

Beyond the Status: What STDs Really Mean in Pregnancy and Breastfeeding

By Brittany Ajoku, MotherToBaby North Texas

Did you know that 1 of every 2 sexually active people will contract a sexually transmitted disease (STD) by age 25? That number is shocking, and highlights why it is so important to tackle this often-stigmatized topic head-on! So as we ease into National STD Awareness Month, it's time to talk openly about STDs, pregnancy and breastfeeding. STDs can affect people from all walks of life, and do not discriminate against anyone, including pregnant and breastfeeding women.

I remember when a client recently called our office panicked about the result of an STD test after learning her husband was having an affair. She tested positive for a bacterial infection and her doctor prescribed an antibiotic for treatment. Because she was breastfeeding, she was hesitant to begin using the antibiotic and had many questions. Would the antibiotic hurt her baby? Could she have infected her baby before she knew she had the infection? With a Google search leaving her with more questions than answers, she turned to MotherToBaby. After listening to her concerns, I began to dig through the latest research to provide her with what we are known for: giving understandable and current, evidence-based information.

STD Testing: Why Knowing Your Status Is Definitely Better For You & For Baby

In any woman, including those who are pregnant or breastfeeding, some STDs are asymptomatic (do not have symptoms or signs) even when infected. As a result, it can be difficult to know for sure whether a woman is infected or not without testing. Some STDs are automatically tested for over the course of a pregnancy (such as syphilis, HIV, hepatitis B, and chlamydia) while others are only tested if you are at an increased risk for the infection due to various risk factors. Even if you have already been tested earlier in pregnancy or you were tested in the past while breastfeeding, it is important to let your doctor know if you are having symptoms or suspect you have or may have been exposed to an STD. Earlier treatment of STDs allows for earlier detection of infections, which reduces the likelihood for you to transmit the infection to your baby during pregnancy or via breastmilk. Untreated STDs can not only lead to negative outcomes in moms but can also lead to negative outcomes in their babies.

Some of the negative outcomes from untreated STDs in pregnancy are:

- Preterm delivery
- Low birth weight
- Pregnancy loss
- Infections in the baby's organs
- Premature rupture of membranes

Treating STDs in Nursing Moms and Moms-To-Be

Once detected and diagnosed, it's best to begin to treat the STD as soon as possible. Antibiotics are commonly prescribed to treat and cure bacterial infections, while antiviral medications are prescribed to help treat the signs and symptoms of viral infections. Many medications have not been shown to increase risks in pregnancy and breastfeeding. Our library of fact sheets has many of the antibiotics and antiviral medications used to treat STDs and can be viewed [here](#).

While breastfeeding with an STD, there is an additional factor to keep in mind besides what medication is prescribed to treat the STD. There are some STDs (such as syphilis and herpes) that may produce sores on various areas of the body and it's important to keep your baby and any pumping equipment from touching these sores to limit transmission of infections.

"An Ounce of Prevention Is Worth A Pound of Cure"

As important as it is to talk about treatment, prevention is also important to discuss. Here are a few things to keep in mind both during pregnancy and while breastfeeding.

- It is important to always have open and honest conversations with both your doctor and intimate partner(s) about your STD status.
- Abstaining from any type of sex (oral, vaginal, or anal) is the most reliable way to avoid infection. But if you want to be sexually active (and let's face it, many do!), practice safe sex by consistently and correctly using condoms, especially if you and your partner are not mutually monogamous or have not recently been tested.
- Be sure to get tested as soon as possible whenever you notice symptoms and signs, or think you've been infected.
- If you and/or your partner(s) are currently receiving treatment for an STD, practice abstinence during treatment.

With this information in mind, I was able to counsel my client on the importance of treating her STD and that the antibiotic she was prescribed was not expected to have negative effects in her nursing infant. Many STDs that are bacterial (such as chlamydia and gonorrhea) have not been shown to be transmitted via breast milk so my client had not put her infant at risk prior to treatment.

Just as I was able to help my client, the experts at MotherToBaby are always available to discuss medications and exposures, like STDs, during pregnancy and breastfeeding – it's confidential, no-cost, and judgment-free!



