



CDC's Communications Efforts Related to Medications and Pregnancy

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PRGLAC Workgroup Meeting

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Medication use in pregnancy is common

9 OUT OF **10**
PEOPLE

IN THE UNITED STATES
TAKE A MEDICATION
DURING PREGNANCY



5.4 MILLION PREGNANCIES
ARE EXPOSED TO MEDICATIONS EACH YEAR



Medication use in pregnancy raises questions

“Should I keep taking my allergy medicine while pregnant?”



“What should I take to manage my pain while pregnant?”

“How should I change my pregnant patient’s treatment plan?”



Previous work

Formative research:

- Women
- Healthcare providers
- Pharmacists

Resulting efforts

Formative research aimed to understand knowledge, attitudes, and beliefs about medication during pregnancy

- **3 key audiences:**
 - Women (focus groups + in-depth interviews)
 - Prescribers (in-depth interviews)
 - Pharmacists (in-depth interviews)



Primary concern was harm to fetus

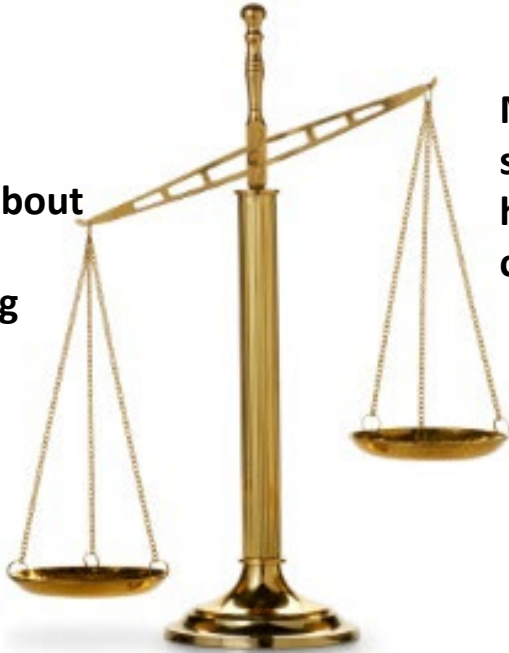
“My concern is just the effects on the child. That is my greatest fear. Every time I take medication that comes to mind. I don’t know if I am just being paranoid...I am always concerned, though. In the long run, will there be a side effect? I am the one who will be taking care of a child with a problem, and it would be a long, lifetime struggle.”

**- Interview
(Planning, Depression)**



Participants were also concerned with their own health...

**Concern about
safety for
developing
baby**



**Manage
serious
health
condition**

“I didn’t like using my inhaler when I was pregnant, but I had to. I don’t want to feel like I can’t breathe or I’m hurting my health by not taking it.”

**- Focus Group
(Postpartum, Asthma)**

...and unknown risks of medication use

“If there’s no risk information, then I don’t take the medication. It’s not worth risking the little one. I’d value my doctor’s opinion, but I don’t want to cause life-long damage to the baby.”

**-Focus Group
(Planner, Asthma)**



Preferred detailed, consistent information from multiple sources

- **Preferred detailed information**
 - Potential adverse effects of medication
 - Long-term side effects
 - Risks to fetus during each trimester
 - Risks of no treatment
- **OBGYN is primary trusted source**
 - Other specialists
 - Relatives
 - Friends
 - Online sources



Clear, consistent messaging and personal stories are powerful motivators and enhance trustworthiness




The New York Times

I'm Embarrassed by My Prenatal Depression. Here's Why I Talk About It Anyway.

One in five women will have mental health issues during and after pregnancy. Raising awareness matters for getting them the treatment they need.



←  **r/BabyBumps** • 4 yr. ago
PM_ME_OTTER_PIX

Pregnancy and ADHD Meds

Women with ADHD who have been pregnant and continued taking their meds. I want to hear your stories! What was the outcome? Do you regret it? Did you have problems? Was everything great? I want to hear anything and everything!

