




# Marijuana and Mother's Milk: What We Know



Presenter:  
Mirine Richey, MPH, IBCLC

Florida State University Center for Prevention & Early Intervention Policy [www.cpeip.fsu.edu](http://www.cpeip.fsu.edu)


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## Presenter

### Mirine Richey, MPH, IBCLC

Research Faculty  
Breastfeeding Counselor Course,  
*Partners for a Healthy Baby* trainer  
FSU Center for Prevention & Early Intervention Policy



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## Background

### Home Visiting & Training Since 1993

- Federal Healthy Start Grant 1993-96
- Early Head Start home visiting program
- Young Parents Project home visiting
- *Partners for a Healthy Baby* curriculum & training
- Breastfeeding Counselor Course
- Infant Mental Health
- Early Childhood Courts






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## *Partners for a Healthy Baby*

Research-based home visiting curriculum covering pregnancy- age 3


- Family Development
- Maternal and Family Health
- Preparing/ Caring for Baby
- Baby/Toddler's Development



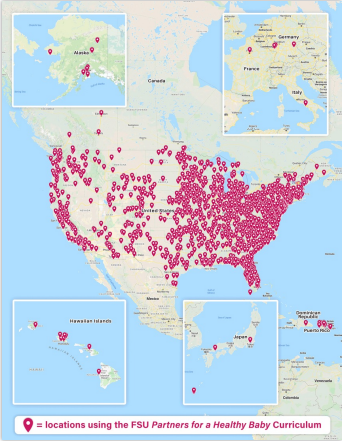
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## Programs and Models Using *Partners*



- Early Head Start (EHS)
- New Parent Support Program
- Healthy Start
- Healthy Families America
- Parents as Teachers
- Non-profit community programs
- Faith-based organizations

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## Objectives for the Webinar

- Objective 1: Increase awareness about the potential risks and effects of marijuana and cannabis product use on breastfed infants
- Objective 2: Provide evidence-based information regarding marijuana use in various forms, and its potential impact on breast milk composition
- Objective 3: Promote open and non-judgmental discussions with breastfeeding mothers who may be using marijuana


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 **Physical and Emotional Stress of Pregnancy**



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 **Motivators During Pregnancy**

- Pregnancy is a time of physical and emotional stress
- Women will often revert to the method of emotional coping they used before pregnancy
- Women are also looking for ways to help cope with the physical changes



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## Motivators During Pregnancy

50% of non-pregnant users will continue during pregnancy

- Trends contributed to legalization and cultural shifts in acceptance
- Stress about parenting
- Beliefs around relief for
  - nausea
  - backache
  - stress
  - sleep



## Development of Milk

- Colostrum is produced in response to pregnancy
- Begins sometime around 16 weeks
- Is stored in the breast until birth
- Is baby's first food and immunization
- The component that is most helpful against infection in colostrum is called secretory immunoglobulin A (SIgA)






## Current Breastfeeding Recommendation




- Start breastfeeding within the first hour after birth so baby can get colostrum
- Feed baby on demand 8-12x in 24 hours
- Until about 6 months, only breastmilk
- Solid food introduction around 6 months
- Continue with breastmilk until age 2 or however long is desired

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## Who Should Avoid Breastfeeding?



- Infant with a diagnosis of galactosemia
- The mother of the infant has one or more of the following:
  - HTLV 1 or II
  - HIV+ and **not** on anti-retroviral meds or **with** a detectable load
  - Active untreated TB
  - DNA or cell division-interfering drugs
  - Radiation therapy or nuclear medicine (temporary)
  - Illicit drug dependency

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## US 2022 Breastfeeding Report Card

- National rates 83.2% initiation (at time of birth)
  - 55.8% continuation at 6 months
  - 35.9% continuation at 12 months
  - 19.2% infants receive formula in the first 2 days of life



**Poll:**  
What is the #1 reason for stopping breastfeeding?







## Barriers to Breastfeeding Duration

The top reasons for stopping breastfeeding are thoughts that:

- did not produce enough milk or that the milk had dried up (49.2%)
- breast milk alone did not satisfy baby (37.2%)

• FDOH, 2020



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## Motivators During Breastfeeding

- During pregnancy, research shows more symptom-relief motivation.
- Postpartum sees a shift back to recreational use motivation.
- Some beliefs about marijuana
  - increasing milk production
  - calming postpartum depression/anxiety
  - as a “natural” pain relief for recovery



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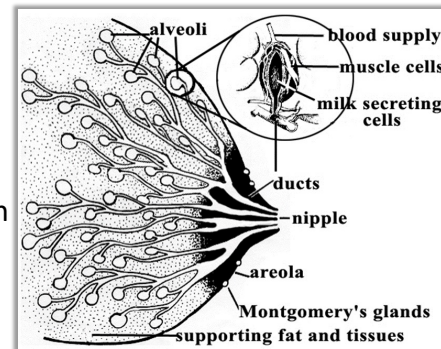
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## How is Milk Made?

- The smallest functional unit is the alveolus, made up of secretory epithelial cells, which manufacture the milk.
- A *capillary network* surrounds each alveolus, bringing the raw materials for making milk from whatever is in the body (good and bad).



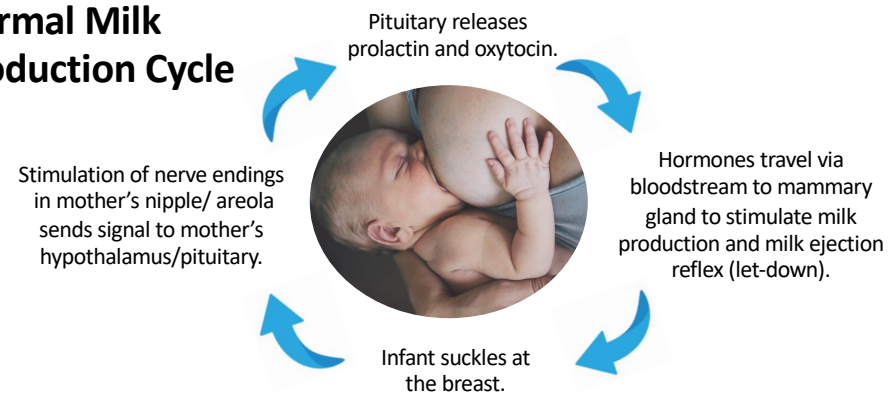
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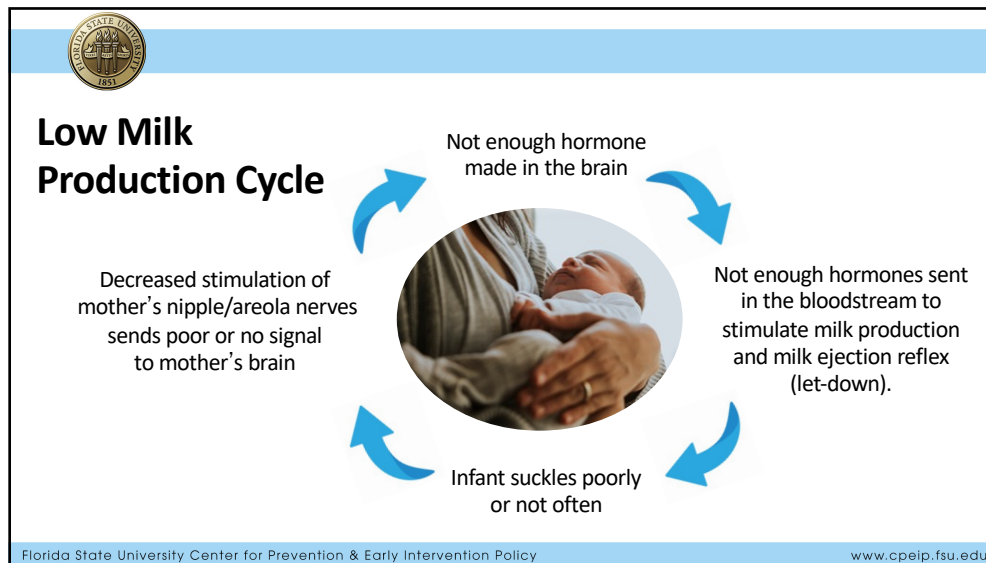
## Normal Milk Production Cycle