Brittany Ajoku is a Teratogen Information Specialist with MotherToBaby North Texas. She received her bachelor's degree in biochemistry from the University of North Texas and is working towards a Master in Public Health in Maternal and Child Health. Along with providing counseling at the service, she also enjoys raising awareness of the organization through community presentations and events.

About MotherToBaby

MotherToBaby is a service of the Organization of Teratology Information Specialists (OTIS), and a suggested resource 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.

References:

Center for Disease Control and Prevention (CDC). 2017. STDs during Pregnancy.
<https://www.cdc.gov/STD/pregnancy/default.htm>

The American College of Obstetricians and Gynecologists (ACOG). 2017. FAQs: Routine Tests During Pregnancy.
<https://www.acog.org/Patients/FAQs/Routine-Tests-During-Pregnancy>

March of Dimes (MOD). 2018. Sexually Transmitted Infections.
<https://www.marchofdimes.org/complications/sexually-transmitted-infections.aspx>

National Institute of Child Health and Development. 2017. How do sexually transmitted diseases and sexually transmitted infections (STDs/STIs) affect pregnancy?
<https://www.nichd.nih.gov/health/topics/STDs/conditioninfo/infant>

Office on Women's Health, U.S. Department of Health and Human Services. 2018. Sexually transmitted infections, pregnancy, and breastfeeding. <https://www.womenshealth.gov/a-z-topics/STDs-pregnancy-and-breastfeeding>

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

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, April 9, 2019.

Beyond the Status: What STDs Really Mean in Pregnancy and Breastfeeding

By Beth Kiernan, MPH, Interviewer & Teratogen Information Specialist, MotherToBaby

"When my RA started flaring 6 or 7 weeks postpartum, I got to the point that I could barely lift my own baby....We need more research on medications used in pregnancy as well as during breastfeeding!"

I want you to meet Mariah, a participant in our MotherToBaby Rheumatoid Arthritis Study. I chatted with Mariah to learn about her experience being pregnant with a chronic medical condition and to find out what motivated her to participate in our study. As a Baby Blog reader, you are probably aware that MotherToBaby provides information on exposures during pregnancy and breastfeeding. What you might not know is that we also conduct observational research on certain health conditions and their treatments, with the goal of providing moms like Mariah (and like you!) with better information about health and medications in pregnancy. This month's Baby Blog focuses on the role of research at MotherToBaby and puts a spotlight on those who make our program possible: the women who decide to share their pregnancy experience with us.

BETH: Mariah, thank you so much for talking with me about pregnancy research and your involvement with MotherToBaby! As an advocate for moms with **rheumatoid arthritis (RA)** and the creator of the popular blog, **Mamas Facing Forward**, you are inspiring women with chronic illness across the globe who are or want to become pregnant.

MARIAH: I'm so glad to be here and to talk more about pregnancy research! Since being diagnosed with RA, I've taken an interest in medical research—both personally and professionally. It's been interesting to see my RA treatment options expand dramatically between my first pregnancy and my third, which were only about six years apart.

BETH: In general, the medical community knows little about the effects of taking most medications in pregnancy, because pregnant women are often not included in studies that determine the safety of new medicines. What initially interested you about MotherToBaby Pregnancy Studies?

MARIAH: Medication use during pregnancy needs to be studied because of the potential risks for the developing baby! Professionally, I cover developing research for Rheumatology Network so I have a good understanding of the different types and stages of medical research. But even with this background, when I first joined MotherToBaby's study, I didn't understand what "observational research" meant. My biggest concern was: Would I have to take a study drug—or change my usual treatment in any way?

BETH: This is the most common question—or confusion—that I hear from women! How would you describe what observational research is and what would you say is the difference between a clinical trial and observational studies, like MotherToBaby's pregnancy registries?

MARIAH: I've learned that observational means the study "observes" what a participant does, but doesn't advise or require a treatment course or change. There is no tested drug or placebo like in a clinical trial. A pregnancy registry is a study that collects health and medication information from pregnant women and their newborns, and then compares outcomes to unexposed women and their babies. While in the study, I made my own treatment decisions with my doctor, which is logical since she knows my health history best. But because MotherToBaby provides evidence-based information about medications in pregnancy, you also helped me learn more about my medications and specific pregnancy data, which then guided the conversations I had with my doctor before pregnancy and during the flare I had at about 23 weeks.

