

# Behind the Scenes at MotherToBaby

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Did you know that 70% of pregnant women take at least one prescribed medication? And that 90% take any medication during pregnancy? How do you know if it is safe for a pregnant woman to take these medicines?

MotherToBaby Teratogen Information Specialists (TIS) are experts at answering questions about any possible increased risk of taking an over-the-counter (OTC) or prescribed medication, as well as any other exposures! A teratogen is something that can increase the risk for birth defects to the developing baby, and other problems such as a smaller baby or early delivery, when exposure occurs during pregnancy. Special intensive training is required to become a TIS, before we are able to answer the questions of healthcare providers, pregnant and lactating women, their relatives and partners, prospective adoptive parents, and the public. We get calls from people of all ages, teens up to older adults, even prospective grandparents. Teratogen specialists learn how to investigate the question, summarize the data, and then communicate it in a way that is easily understood. Every contact is a little different because each scenario is different, but that makes each day endlessly fascinating for those at MotherToBaby who respond to your inquiries.

This work is different than the work of other healthcare providers such as a genetic counselor, midwife or obstetrician – we don't generally delve into family history, and we don't make direct recommendations. We try to be reassuring as we give you the most up-to-date exposure information. We consider the potential effects of taking AND not taking a medication, herbal supplement, or OTC drug. There are important considerations when someone is planning a pregnancy, facing a newly discovered pregnancy or an unanticipated pregnancy, dealing with worsening mental or physical health conditions, or with the sudden diagnosis of a birth defect or pregnancy loss.

We answer questions from prospective adoptive parents who may only have 36 hours to decide if they will accept a baby whose biological mom used heroin, methamphetamine or alcohol in pregnancy. We listen to pregnant callers worried about the substantial alcohol they drank or the marijuana they used before getting a positive pregnancy test. We also answer questions from people worried about Zika virus exposure on their honeymoons. And common questions these days involve the COVID-19 virus and the COVID vaccines and booster shots given at any time in pregnancy or while breastfeeding.

Teratogen specialists also get calls about the potential consequences of pain medications for those who are pregnant and facing surgery such as a pre-op visit for a herniated disc – and are in excruciating pain. We have numerous conversations with lactating women who were advised to “pump and dump” after dental work or general anesthesia, or CT scans and we are able to discuss why this dated practice is usually unnecessary. Some women call repeatedly due to anxiety or simply because our TIS team has reliable expertise. We also answer breastfeeding questions about COVID-19 and the vaccines, prescriptions and OTC medications, or how much of a drug gets into breastmilk. And we get questions from pregnant and postpartum individuals who are trying to avoid using inhalers or taking their anxiety/nausea/ADHD medications. We share the research and reassure them that some health conditions need to be treated with medications because it's best for mom and baby. Some conversations are more sensitive – such as women with a history of multiple miscarriages, IVF, or other high-risk pregnancies who are trying to make only the best choices in a high-stakes stressful time. Sometimes there are tears, and that's OK.

Often, we talk about the benefits to the individual of taking/using the medication or other product, versus any possible risks to the pregnancy or the baby. We tell them to consider the long view, that as a parent, you will be making “risk vs. benefit” decisions for nearly the next two decades for the child growing inside you. So, it's important for you to make a choice now that gives you a good quality of life, and also to consider every aspect of the consequences for you both mentally and physically. In addition, it is in the important input of your partner and your healthcare providers.

It is a privilege to be part of the lives of all those who come to MotherToBaby for information. We are sensitive to different cultures, backgrounds, sexual orientation, and gender identification. We have 12 affiliate offices in the US and one in Canada. We provide information by phone, text, email, and live chat, and because we work across three time zones, we can respond quickly!

Affiliate offices are based in universities, academic medical centers, or health departments. Our multi-disciplinary team of Teratogen Information Specialists includes genetic counselors, nurses, doctors, and others with a master's degree or Master of Public Health specifically. We also provide services in Spanish. We meet at least annually for training plus more often within our own institutions to discuss new publications and developments in the field.