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## Signs of Inadequate Milk Supply

- A weight loss of more than 7% in the first 72 hours should trigger an assessment of mother and baby.
- Weight loss of 10% from birth weight is maximum for a breastfed infant and requires close observation and support.



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The slide features a central photograph of a Black woman smiling while holding her newborn baby. To the left of the photo is a bulleted list of two signs of inadequate milk supply. The first bullet point states that a weight loss of more than 7% in the first 72 hours should trigger an assessment. The second bullet point states that a weight loss of 10% from birth weight is the maximum for a breastfed infant and requires close observation and support. The slide is framed by a blue header and footer containing the Florida State University logo and contact information.

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## Popular Remedies Believed to Increase Supply

- Pumping in addition to breastfeeding
- Lactation “cookies”, teas, other beverages
- Herbal remedies
  - Fenugreek
  - Blessed thistle
  - Goat’s rue
  - Cannabis



## Actual Remedies to Increase Supply

- Early initiation at birth
- Avoiding pacifiers and bottles in the first month
- Breastfeeding on demand, 8-12x in 24 hours
- Avoiding hormonal products such as birth control until after 6 weeks
- Latch and positioning support
- Pumping, in addition to breastfeeding



**Suggested Partners for a Healthy Baby Handouts**

The first two weeks of breastfeeding can be difficult and many new moms get discouraged. However, most women adjust to breastfeeding and are able to make enough milk for their baby.

**Is my baby getting enough to eat?**  
 Newborns should be fed 8 to 12 times over a 24-hour period during the first month. Feed on demand whenever your baby is hungry—generally every 2 to 3 hours. If you're unsure whether to breastfeed, ask your doctor or a lactation consultant. If you're having trouble with breastfeeding, ask your doctor or a lactation consultant. If you're having trouble with breastfeeding, ask your doctor or a lactation consultant.

**Don't Give Up, Get Help!**  
 The first few weeks of breastfeeding can be difficult and many new moms get discouraged. However, most women adjust to breastfeeding and are able to make enough milk for their baby. Here are some common concerns that new moms have about breastfeeding.

**My Baby's Feeding/Wetting Record**  
 Baby's name: \_\_\_\_\_  
 Day 1: Total # Feedings \_\_\_\_\_ (Goal 8-12)  
 Total # Wet Diapers \_\_\_\_\_ (Goal 6-8)  
 Day 2: Total # Feedings \_\_\_\_\_ (Goal 8-12)  
 Total # Wet Diapers \_\_\_\_\_ (Goal 6-8)  
 Day 3: Total # Feedings \_\_\_\_\_ (Goal 8-12)  
 Total # Wet Diapers \_\_\_\_\_ (Goal 6-8)  
 Day 4: Total # Feedings \_\_\_\_\_ (Goal 8-12)  
 Total # Wet Diapers \_\_\_\_\_ (Goal 6-8)  
 Day 5: Total # Feedings \_\_\_\_\_ (Goal 8-12)  
 Total # Wet Diapers \_\_\_\_\_ (Goal 6-8)  
 Day 6: Total # Feedings \_\_\_\_\_ (Goal 8-12)  
 Total # Wet Diapers \_\_\_\_\_ (Goal 6-8)  
 Day 7: Total # Feedings \_\_\_\_\_ (Goal 8-12)  
 Total # Wet Diapers \_\_\_\_\_ (Goal 6-8)

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**Cannabis Impact on Breastfeeding and Lactation**

- Many studies suggest that it can **decrease prolactin** levels
- Lactose levels are increased
- IgA levels are decreased
- Research suggests earlier weaning by mothers who use marijuana
- About half of marijuana users also use tobacco which also impacts lactation

**The pituitary gland control milk secretion**

The diagram illustrates the hormonal control of milk secretion. It shows the hypothalamus in the brain sending signals to the pituitary gland, which then releases prolactin hormones to stimulate milk secretion in the mammary glands. The diagram also shows the effect of baby sucking on the process.