BETH: I'm glad that we were able to help you during this flare! So what ultimately motivated you to join a MotherToBaby Pregnancy Study?

MARIAH: I've actually participated in two research studies through MotherToBaby, and my main motivation was due to the lack of information on medications during pregnancy. At the beginning of my second pregnancy, I wasn't taking any medications to control my RA and I ended up flaring very badly—to the point where I was having difficulty caring for myself and my then almost two-year-old son. Though I know oftentimes TNF inhibitors are discontinued in the third trimester (**call MotherToBaby to find out why!**), my rheumatologist and I made the decision to use one so we re-started **Enbrel** near the end of my second trimester and continued through the remainder of my pregnancy. After making such a difficult decision, I called MotherToBaby right away to enroll in the study because I wanted future moms to have the benefit of my data when it came time for them to make a similar difficult decision.

While planning to become pregnant again, my rheumatologist, perinatologist, and I decided to switch me from Rituxan to **Cimzia** prior to conception, and decided that I would remain on Cimzia through my entire pregnancy and while nursing. I joined the **Cimzia & Pregnancy Study** as soon as I found out I was pregnant with my third baby. I'm still involved, in fact, my third baby just turned one and we just got a birthday card in the mail from MotherToBaby! I think it's fantastic to have such a caring group of researchers committed to providing better information for pregnant women living with chronic illnesses.

BETH: Did you have any initial hesitations about joining a MotherToBaby study?

MARIAH: At first, I wondered if study participation would take too much time. I had a toddler at home, I worked, and I was pregnant again. I found out that typically a woman spends about two hours total in phone interviews in the first year, and then just ten minutes per year by phone if enrolled in a multi-year study.

My husband was concerned about privacy. I asked how my personal information would be safeguarded, and who would have access to my medical records. I asked if the study collected my insurance information or social security number—it does not. Results will be published but without revealing my identity. The studies are coordinated out of the University of California San Diego, and their Human Research Protections Program oversees the privacy and security protocols, so there is an extra layer of oversight and protection. Also, pharmaceutical companies are required to

sponsor this research but they don't have access to my personal data, and all research is done independently.

Women may feel wary about the idea of participating in research during pregnancy. What has made me feel even more secure is that doctors familiar with MotherToBaby have recommended joining your studies. The studies are not experimental so I didn't find any likely risk, nor is there any cost to me. So this, coupled with the research benefiting other moms like me, made me feel like it was something that I could support pretty easily.

BETH: What was the process of enrolling like for you?

MARIAH: I answered questions about my health history, prenatal test results, some demographic info, and then made a list of exposures during the pregnancy, such as prescription and over-the-counter medications, caffeine, illnesses and other environmental exposures.

BETH: I know you've mentioned the main reason for your enrollment was due to the lack of information about medications during pregnancy. Can you tell us more about how you and your healthcare team navigated your treatment options during pregnancy?

MARIAH: As I mentioned before, my treatment options changed dramatically between my first and third pregnancies. During my first, I spoke to my obstetrician and rheumatologist about my RA medications. I didn't do much research on my own at the time (there were fewer online resources, blogs, and social media connections then too!) but rather I trusted the information being given to me by my doctors. My obstetrician knew almost nothing about RA treatments and deferred completely to my rheumatologist. Based on the data available at the time, I used nothing but **prednisone** during that pregnancy.

When my RA started flaring 6 or 7 weeks postpartum, I got to the point that I could barely lift my own baby. At three months, I made the heartbreaking decision to wean my son so that I could re-start Enbrel, because at the time my rheumatologist did not think there was enough data available for it to be safe enough to breastfeed while taking that medication. I did manage to find one blog at the time where a mom talked about making the decision to use Enbrel while nursing, but as much as I personally wanted to continue breastfeeding I couldn't find adequate information to make me comfortable with the idea.

BETH: I'm so sorry to hear about your struggle breastfeeding. Unfortunately, this experience is very common. We also provide information to moms about breastfeeding exposures, and many of our research participants also provide a sample of breastmilk to **Mommy's Milk** so we can learn more about medications and breastfeeding.

