MotherToBaby® North Carolina

Medications and Other Exposures in Breastfeeding

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- I have no conflicts of interest to report.

Objectives

1. Describe factors that influence the amount of infant exposure through the breast milk
2. Identify possible effects on baby of common exposures through the breast milk
3. Learn how to use and share MotherToBaby as a resource for information about exposures in breastfeeding

Benefits of breastfeeding: Infant

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Short-term:

- Complete nutrition for first 6 months of life
- Fewer GI, respiratory, ear infections
- Lower chance of SIDS/SUID
- Fewer allergies, asthma, skin conditions
- Increased bonding with caregiver

Long-term:

- Decreased incidence of health concerns including obesity, diabetes, childhood leukemia and lymphoma

Benefits of breastfeeding: Parent

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Short-term:

- Faster postpartum recovery
- Helps with pregnancy spacing
- Convenient, inexpensive
- Increased bonding with infant

Long-term:

- Decreased rates of breast, ovarian, endometrial cancer

Breastfeeding Report Card, 2022

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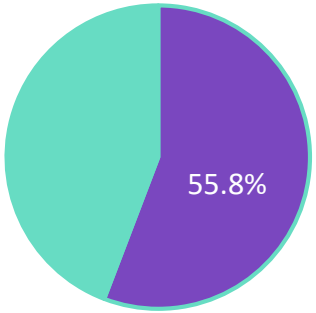
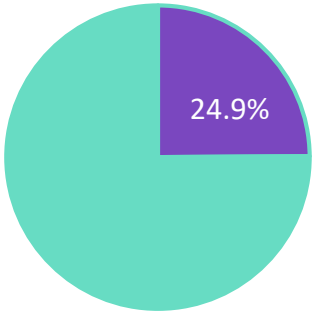
Among infants born in the **United States** in 2019:

Percentage of infants breastfed through 6 months:



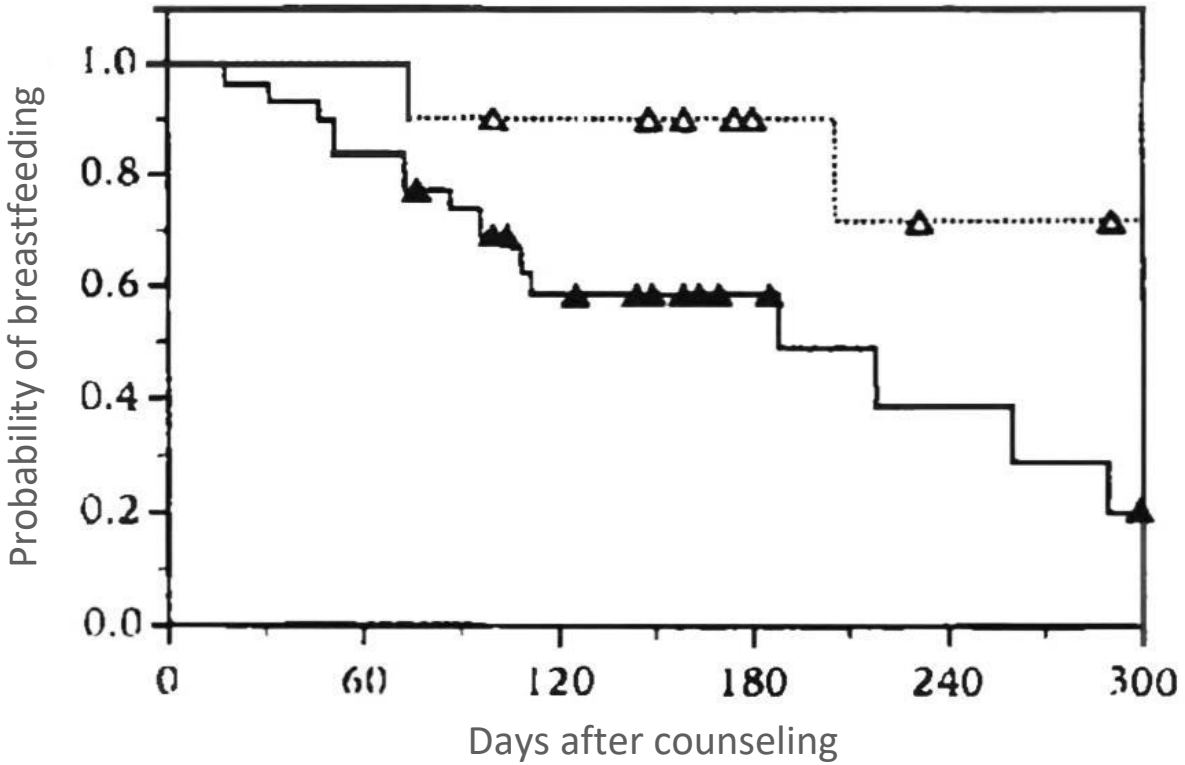
Percentage of infants **exclusively** breastfed through 6 months:



North Carolina → **53.0%** **22.1%**

https://www.cdc.gov/breastfeeding/data/reportcard.htm

Medication use affects breastfeeding rates



Ito S, et al. Maternal drug therapy as a risk factor shorter duration of breastfeeding. Pediatr Perinat Drug Ther 1999;3(1):44–8.

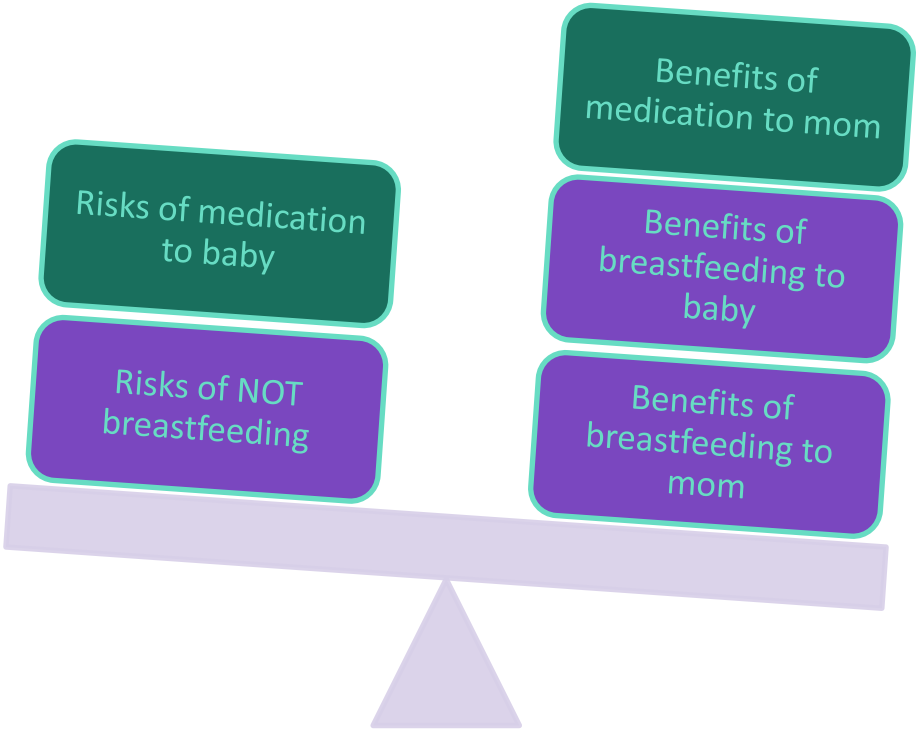
Most medications can be used while breastfeeding

- AAP: “Many breastfeeding women are wrongly advised to stop taking necessary medications or to discontinue nursing because of potential harmful effects on their infants.”
- CDC: Although many medications do pass into breast milk, most have little or no effect on milk supply or on infant well-being. Few medications are contraindicated while breastfeeding.

AAP: Sachs HC. 2013. The transfer of drugs and therapeutics into human breast milk: an update on selected topics. Pediatrics 132(3);e796-e809.
CDC: https://www.cdc.gov/breastfeeding/breastfeeding-special-circumstances/vaccinations-medications-drugs/prescription-medication-use.html

Risks vs. Benefits

Consider not only the medication but also breastfeeding itself



Factors affecting infant exposure through the breast milk

- **Does the substance enter the breast milk?**
  - Protein binding, molecular weight, acidity, solubility
- **Absorbed into baby's system or pass right through?**
  - "Oral bioavailability"
- **For how long and how often will baby be exposed?**
  - Length and dosing of treatment
  - Half-life of medication
  - Frequency of nursing, volume of milk ingested

Relative Infant Dose

- Weight-adjusted percentage of maternal dose that enters breast milk
- *In general*, RID less than 10% is considered compatible with breastfeeding
- MOST medications have a RID of less than 10%

Does pumping eliminate substances faster?