There isn't a lot of good information on outcomes of pregnancies where women stayed on medication. Most of the data for stimulants is about addiction and recreational usage, which brings in a bunch of confounding variables. I'm trying to get a sense of other peoples real experiences and perhaps some direction of where to look for more information.

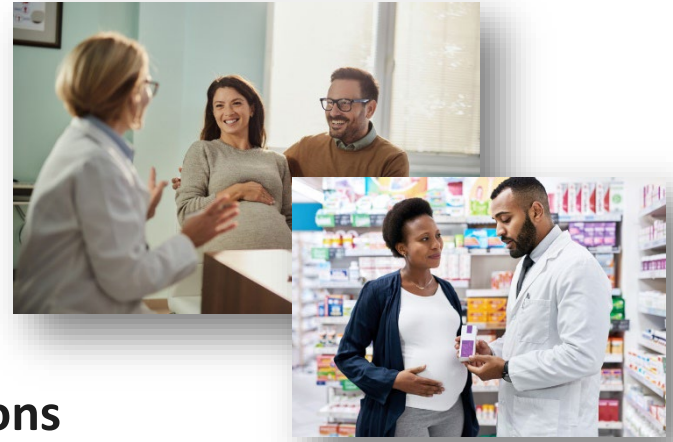
Efforts with healthcare professionals and pharmacists provided additional implications for practice

- **Key Findings**

- Providers retrieve information during clinical visits
- Widespread provision of safe lists
- Limited counseling for people not planning pregnancy

- **Proposed enhanced technical and policy solutions**


- Improved digital information tools for discussing information in clinical settings
- Developing evidence-based resources for physicians to share with patients
- Encouraging counseling all women of reproductive age receiving teratogenic medications



[Improving Safe Use of Medications During Pregnancy: The Roles of Patients, Physicians, and Pharmacists \(sagepub.com\)](https://www.sagepub.com)


[Obstetrician-Gynecologist Views of Pregnancy-Related Medication Safety - PMC \(nih.gov\)](https://pubmed.ncbi.nlm.nih.gov/)

Findings led to new materials and resources

 Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™


Search

Medicine and Pregnancy [No Title]



[Español/Spanish](#) [Print](#)

Almost every pregnant person will face a decision about taking medicines before and during pregnancy. Many people need to take medicine to stay healthy during pregnancy. However, not all medicines are safe to take during pregnancy. Some medicines may cause birth defects, pregnancy loss, prematurity, infant death, or developmental disabilities. CDC aims to improve the health of people and their babies by identifying the safest treatment options for common conditions before, during, and after pregnancy.

Fact about Medicine and Pregnancy Safer medicine use in pregnancy.	Research Key research findings by health condition.	Key Findings  Pregnant Women Report Taking Medicines for Anxiety and Other Mental Health Conditions
Guidelines & Recommendations Guidelines and recommendations for treatment.	Materials Posters and fact sheets.	
Questions and Answers Answers to frequently asked questions.	Key Findings Read key findings from recent publications.	

Pregnant or thinking of getting pregnant?

Talk to all your healthcare providers before starting or stopping any medicine.

3 Things to Discuss

1. **All medicines you take**, including over-the-counter medicines, herbal and dietary supplements, and vitamins
2. Best ways to keep your **health condition** under control
3. Your **personal goals** for managing your health condition during pregnancy

Did you know?

9 in 10 women in the United States take a medicine during pregnancy. But not all medicines are safe to take during pregnancy.