MARIAH: Yes, we need more research on medications used in pregnancy as well as during breastfeeding! So jump forward to two years later during my second pregnancy, my rheumatologist and I decided that the data had improved enough—and that the uncontrolled inflammation I was experiencing was a greater risk to me and my baby than the potential risk of the Enbrel. I used Enbrel during the end of that pregnancy and through three months of breastfeeding. Though I must say that I made this decision under a fair amount of duress because I was feeling very, very poorly at the time. I assumed I would manage my second pregnancy the same way I managed my first, so when I started flaring badly I did not have a treatment plan in place. This was another situation where I more or less trusted my rheumatologist's advice. Unfortunately, Enbrel lost its effect for me after my second pregnancy and I weaned my second son at three months as well, and began to search for another treatment option.

For my third pregnancy, I consulted my rheumatologist and a perinatologist prior to trying to conceive. I also did a lot more of my own research. I looked to what MotherToBaby had to say about the medications we were considering and found some research studies to read. I was lucky to have doctors who also did their research. My perinatologist didn't know much about Cimzia so she researched it before meeting with me. She shared her research with me and explained how the molecular structure of Cimzia was missing the part that is responsible for crossing the placenta, making it one of the better options for use during pregnancy.

BETH: Wow! That is a lot to navigate –for you and your healthcare providers. As you have shown us, every pregnancy and treatment plan is different! What is one thing you would like pregnant women or moms dealing with a chronic illness to learn from your experience?

MARIAH: When it comes to considering the use of medications during pregnancy, public opinion tends to push the idea that a woman ought to “sacrifice” herself for the sake of her baby during a pregnancy, so it can be difficult for many women to dodge that pressure and to consider medication at all while pregnant. MotherToBaby can help illuminate both the potential benefits and potential challenges of taking a drug while pregnant or breastfeeding. I'm glad to talk about these issues, and recommend paths to women that may make their decisions easier!

BETH: Thank you so much for talking with us today and for sharing your experience, Mariah. I think many women will be interested in hearing how you navigated pregnancy and motherhood while living with a chronic illness. So many women grapple with medication questions during pregnancy, and whether they decide to participate in our studies or not, we are glad you are here to help them through it on your blog and as an RA patient advocate. Any last words about pregnancy & research?

MARIAH: I recommend you ALL THE TIME – and have benefited firsthand from the research studies!

—

If you are pregnant and interested in participating in a study, contact MotherToBaby to see if you qualify! We enroll pregnant women taking certain medications or living with chronic health conditions like rheumatoid arthritis, psoriasis, psoriatic arthritis, ankylosing spondylitis, Crohn's and ulcerative colitis, multiple sclerosis, asthma, high cholesterol, and eczema. We also enroll women without any of these conditions or medication exposures. You can view a list of all our ongoing studies here: <https://mothertobaby.org/ongoing-studies>. We look forward to speaking with you!



Beth Kiernan, MPH, is a Teratogen Information Specialist with MotherToBaby Pregnancy Studies, a series of observational research studies about medications and health conditions during pregnancy. The studies are conducted by the non-profit Organization of Teratology Information Specialists (OTIS). Beth is based at the University of California San Diego, and is a married mother of four children.

About MotherToBaby

MotherToBaby is a service of the Organization of Teratology Information Specialists (OTIS), and a suggested resource 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://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.**

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

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, April 9, 2019.

Beyond the Status: What STDs Really Mean in Pregnancy and Breastfeeding

By Lauren Kozlowski, MSW, MPH, MotherToBaby Georgia

Carly called and I could hear the stress in her voice immediately. She had been smoking marijuana on weekends and having a glass of wine most evenings with her dinner. She just found out she was pregnant with her fifth child. Carly knew her baby could suffer if she did not change her use of alcohol and marijuana. Carly was scared, so she contacted MotherToBaby. We were able to discuss what kinds of risk the substances she had used may have, and I shared information with her that she could talk to her doctor about. Carly's story immediately came to mind when talking about Birth Defects Prevention Month's **Tip 0: Boost your health by avoiding harmful substances during pregnancy, such as alcohol, tobacco, marijuana and other drugs.**

Alcohol

Alcohol is actively advertised as a way to relax after a hard day, and it's almost always a part of celebrations. Alcohol is legal to purchase in any amount for most adults 21 and older, making it very accessible. Changing your lifestyle to not drink any alcohol during pregnancy may seem hard, but it is worth it for the health of your developing baby. Though having one drink likely does not mean your baby will automatically have health problems, no amount of alcohol has been proven safe during pregnancy. This means that not drinking alcohol at all during pregnancy is your best bet. Alcohol can cause a range of issues for the health of your child. Some are physical birth defects, while others are related to controlling emotions effectively and learning abilities. Some of these issues last long after birth and can have lifelong effects on your child.