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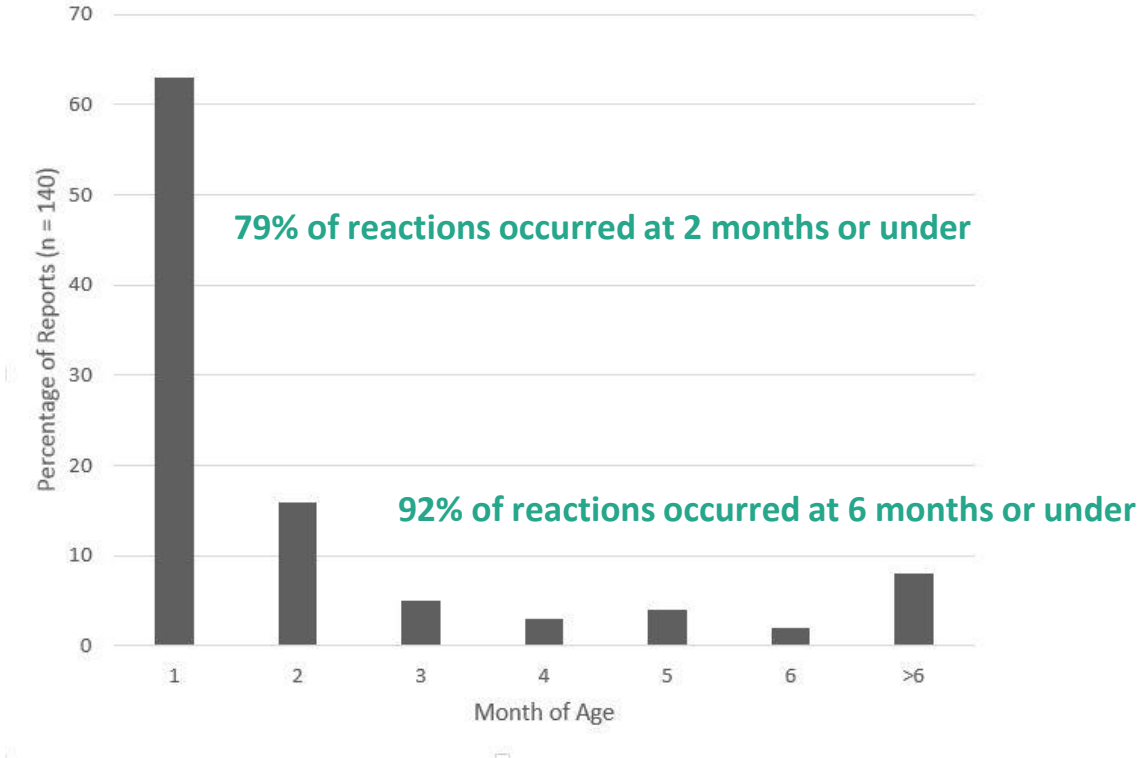
NOPE.

- Any new milk produced after pumping will still contain the substance as long as it is in the lactating person's system.
- Pumping is useful for comfort and to maintain milk supply.
- With ***time***, the substance is metabolized from the bloodstream *and* the breast milk. Won't "store" in milk.

Baby’s age matters

- Gut maturity → affects absorption
- Baby’s metabolism → affects accumulation
- Under age 2 months→ use greater caution

Adverse reactions by infant age



Anderson PO, et al. 2016. *ClinPediatr* 55:236-44.

Medications

Medications for mental health

- **Inflated perception of infant risk**
- **How significant are benefits of medication?**
  - Depressed/anxious parents may have more difficulty caring for their infants
  - How well does parent do off of medication?
  - Are first-line non-medication therapies enough?
- **Not a one-size-fits-all answer**
  - What's best for parent is usually best for baby

Medications for mental health

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- Amount baby will get through breast milk is LESS than during pregnancy
- Some enter the breast milk in only very low amounts (RID < 1-2%)
- Some have more data than others
- Research on long-term effects still limited

Reported infant side effects

Reports have included:

- Restlessness
- Irritability
- Poor feeding/weight loss
- Sedation
- Vomiting, diarrhea
- Seizures (2 cases with Wellbutrin, there appeared to be other contributing factors)
- Respiratory depression (2 cases with tricyclic antidepressants)

Most infants do not have side effects from the use of these medications while breastfeeding.