Please spread the word. We welcome your inquiries!

**Questions? Call 866.626.6847 | Text 855.999.3525 | Email or Chat at [MotherToBaby.org](https://www.MotherToBaby.org).**

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***By Ginger Nichols, Licensed Certified Genetic Counselor at MotherToBaby Connecticut***

With Birth Defects Prevention Month in full swing, it's time to focus on **Tip #2 for Preventing Birth Defects: Booking a visit with your health care provider before stopping or starting any medicine.**

Callers to **MotherToBaby** often wonder why it's important to talk with their health care provider before stopping or starting a medication. My most recent caller to MotherToBaby asked this very question.

Maria contacted us at **MotherToBaby** telling us that she and her partner had decided that they would like to start a family. Like many women, Maria was taking medications for a health condition, and she wanted to learn if it would be OK to use them while trying to get pregnant and during pregnancy. She was planning to stop taking them because she was worried that they could be harmful for her baby. She told me that she felt alone as she faced this decision.

In fact, Maria is not alone; 70 percent of women need to take prescription medication during pregnancy to treat a wide

variety of health conditions, like **depression, asthma, diabetes, nausea and vomiting of pregnancy and inflammatory bowel disease**. And most women (90 percent) report using over-the-counter medication, vitamins or supplements for overall health or for specific health concerns, such as **acne, allergies, colds, constipation, headaches and lice** .

### **Why should you talk with you health care provider before starting or stopping taking medication?**

Here's why it's important to check with your providers about taking medications and supplements before and during pregnancy:

- Some medications or herbal products can make it harder to get pregnant. And some medications can help you get pregnant.
- In some cases, stopping a medication and having an untreated medical condition may be more of a concern for pregnancy than the medications used to treat it. If a medicine can be harmful during pregnancy, your provider may want to switch you to one that's safer for your baby. But some medications are necessary, even if they may be risky for your baby. You and your provider can talk about all your treatment options to make the best decision for you and your baby. Some medications can cause you to go through withdrawal (have unpleasant physical and/or mental symptoms) if you stop suddenly (also called "cold turkey"). If you and your provider decide to stop a treatment, you may need to stop taking the medicine slowly over time rather than stopping all at once.
- Some medications may need to be increased or decreased during pregnancy in order to continue working properly.
- Some vitamins and supplements may have too much or too little of the nutrients that you need during pregnancy. You may need to adjust the amount you take.
- **Supplements and herbal products** are not regulated by the Food and Drug Administration. There are no standards for ingredients and strength, and most have been poorly studied regarding their safety for use in a pregnancy.

### **Now that you know why it's important to check on the safety of medication before and during pregnancy, what's next?**

- Whether you are planning a pregnancy or currently pregnant, talk to your health care providers before starting any medication (prescription or over-the-counter), vitamins or herbal products.
- Don't stop taking your prescription medication unless your health care provider says that it is OK.
- Make appointments with your health care providers to review medications they prescribe, and make an appointment with your prenatal provider. If you are planning a pregnancy, talk with your providers before you get pregnant; and talk with them again as soon as you find out that you are pregnant.
- Tell your provider about any medicine you take, including medications that you only use once in a while, like seasonal allergy medication or rescue inhalers. Tell them about over-the-counter medicines, **supplements and herbal products, too**. A product may be made from herbs if it has word on the label like indigenous or tribal medicine, traditional Chinese medicine, **natural remedies**, herbal supplements, **nutritional shakes, essential oils** and tinctures.
- Start taking a prenatal vitamin as soon as you stop your birth control. Talk to your provider about which prenatal vitamin to take.

