hours** after the baby is finished feeding		

*Recommended storage times are important to follow for best quality.

- https://www.cdc.gov/breastfeeding/pdf/preparation-of-breast-milk_H.pdf

In the context of the known and unknown risks…

- **Breastfeeding is a human right**
- **…and can be done safely**
  - Observation and support during initiation
  - Maximal and well-matched social support (compassion!)
  - Contingency planning

Feldman-Winter L, Van T, Varadi D, Adams AC, Kural B, and C.J. Rouw ECJ. Academy of Breastfeeding Medicine Position Statement: Breastfeeding As a Basic Human Right. BREASTFEEDING MEDICINE Volume 17, Number 8, 2022

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 (2016)

- Breastfeeding is a human right

Feldman-Winter L, Van T, Varadi D, Adams AC, Kural B, and C.J. Rouw ECJ. Academy of Breastfeeding Medicine Position Statement: Breastfeeding As a Basic Human Right. BREASTFEEDING MEDICINE Volume 17, Number 8, 2022

- A strong benefit of breastfeeding is secure attachment formation, which reduces the risk of child harm

Gibbs BG, Forste R, Lybbert E. Breastfeeding, Parenting, and Infant Attachment Behaviors. Matern Child Health J. 2018 Apr;22(4):579-588. doi: 10.1007/s10995-018-2427-z. PMID: 29388115.

- Most medications can be prescribed in safe ways during breastfeeding

- The benefits of breastfeeding for the infant strongly outweigh the risks of medication exposure via breastmilk in the vast majority of prescribed medications, including antidepressants and medications for opioid use disorder

- The benefits of breastfeeding for the parent as an adjuvant treatment for OUD are underexplored

- Infant environmental safety is best promoted by well-matched social supports and family engagement with medical and social systems, which is promoted by a non-punitive approach to stigmatized medical and mental health issues

Thank you!

- sharon.ostfeld-johns@yale.edu



Learning Objectives

- Discuss the in utero effects of substance use and substance use disorder to contextualize breastfeeding decision-making
- Understand the benefits of breastfeeding for the birthing person and for the infant
- Contextualize breastfeeding decision-making in the setting of prenatal substance exposure, including a review of the Academy of Breastfeeding Medicine's 2023 guidance
- Discuss current evidence regarding substance use disorder treatment in the context of post-partum health care, including contingency management related to breast milk
- Examine the challenges of supporting breast milk feeding for mothers and infants at risk of separation (i.e. incarceration or DCF custody)
- Review safe handling recommendations for expressed breast milk

THANK YOU!