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## What about CBD Products?

- Personal body products such as lotions
- Cosmetics and facial products
- Coffee/beverages
- Tinctures
- Supplements
- May contain trace THC
- Not regulated by FDA




## What about CBD Products?

- Beliefs that it is not harmful or doesn't contain THC
- Cannabidiol (CBD) does pass through breastmilk
- Effects are not well understood


Promoted for

- pain relief
- postpartum anxiety
- depression
- wellness







## Drug & Medication References




<https://www.ncbi.nlm.nih.gov/books/NBK501922/>




MotherToBaby®  
[www.mothersobaby.org](http://www.mothersobaby.org)



[www.infantrisk.com](http://www.infantrisk.com)




[www.halesmeds.com](http://www.halesmeds.com)



LactRx App

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## Summary of Current Drug & Medication References

Source	Lactation Recommendation
LactMed ( National Institutes of Health)	<ul style="list-style-type: none"> <li>Cannabis use should be avoided by nursing mothers, and nursing mothers should be informed of possible adverse effects on infant development from exposure to cannabis compounds in breastmilk.</li> <li>Case studies in the listing.</li> </ul>
Medication and Mother's Milk (2023)	<ul style="list-style-type: none"> <li>Marijuana can reduce prolactin levels.</li> <li>Was listed as an L5, now an L4 –Chronic and L3-Occasional (in terms of safety L1 safest, L5 most dangerous)</li> </ul>
Infant Risk Center	<ul style="list-style-type: none"> <li>Counseled to reduce or eliminate use of marijuana.</li> <li>Warns of potential long-term neurobehavioral consequences.</li> </ul>
MotherToBaby (Organization of Teratology Information Specialists)	<ul style="list-style-type: none"> <li>Marijuana use is discouraged due to lack of data.</li> <li>Cites research articles and position papers.</li> </ul>

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## Summary of Current Drug & Medication References

Organization	Lactation Recommendation
Medication and Mother's Milk (2023)	Marijuana can reduce prolactin levels. Previous editions listed as an L5, now L4 –Chronic and L3-Occasional (in terms of safety L1 safest, L5 most dangerous)

- L4 defined as Potentially Hazardous: positive evidence of risk to the infant or breastmilk production with benefit of breastfeeding possibly outweighing the risk of the drug
- L3 defined as Probably Compatible: no controlled studies, but risks possible or minimal
- For oral consumption, slower absorption and not as much THC is “bioavailable”.
- Many case studies are cited, and other studies with small numbers, and poor study designs.

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## Maternal Medications – Recommendations




1. Drugs not absorbed through GI tract are *probably safe* – i.e., topical
2. Choose drugs with higher protein binding or large molecular weight – harder to pass through milk
3. Investigate herbal preparations as well
4. Choose drugs with a shorter half life, not long-release forms

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## How Does Cannabis Measure Up?


Cannabis products come in a variety of forms:

- inhaled
- edible
- sublingual drops

*Recommendation:* Drugs not absorbed through GI tract are *probably* safe – i.e., topical but many lack data.

*Patients using edible products had similar cannabinoid levels as those who smoked cannabis (LactMed)*

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## How Does Cannabis Measure Up?

Cannabis :


- topical

*Recommendation:* Drugs not absorbed through GI tract are *probably* safe – i.e., topical but many lack data.

*Topicals include balms, salves, lotions, and bath soaks, which do not enter the bloodstream*

*Caution should be used to avoid breast, nipple or skin that would come in contact with baby*

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## How Does Cannabis Measure Up?