Medications for mental health

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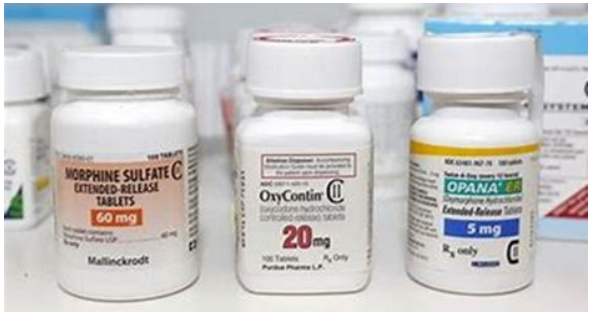
Takeaways:

- Many antidepressants and other mental health medications are considered ***compatible*** with breastfeeding
- Benefits of treatment to both parent and infant may outweigh any potential risks of medications
- Watch for possible side effects and monitor infant's growth and neurodevelopment

Prescription opioids

- Non-opioid pain meds are preferred in BF
- **Opioids and sedating drugs are responsible for most adverse side effects in breastfeeding**
- However, most babies do okay with *limited* amounts of opioids for short periods of time
- Watch baby for signs of sedation, breathing problems, especially if under 2 months of age!



Medication-assisted therapy

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- Most people in MAT can breastfeed if there are no other contraindications to breastfeeding
- RID < 3% for methadone and buprenorphine via the breast milk
- In cases of neonatal withdrawal from opioid use during pregnancy, breastfeeding after delivery is associated with:
  - Shorter hospital stays for infant
  - Less need for treatment of symptoms for infant
- As with any opioid, continue to watch baby for side effects after going home
- Do not abruptly discontinue breastfeeding while in MAT

Anesthesia

- Stays in the body for a very short time
- Local anesthesia (injected/topical): no interruption of BF required
- Regional and general anesthesia:
  - Healthy, full-term infants—can nurse as soon as parent is awake and alert
  - Preterm or at-risk infants—*may* need to withhold BF up to 12 hours
- Be sure all providers know the parent is breastfeeding

OTC cold medications

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Avoid:

- Multi-symptom, extra-strength and extended-release formulas
- Alcohol (check inactive ingredients)

Fever/pain:

- Acetaminophen (Tylenol) and ibuprofen (Advil) enter milk in lower amounts than the infant dose
- Aspirin not a first choice due to theoretical risks (aspirin not given to infants/young children)

Decongestants:

- Oral decongestants *might* affect milk supply; irritability or excitement in infants (rarely)
- Nasal spray decongestants may be preferred, if effective

OTC cold medications

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Antihistamines:

- Non-sedating antihistamines preferred
- Sedating antihistamines—if it makes mom sleepy, it can make baby sleepy

OTC cough medications:

- Dextromethorphan (suppressant)—no infant effects expected with occasional short-term use
- Guaifenesin (expectorant)—no data in BF and little evidence that it actually works (risks > benefits?)

Tips to reduce infant exposure

- Delay *elective* therapies or procedures until baby is weaned
- When possible, try non-medication therapies
- Use topical or inhaled meds instead of oral/systemic ones, if possible
- Choose meds that pass poorly into milk (seek expertise)
- Choose regular-strength, short-acting doses
- Avoid nursing at times of peak concentration in milk (seek expertise)
- Dose before longest period of infant sleep
- Temporarily withhold breastfeeding *if indicated*

Nice FJ, et al. Medications and breast-feeding: Current concepts. 2012. *J Am Pharm Assoc* Jan- Feb;52(1):86-94.