### **How can you get ready to talk to your providers about medication and pregnancy?**

- Prepare and bring with you a list of all the medications and supplements that you take, including the ones you may only take occasionally.
  - Bring all pill bottles/boxes with you to the appointment so your provider can check on the active ingredients.
  - For each medication/supplement on your list, include information on:

- Dosage (how much you take),
  - Frequency (how often you take it), and
  - Indication (why you are taking it).
- Some medications can stay in the body for a long time. If your treatment plan includes stopping a medication before getting pregnant, discuss the timing of when you should stop.
  - There may be alternative treatments that work just as well for you and are better options during pregnancy and breastfeeding.
    - Ask about alternative treatments. Find out if you can try them out before pregnancy to see if they will work for you.
  - Talk about the right **prenatal vitamins** with the right amount of **folic acid** for you.
    - Some medications can affect how your body uses folic acid, which is important for pregnancy.
    - Ask your prenatal provider to prescribe you a prenatal vitamin to make the choice easier.

After our call, Maria felt more comfortable in learning about her medications and questions she should have ready to discuss with her providers about the best way to treat her medical condition throughout her pregnancy.

Remember, just like Maria, you are not alone. MotherToBaby is here to help you and your providers work together to make informed decisions about your medication options for pregnancy and breastfeeding.



***Ginger Nichols is a licensed certified genetic counselor based in Farmington, Connecticut. She currently works for MotherToBaby CT, which is housed at UCONN Health in the Division of Human Genetics, Department of Genetics and Genome Sciences. She obtained her Bachelor of Science degree in Biology and Sociology from Juniata College and her Master's Degree in Medical Genetics from the University of Cincinnati. She has a special interest in occupational and environmental exposures.***

#### **About MotherToBaby**

***MotherToBaby is a service of the Organization of Teratology Information Specialists (OTIS), suggested resources by many agencies including the Centers for Disease Control and Prevention (CDC). If you have questions about exposures during pregnancy and breastfeeding, please call MotherToBaby toll-FREE at 866-626-6847 or try out MotherToBaby's new text information service by texting questions to (855) 999-3525. You can also visit [MotherToBaby.org](https://www.MotherToBaby.org) to browse a library of fact sheets about dozens of viruses, medications, vaccines, alcohol, diseases, or other exposures during pregnancy and breastfeeding or connect with all of our resources by downloading the new MotherToBaby free app, available on **Android and iOS** markets.***

#### Selected References:

- Bohio R, et al. 2016. Utilization of over the counter medication among pregnant women; a cross-sectional study

conducted at Isra University Hospital, Hyderabad. J Pak Med Assoc. 66(1):68-71.

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**By Pat Olney, MS, CGC, Pregnancy Risk Specialist, MotherToBaby Georgia**

One day in early June I received a frantic call from a woman who had first called Georgia's Poison Control Center worried about the agent used to treat her varicose veins. She thought that she did the right thing by postponing her treatment until after she gave birth, but now was concerned about breastfeeding her newborn. The medical director at poison control, who is one of our advisory board members, gave her the correct information: "Call Pat Olney at MotherToBaby!"

The caller's vascular surgeon advised her to pump her breast milk over the next 24-48 hours, and discard it; otherwise known as pump and dump. The first thing she did before calling poison control was surf the Internet for answers. She began feeling guilty about having had the procedure. She lamented, "Why didn't I wait until after my baby was done nursing!"

First, I needed to learn a little bit about varicose veins. Varicose veins are more common in women than men, and women may first develop varicose veins during pregnancy. Pregnancy puts an added burden on the veins as the amount of blood flowing through the veins increases. Veins in the legs are already working against gravity, and pressure from the increased blood volume can cause veins to swell and bulge near the surface of the skin. They tend to get worse with each subsequent pregnancy, as women get older, or if a woman is overweight. Varicose veins can be very painful. Typically, the problem tends to improve after delivery. For our caller, the pain and discomfort continued and she decided to seek treatment.