*Recommendation:* Choose drugs with higher protein binding or large molecular weight – harder to pass through milk

- Cannabis protein-binding is very high, making a large protein that does **not** easily fit through to the milk
- Can accumulate over time in fatty tissue

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## How Does Cannabis Measure Up?

*Recommendation:* Investigate herbal preparations as well as pharmaceuticals

- Some preparations of Cannabis, inhaled, topical, edible, or sublingual, may have **other** contaminants
- Many of the studies used controlled preparations from dispensaries, unlike the real world
- Some studies use older data

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## How Does Cannabis Measure Up?

*Recommendation:* Choose drugs with a shorter half-life, not long-release forms

- Cannabis has a **long** half-life of 25-57 hours
- The metabolites can linger for days or weeks in the mother's and infant's system
- THC loves highly-vascular areas of the body like the breast and is stored in fat

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## Recommendation of Marijuana Use and Breastfeeding

- Limited studies are looking at the harms of cannabis exposure during lactation (compared to pregnancy).
- A 2020 systematic review identified only 2 studies on the topic, both published more than 30 years ago.
- All health organizations recommend that those who are breastfeeding or lactating avoid or reducing use of Cannabis.
- One study suggests women should be advised to avoid breastfeeding within 1 hour of inhaled use to reduce exposure
- Recommendations are mostly based on a **lack of information**, erring on the side of caution.

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## Preterm Exposures



- A study of 763 early preterm infants from 2014 to 2020 found 17% of their mothers tested positive at the time of delivery for THC
- These babies were similarly healthy by the time of their discharge when fed their mother's breast milk compared to those who did not receive their mother's breast milk

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## The Preterm Infant

- Preterm milk is more suited to the preterm infant than mature milk
- Preterm milk is unique
  - Levels of nitrogen, long, medium and short chain fatty acids, sodium, chloride and iron are higher in preterm milk
  - Risk vs benefit of NOT getting breastmilk



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## Translating the Recommendations

- Counsel women to use caution: **reducing or abstaining is best** during lactation
- Discuss risk reduction strategies such as timing
- Not enough data to tell women that they cannot breastfeed if they are using marijuana
- Even with a preterm infant, short-term outcomes are comparable to those receiving formula
- Long-term effects are still unknown with concerns about long-term neurobehavioral development



## Tip 1: Sharpen your counseling skills

1. The expectant mother's willingness to talk about drug use will depend on the degree to which she trusts you
2. Inform that you discuss this with all of your clients
3. Acknowledge the cultural shift with the popularity of marijuana use
4. Reassure her that your role is to help, not judge





## Discussions Using the 3-Step Counseling Process

1. Ask open-ended questions to elicit client's motivation
2. Acknowledge/Affirm concerns and reassure her that these feelings are normal
3. Educate with carefully targeted messages that address her specific concerns and motivations



## Affirming Statements

- I've heard other clients say that, too.
- Many mothers have experienced that, too.
- I remember feeling that way.
- My friends told me the same thing.
- You are trying to be proactive with your health that is great.





## Targeted Education

- Use the answers to open-ended questions and target specific concerns
  - *So, it sounds like you are saying...*
- Address misinformation with affirmation statements
  - *Many feel that way...*
- Ask for ideas for solving problems and overcoming barriers
  - *How can we...?*



## Tip 2: Know your topic

1. Be aware of local resources and experts and support
2. Be up to date on the research
3. Understand that data is mixed and is not always conclusive
4. Provide the latest research and recommendations to reduce or abstain







## Tip 3: Show concern for risks to the baby

- Acknowledge the challenges of breastfeeding and parenting
- Share risk-reduction strategies
- Explore safe alternatives
- Offer referrals to programs such as
  - home visiting
  - new parent support
  - breastfeeding support



**How using alcohol & drugs can hurt your unborn baby**

From the moment you find out you are pregnant—and even before—you have to make important decisions to make about the use of alcohol and drugs. You may not know it yet, but you know that any substance can impact your baby.