Suggested alternatives to some medications

- **Pain:** relaxation, massage, warm baths, heating pad, cold pack
- **Cough/cold/allergy:** saline nose drops, steam, effervescent shower tablets, nasal strips, warm water with honey and lemon
- **Antacids:** eat small meals, sleep with head propped, avoid head-bending activities, avoid gassy foods
- **Laxatives:** eat high fiber foods/cereals, prune juice, hot liquids with breakfast
- **Antidiarrheals:** discontinue solids 12-24 hours, increase fluids, eat toast/saltines

Nice FJ, et al. Medications and breast-feeding: Current concepts. 2012. J Am Pharm Assoc Jan- Feb;52(1):86-94.
MotherToBaby: https://mothertobaby.org/baby-blog/breastfeeding-treating-cough-and-cold-symptoms/

Herbals/Supplements

Herbals/Supplements

- No reliable safety information on many herbal products in breastfeeding
- Lack of FDA oversight for safety, efficacy
- Risk of contamination, mislabeling
- Strength of plant-derived ingredients can vary
- Efficacy data usually not strong enough to outweigh unknown risks

Galactagogues

"Current research of both pharmaceutical and herbal galactagogues is still relatively inconclusive and all agents have potential adverse effects. Therefore, ABM cannot recommend any specific galactagogue at this time." -Academy of Breastfeeding Medicine, 2018

Brodribb W. 2018. ABM Clinical Protocol #9: Use of Galactogogues in Initiating or Augmenting Maternal Milk Production. *Breastfeeding Medicine* 13(5).

“Natural” is not always better

vs.

Paul Karason

For more information, see National Center for Complementary and Integrative Health, *Colloidal Silver: What You Need to Know* available at https://nccih.nih.gov/health/silver

Substances

Marijuana

- “Natural”? Contains over 400 compounds
- Increasing legality = increasing perception of safety
- Difficult to study:
  - Largely unregulated / no standardized “dosing” for medical uses
  - Varying potency of products/strains
  - Delivery method affects exposure levels
  - Co-use of other substances

Marijuana and breastfeeding: What we know

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- THC stores in fatty tissues of the body and continues to release into the bloodstream
- THC and CBD in the bloodstream enter the breast milk by binding to fat
- THC has been found in infant stool, can stay in the infant's body for up to 3 weeks
- Exposure period through breast milk is variable and unknown, can depend in part of frequency of use
- Pumping and discarding breast milk does not help it clear faster
- Reported short-term effects have included tremors (shaking), poor sucking, less feeding time, slow weight gain, delayed motor development, and shorter duration of breastfeeding

Marijuana and breastfeeding: What we don't know

- When breast milk can be considered "clear" of THC, CBD
- Long-term effects of infant exposure through breast milk
- What else might be in the marijuana being used
- What is "best" for every situation

Weigh known benefits of breastfeeding against known and unknown risks of marijuana use, including frequency of use and child's age.

Alcohol

- Breastfeeding people do not have to abstain from alcohol BUT they should be smart about it
- Alcohol concentration in breast milk is the same as in the bloodstream
- Pumping will NOT eliminate alcohol faster…only *time* will do this
- Waiting 2 to 2.5 hours for *each* standard drink will reduce infant exposure

https://www.cdc.gov/breastfeeding/images/what-is-a-drink.jpg

Alcohol

- Regularly consuming more than 2 drinks per day is not recommended while breastfeeding
- More than “moderate” drinking can:
  - Affect infants development, growth, and sleep patterns
  - Affect “letdown” and milk production over time
  - Impair judgment and ability to safely care for the child

Cigarettes

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- Smoking associated with early weaning or not BF at all
- Increased SIDS/SUID, childhood allergies/asthma
- Encourage mothers to BF even if they smoke → BF is protective
- Reduce # of cigarettes as much as possible, minimize second hand smoke in the home
- Consider *short-acting* nicotine replacement therapy at *lowest* effective doses

FREE Help Quitting
Call QuitlineNC

1-800-QUIT-NOW
(1-800-784-8669)

MotherToBaby

What is MotherToBaby?