The agent used for her varicose vein treatment was sodium tetradecyl sulfate (STS). I consulted my brand new 2014 edition of Dr. Thomas Hale's manual of lactational pharmacology, "Medications & Mother's Milk." Dr. Hale's book is used all over the world, and he is recognized as an expert in this highly specialized field. STS, a sclerosing agent, is injected into the affected vein. Dr. Hale describes this agent: "...an anionic surfactant which causes local inflammation, and thrombus formation, thereby occluding and eventually obliterating the affected vein." He goes on to say "severe reactions such as anaphylactic shock, pulmonary embolism have been reported, although rare."

Sounds terrible, doesn't it? I said to myself...no wonder this woman called poison control!

Dr. Hale developed the following lactation risk categories:

**L1 Compatible:** drug has been taken by a large number of breastfeeding women without any observed increase in adverse effects in the infant; controlled studies fail to demonstrate a risk to the infant, or the product is not orally bioavailable in an infant

**L2 Probably compatible:** drug has been studied in a limited number of breastfeeding women without an increase in adverse effects in the infant, and/or the evidence of a demonstrated risk is remote

**L3 Probably compatible:** there are no controlled studies in breastfeeding women; however, the risk of untoward effects to breastfed infant is possible, or controlled studies show only minimal non-threatening adverse effects; drugs should be given only if potential benefit justifies potential risk to infant; new medications that have no published data are automatically categorized in this category, regardless of how safe they may be

**L4 Possibly hazardous:** positive evidence of risk to breastfed infant or to breast milk production; benefits of use may be acceptable despite the risk to infant; e.g. if the drug is needed in a life-threatening situation or a serious disease for which safer drugs cannot be used or are ineffective

**L5 Hazardous:** studies in breastfeeding mothers have demonstrated significant and documented risk to the infant based on human experience, or is a medication that has a high risk of causing significant damage to infant; drug is contraindicated in women breastfeeding an infant

#### **Did the vascular surgeon give our caller the correct information?**

Sodium tetradecyl sulfate falls into lactation category L3. There are no studies done in nursing women, and there is no data on its transfer into human milk. Dr. Hale goes on and states, "This product could be hazardous if introduced in the infant through breast milk. Therefore, extreme caution is recommended with its use in a lactating mother."

Since there are no published studies, and no data, our caller was given the correct advice: pump and dump. Fortunately, her baby was already taking an occasional bottle, so she thought the baby would easily switch back to breastfeeding.

Sometimes the advice given to lactating mothers is not so straightforward. As summarized in a clinical report published by the American Academy of Pediatrics (AAP), "Many breastfeeding women are wrongly advised to stop taking necessary medications or to discontinue nursing because of potential harmful effects on their infants. Not all drugs are present in clinically significant amounts in human milk or pose a risk to the infant. Certain classes of drugs can be problematic, either because of accumulation in breast milk or due to their effects on the nursing infant or mother."

When counseling a woman who has chosen to give her baby the best start in life, it's important to get the facts, even if evidence-based information is lacking.

**Questions? For your FREE personalized risk assessment, call MotherToBaby toll-FREE (866) 626-6847. MotherToBaby is a service of the international non-profit Organization of Teratology Information Specialists (OTIS), a society that supports and contributes to worldwide initiatives for teratology education and research. MotherToBaby affiliates and OTIS are suggested resources by many agencies, including the Centers for Disease Control and Prevention (CDC), and are dedicated to providing evidence-based information to mothers, health care professionals, and the general public about medications and other exposures during pregnancy and while breastfeeding. Learn more at [MotherToBaby.org](https://www.MotherToBaby.org).**



***Patricia Olney, MS, is a certified genetic counselor and pregnancy risk specialist at MotherToBaby Georgia, Emory University. She received her masters degree at the University of California, Berkeley and has practiced genetic counseling for more than 25 years. MotherToBaby GA is funded by the Georgia Department of Behavioral Health and Developmental Disabilities.***

Reference:

The American Academy of Pediatrics (AAP) August 2013 “The Transfer of Drugs and Therapeutics Into Human Breast Milk: An Update on Selected Topics.”

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