Cigarettes & e-cigarettes

Smoking and the use of tobacco products are activities that many associate with stress reduction and, like alcohol, can be hard to stop. Cigarette smoke contains more than 4,000 chemicals and toxins, including nicotine, tar, arsenic, lead, and carbon monoxide. Some of these chemicals cross the placenta and lower the amount of oxygen and food available for a developing baby. Babies born to mothers who smoke are at increased risk for being born too small (with low birthweight) and prematurely (before 37 weeks of pregnancy). Babies born too small and too early are more likely than other babies to have health complications and may need to stay in the hospital longer. Some studies suggest that babies born to moms who smoke are at risk of having an oral cleft, a birth defect where the lip or roof of the mouth does not fully close. Not smoking is best for you and your baby during pregnancy. Every little bit counts, so even reducing the amount can be helpful to your baby!

In comparison to traditional cigarettes, we know very little about the safety of e-cigarettes (or vaping) during pregnancy. This is because e-cigarettes are largely unregulated, and little research has been done on them. While some moms-to-be may view e-cigarettes as safer alternatives than traditional cigarettes, e-cigarette solutions contain several of the same reproductive or developmental toxins that are found in traditional cigarettes, like nicotine, cadmium and lead. So until more studies have been done on the safety/risk of e-cigarettes, it is best for moms-to-be not to use them.

Marijuana and other street drugs

Another way to boost your health during pregnancy is to not use harmful drugs. For example, women may think marijuana may help with nausea and vomiting (morning sickness). Though we still need more research, studies in animals have shown that exposure to marijuana in the womb may harm a baby's brain development. Marijuana is unregulated in most places, so you don't know what may be in it – certain chemicals, pesticides or other drugs may cross the placenta and impact your baby. In addition to smoking marijuana, using substances that include THC (the active ingredient in marijuana), such as edibles and oils, carries the same potential to affect a baby's brain development. No amount of marijuana or THC has been proven safe to use during pregnancy.

Other street drugs, like cocaine, heroin, LSD, MDMA (ecstasy or Molly), and methamphetamine, also are harmful during pregnancy. Using these kinds of drugs during pregnancy increases a baby's risk for miscarriage, preterm birth, birth defects and neonatal abstinence syndrome (NAS). NAS is a group of conditions caused when a baby withdraws from certain drugs she's exposed to in the womb before birth. NAS is most often caused when a woman takes drugs called opioids during pregnancy. Not a single one of these drugs has a beneficial effect on pregnancy or a developing baby – so for your baby's sake as well as your own, a drug-free pregnancy is a healthier pregnancy.

It is important to realize that giving birth to a baby with ten fingers and ten toes – who looks healthy at birth – is not the end of the story. Effects caused by the use of alcohol, tobacco and other drugs during pregnancy can take a while to show. As a child develops and reaches or fails to reach developmental milestones, only then is it possible to evaluate the long-term effects of prenatal substance exposure on things like the ability to learn and manage emotions. While every pregnancy carries some risk that is out of anyone's control, we want to encourage women to focus on areas of their health that they do have some control over. Taking care of yourself and your health means a healthier baby. Doing what you can to boost your health by avoiding harmful substances during pregnancy is a great place to start!

If you are struggling with substance addiction, talk to your health care provider. You can also find help and treatment referrals by visiting the Substance Abuse and Mental Health Services Administration (SAMSHA) website or by calling their national helpline, 1-800-662-HELP (4357).



Lauren Kozlowski, MSW, MPH is serving as the Program Coordinator for MotherToBaby Georgia. She graduated from Boston University with both a Masters of Social Work and a Masters of Public Health. She has experience working with families in both an educational setting, as well as in housing and health, allowing her to recognize the multiple factors contributing to the ability of women and children to thrive. She enjoys living in Atlanta and exploring what the city has to offer.

