

Medications and Other Exposures in Breastfeeding



• 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
- 2 Learn how to use and share MotherToBaby as a resource for information about exposures in breastfeeding

Benefits of breastfeeding: Infant



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



Short-term:

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

Long-term:

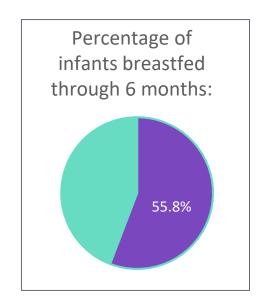
 Decreased rates of breast, ovarian, endometrial cancer

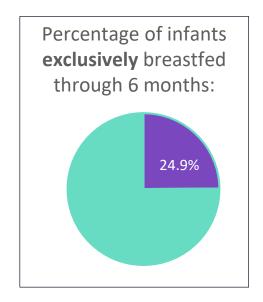


Breastfeeding Report Card, 2022



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



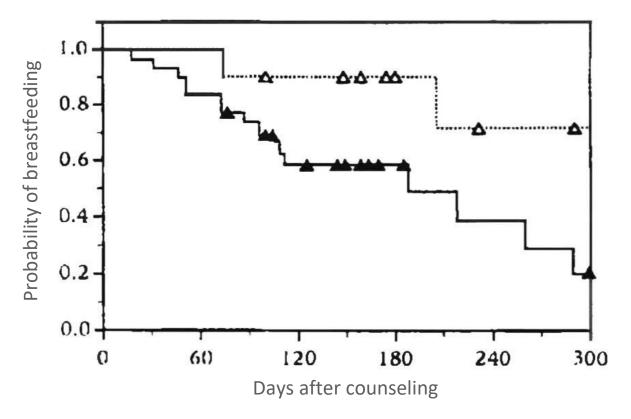




53.0%

22.1%

Medication use affects breastfeeding rates





Most medications can be used while breastfeeding

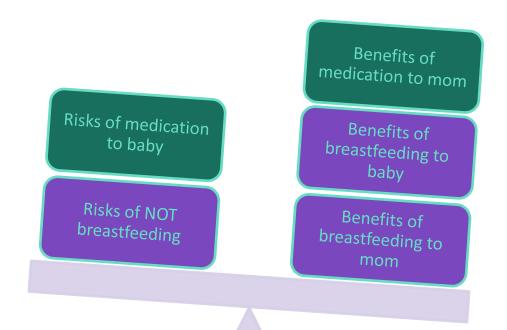
- AAP: "Many breastfeeding women are wrongly advised to stop taking necessary medications or to discontinue nursing because of potential harmful effects on their infants."
- CDC: Although many medications do pass into breast milk, most have little or no effect on milk supply or on infant well-being.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







- 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?

NOPE.

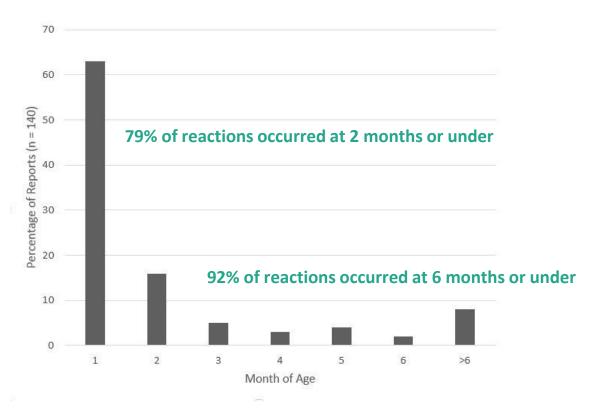
- Any new milk produced after pumping will still contain the substance as long as it is in the lactating person's system.
- Pumping is useful for comfort and to maintain milk supply.
- With time, the substance is metabolized from the bloodstream and the breast milk. Won't "store" in milk.

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



- 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



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



- 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



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



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



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

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

- 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



- 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?



- 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







Call: 866-626-6847

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Marijuana (Cannabis)

This sheet is about exposure to marijuana in pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

Marijuana is made from a mix of dried flowers from the Cannabis sativa plant. Some other names for marijuana are Marijuana is made from a mix of ored flowers from the Cannabis sativa plant. Some other names for marijuana are of weed, or cannabis. There are several ways to use marijuana, including smoking or vaping (inhaling), eating or princing problems in increased with marijuana (edition). As a preparation applied to the sun representation of the same active control of the sun ornixing products intused with manquana (editiols), or as a preparation applied to the sion (topical). The mail chemical in marijuana is delta-9-tetrahydrocannabinol (THC), which is what gives people that "high" feeling.