MotherToBaby® North Carolina

- A **free** service of the not-for-profit Organization of Teratology Information Specialists (OTIS)
- Provides **evidence-based** information on effects of medications, substances, and other exposures in pregnancy and breastfeeding
- Available to **anyone**: healthcare providers, parents, families, prospective adoptive parents
- Trained specialists provide easy-to-understand information in **English and Spanish**

Contact MotherToBaby

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Call: 866-626-6847

Text: 855-999-3525

Email or Live Chat:
MotherToBaby.org/Contact

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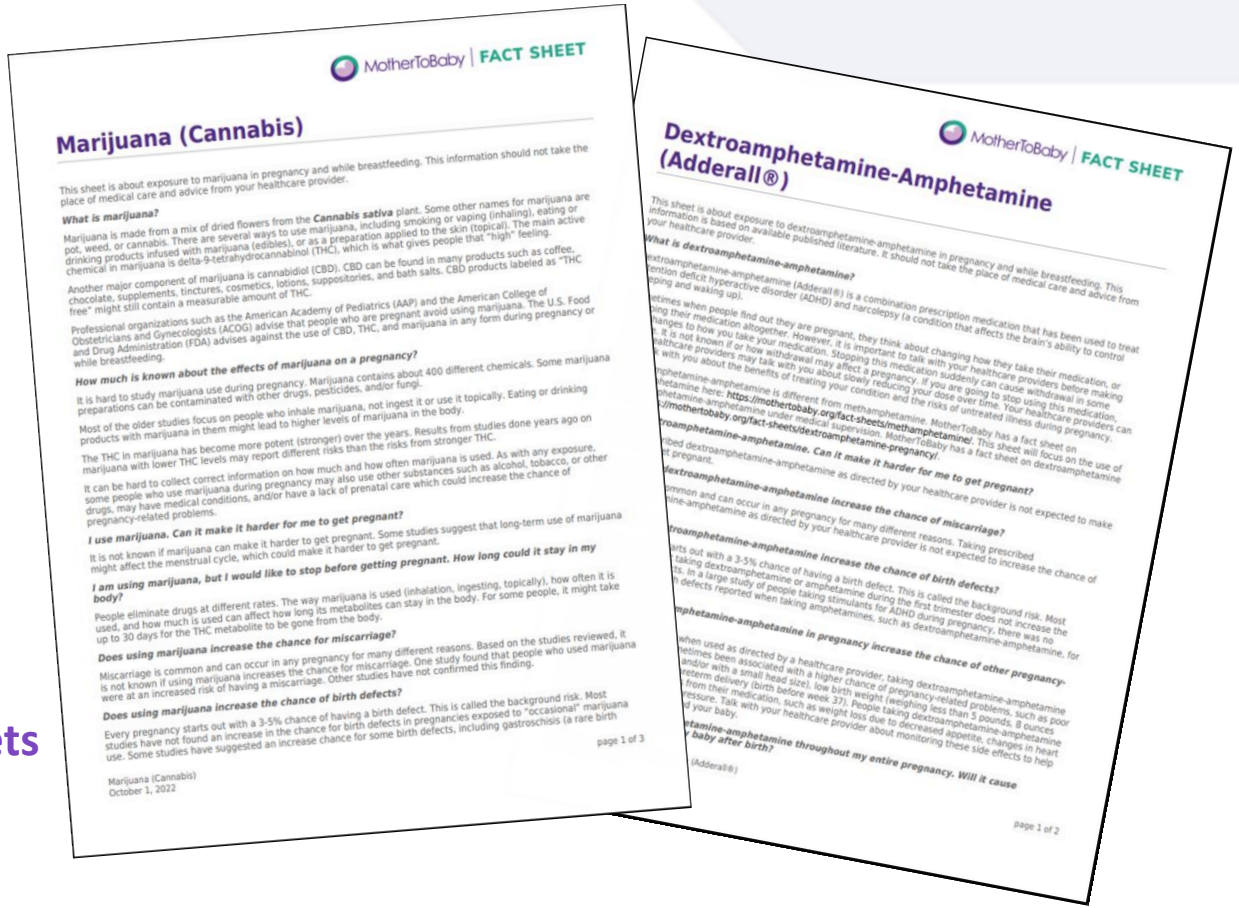
800-532-6302 (direct)

facts@mothertobaby.org (direct)

Fact Sheets

- 275+ evidence-based **Fact Sheets** in English and Spanish
- Answers to FAQ about exposures in pregnancy and breastfeeding
- Free to view, download, and print

MotherToBaby.org/Fact-Sheets



LactRx by MotherToBaby

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- **LactRx** provides easy access to the **National Library of Medicine's LactMed** database for current information on medications, substances, and more in lactation
- Free for iPhone and Android: **MotherToBaby.org/LactRx**

Additional Selected References

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Thank you!