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.

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

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, April 9, 2019.

Beyond the Status: What STDs Really Mean in Pregnancy and Breastfeeding

By Beth Conover, APRN, CGC MotherToBaby Nebraska, UNMC

“I am 20 weeks pregnant...when is it safe to get my flu shot?” The texted question came in to the MotherToBaby texting helpline, and the answer that I texted back was simple – “As soon as possible...it’s safe at any time in pregnancy and really important for you and your baby!”

Once we are into influenza (flu) season (November to March), pregnant women are strongly recommended to get immunized (vaccinated), regardless of how far along they are in their pregnancy. Yet many women delay, and in the end only about 50 percent of pregnant women get their flu shot.

The flu can cause severe illness and even death in pregnant and postpartum women. The flu shot contains an inactivated virus that won’t make you or your baby sick. It is the most effective way to prevent the flu or help you have less severe symptoms if you do get the flu. Currently the nasal-spray flu vaccination is NOT recommended for pregnant women because it contains live attenuated (weakened) virus.

As if the benefits to you from the flu shot aren’t enough, here’s another one: getting vaccinated while you are pregnant can protect your baby from getting the flu after birth! This is because the antibodies that you develop when you get the flu shot get passed to your developing baby during pregnancy and help protect your newborn for the first few months of life.

Here’s another common question that I get about vaccines during pregnancy.

“I received my diphtheria/pertussis/tetanus (Tdap) shot last year. Since I am already immune, why do I

have to get it again in my third trimester of pregnancy?"

The third trimester Tdap booster is to help your baby, not you. Diseases like pertussis (whooping cough) can cause serious life-threatening illness in newborns. When a pregnant woman gets a Tdap booster in her third trimester, she mounts a strong antibody response which is passed on to her baby and helps protect the newborn until the baby starts a vaccination series at 2 months of age.

Some pregnant women are worried about whether immunizations will harm their baby. The scares about vaccines being associated with problems like autism have been debunked. Most vaccines are safe for pregnant and breastfeeding women. A few, such as the **measles, mumps and rubella (MMR)** and chicken pox vaccinations, contain live attenuated virus and are best given when you are **not** pregnant. The benefits of protection against disease strongly outweigh any potential risk. That's why Birth Defects Prevention Month's Tip ⑤ is a really important one: **Become up-to-date with all vaccines, including the flu shot.** Better yet...if you are thinking about getting pregnant, it's an excellent time to speak with your health care provider to make sure you are current on all of your recommended vaccinations. Remember, a healthy mother is more likely to have a healthy baby!

Are you interested in learning more about vaccinations in pregnancy or while breastfeeding?

Visit the Mother to Baby website and read all of our vaccine-related fact sheets. There is a general fact sheet on all vaccines, and then specific fact sheets on the influenza vaccine and Tdap vaccine (of course!) but also many others like the Measles, Mumps, and Rubella (MMR), HPV, hepatitis A, and chicken pox vaccinations.



Beth Conover, APRN, CGC, is a genetic counselor and pediatric nurse practitioner. She established the Nebraska Teratogen Information Service in 1986, also known as MotherToBaby Nebraska. She was also a founding board member of the Organization of Teratology Information Specialists (OTIS). In her clinical practice, Beth sees patients in General Genetics Clinic, Prenatal Clinic, and the Fetal Alcohol Syndrome Clinic at the University of Nebraska Medical Center. Beth has provided consultation to the FDA and CDC.

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 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.

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

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, April 9, 2019.

Beyond the Status: What STDs Really Mean in Pregnancy and Breastfeeding

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 your 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** 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.
- Centers for Disease Control and Prevention (CDC). 2018. Treating for Two: Medicine and Pregnancy. <https://www.cdc.gov/pregnancy/meds/treatingfortwo/facts.html> [Accessed 11/2018]
- Tasnif Y, et al. 2016. Pregnancy-related pharmacokinetic changes. Clin Pharmacol Ther. 100(1):53-62.
- U.S. Food and Drug Administration (FDA). 2018. Medicine and Pregnancy. <https://www.fda.gov/forconsumers/byaudience/forwomen/ucm118567.htm> [Accessed 11/2018].

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

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, April 9, 2019.