**Alcohol and drugs can harm a developing baby in different ways:**

- They can impact brain development, causing both physical and behavioral challenges that may change everything.
- They can reduce the amount of nutrients and oxygen that go to the baby, causing the baby to be undernourished and underdeveloped.
- They can cause congenital and pattern issues, which could result in the baby being born too soon.
- Babies who use hard drugs often get through withdrawal. They may cry a lot and have trouble eating or sleeping.

**Take a stand and get the help you need! You and your baby deserve it!**

Author: Kelly Adams, MS, MEd, PhD, TCI  
 Florida State University Center for Prevention & Early Intervention Policy

**Breastfeeding & Drugs**

Using street drugs, herbal remedies, or prescription medications when breastfeeding can harm your baby.

**Any drug use while breastfeeding may cause your baby to:**

- feel drowsy or have difficulty waking up
- have trouble sucking & swallowing
- lose weight or not thrive
- have a fast heart rate & trouble resting
- experience vomiting
- gain weight slowly
- experience learning or reasoning issues
- not produce long after meals with regurgitate

**Remember—what you put in your body goes to your baby through your breasts!**

If you're using any drugs, talk with your doctor before breastfeeding.

Author: Kelly Adams, MS, MEd, PhD, TCI  
 Florida State University Center for Prevention & Early Intervention Policy

**The link between Addictions & Unresolved Trauma**

Living with a family member with an addiction is one of the ACEs—Adverse Childhood Experiences—that can have long-term negative effects on you and your baby.

If you or a loved one are battling an addiction, talk with your health care provider about treatment options in your community.


**OVERSHARED ADDICTION WITH BREASTFEEDING**

When you breastfeed, you pass on more than just milk to your baby. You also pass on the chemicals in your body. If you have an addiction, the chemicals from the drug can pass through your milk to your baby. This can cause health problems for your baby, such as difficulty sleeping, poor weight gain, and more.

**For more understanding about addictions, watch this short YouTube:**

<https://www.youtube.com/watch?v=8w8k-8d8d8g>

Author: Kelly Adams, MS, MEd, PhD, TCI  
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## Summary of Current Recommendations

Authority	Lactation Recommendation
Centers for Disease Control and Prevention (CDC)	Encouraged to abstain from or significantly reduce marijuana use.
American College of Obstetricians and Gynecologists (ACOG)	Marijuana use is discouraged due to lack of data.
Academy of Breastfeeding Medicine (ABM)	Counseled to reduce or eliminate use of marijuana.
American Academy of Pediatrics (AAP)	Marijuana use is discouraged due to lack of data.

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**Email: Mirine Richey, MPH, IBCLC** [m.richey@fsu.edu](mailto:m.richey@fsu.edu)



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## References:

- AAP. (2023) Maternal Marijuana Use During Pregnancy and Breastfeeding: Assessing In-Hospital Outcomes of Early Preterm Infants. American Academy of Pediatrics National Conference & Exhibition
- CDC. (2023) Contraindications to Breastfeeding Summary CDC.gov
- Florida Dept of Health. (2021) Breastfeeding Initiation and Duration in Florida, 2015-2020
- Hale, T. (2023) Medications and Mothers Milk.
- Josan, C., Shiplo, S., Fusch, G. et al. (2023). Cannabis use during lactation may alter the composition of human breast milk. *Pediatr Res*
- National Institute of Child Health and Human Development (2023) Drugs and Lactation Database (LactMed®) 2006-. Cannabis <https://www.ncbi.nlm.nih.gov/books/NBK501587/>
- Thompson, R., DeJong, K., & Lo, J. (2019) Marijuana Use in Pregnancy: A Review. *Obstetrical & gynecological survey*, 74(7), 415–428.
- Vanstone, M., Taneja, S., Popoola, A., Panday, J., Greyson, D., Lennox, R., & McDonald, S. D. (2021) Reasons for cannabis use during pregnancy and lactation: a qualitative study. *CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne*, 193(50), E1906–E1914.