Another major component of marijuana is cannabidiol (CBD), CBD can be found in many groducts such as coffee, chocolate, appelements, linctures, cosmetics, liditions, suppositories, and bath sales. CBD products labeled as "THC chocolate, appelements, direction of the control of the control

Professional organizations such as the American Academy of Pediatrics (AAP) and the American College of reversional organizations such as the American Academy or Pediatrics (AAP) and the American Conlege of baseleticares and Gynecologists (ACOG) advise that people who are pregnant avoid using maniplana. The U.S. Food and Drug Administration (FDA) advises against the use of CBD, THC, and maniplana in any form during pregnancy or and Drug Administration.

It is hard to study marijuana use during pregnancy. Marijuana contains about 400 different chemicals. Some marijuana preparations can be contaminated with other drugs, pesticides, and/or furgi.

Most of the older studies focus on people who inhale marijuana, not ingest it or use it topically. Eating or drinking most or the croer studies focus on people who innae manjuana, not ingest it or use it is products with manjuana in them might lead to higher levels of manjuana in the body.

The THC in marijuana has become more potent (stronger) over the years. Results from studies done years ago on THE THE IN THAT HAVE DECOME MORE PROPERLY STRONGER OVER THE YEARS. KESSINS FROM STUDIES THAT HAVE THE LEVELS MAY REPORT different risks than the risks from Stronger THC.

It can be hard to collect correct information on how much and how often marijuana is used. As with any exposure, It can be hard so consect correct information on how much and how other marijuana is used. As with any exposure, some people who use marijuana during pregnancy may also use other substances such as skooled, tobacce, or other drugs, may have medical conditions, and/or have a lack of prenatal care which could increase the chance of

It is not known if marijuana can make it harder to get pregnant. Some studies suggest that long-term use of marijuana might affect the mendrual cycle, which could make it harder to get pregnant.

I am using marijuana, but I would like to stop before getting pregnant. How long could it stay in my

People eliminate drugs at different rates. The way marijuana is used (inhalation, ingesting, topically), how often it is reopie eliminate crups at orierent rates. The way marquana is used (inhalation, ingesting, topically), how often it is used, and how much is used can affect how long its metabolites can stay in the body. For some people, it might take up to 30 days for the THC metabolite to be gone from the body.

Miscarriage is common and can occur in any pregnancy for many different reasons. Based on the studies reviewed, it is not known if retire manufactures because the observable for many different reasons. moveringe is common into son occur in any pregnancy via many unterent reasons, based on the studies reviewed, it work through it using marijusna increases the chance for miscarriage. One study found that people who used marijuana increases the chance for miscarriage. One study found that people who used marijuana were at an increased risk of having a miscarriage. Other studies have not confirmed this finding.

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Marijuana (Cannabis)



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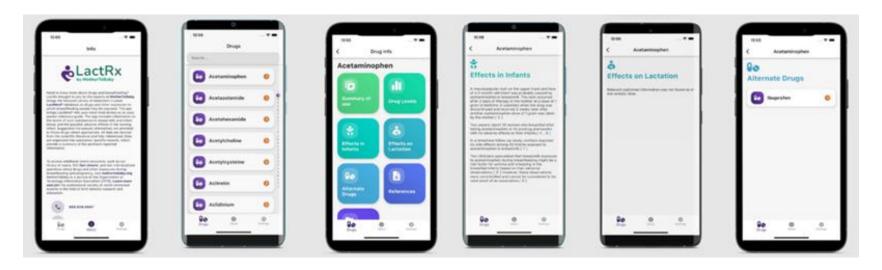
stanine-amphetamine throughout my entire pregnancy. Will it cause

page 1 of 2





- 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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800-532-6302 (direct)



facts@mothertobaby.org (direct)

Lorrie Harris-Sagaribay, MPH

Teratogen Information Specialist and Coordinator lorrie.harrissagaribay@hcahealthcare.com 828-213-6827



Thank you!