For more information about safer medication use during pregnancy, visit: www.cdc.gov



Current efforts

- Quantitative efforts
- Qualitative efforts
- Information dissemination
- Partnerships

Recent survey explored terminology and information seeking preferences

- **Where would you go to find information about pregnancy and baby health?**
 - Ask a professional (72%)
 - Ask a family member (35%)
 - Search on the internet (30%)
 - Look it up on a specific website (e.g., WebMD, CDC) (29%)
- **How would you like to receive information about pregnancy and baby health?**
 - Link from doctor to a website (51%)
 - Handout/brochure from doctor (39%)
 - Book (30%)
 - Text from your doctor (27%)
 - Video (viewed in doctor's waiting room or patient portal) (25%)

New questions added to BD-STEPS

- Case control study of birth defects and stillbirth with a focus on medications
- Women with thyroid disease, asthma, epilepsy, autoimmune conditions, depression and/or anxiety, and ADHD were asked:

Either before or during your pregnancy, did you speak with a healthcare provider about your treatment options during pregnancy?

- Starting the analysis to describe the demographic characteristics and timing of the discussions

Formative research aims to understand perceptions of risk during pregnancy

- **Project with Karna**
 - Literature review
 - Focus groups
 - Survey
- **Findings from literature review consistent with previous knowledge:**
 - Heightened perception of risk during pregnancy
 - Overestimation of teratogenic risk of medication
 - Reliance on healthcare providers, internet sources, partners/family for information
 - Barriers include conflicting information, medical jargon, language barriers
 - Facilitators include plain language, visuals, numbers, tailored information

Next steps include focus groups and survey

- **Domains to explore:**

- Risk perception
- Risk communication
- Information seeking
- Decision making
- Trusted messengers
- Messaging/Framing



2 groups:
Planning pregnancy

2 groups:
Currently or recently
pregnant (1st time)

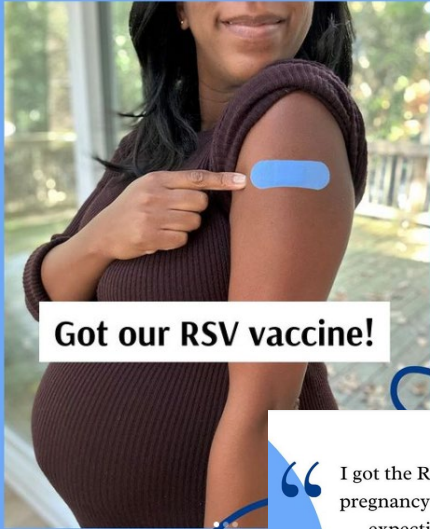
2 groups:
Currently or recently
pregnant (not 1st time)

Explore perceptions of different risks and communications approaches

- **Current exposure scenarios to reference (not final)**
 - Medication for depression
 - Food safety advice
 - Marijuana
- **Concepts/approaches to test**
 - Risk to mom versus risk to baby
 - Receiving info on specific topics versus info grouped together
 - Data or storytelling
 - Explanation or directive
 - Testimonials from trusted sources

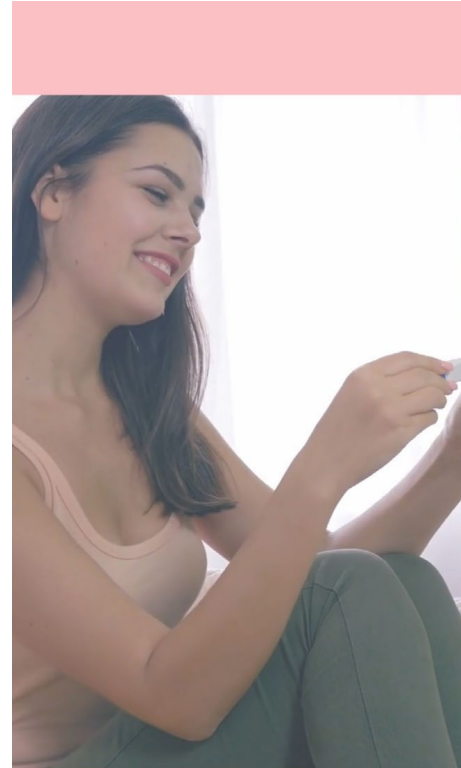


Share clear messaging and translate new findings



Got our RSV vaccine!

“ I got the RSV vaccine in pregnancy because I am expecting a newborn during respiratory virus season. I wanted to do everything in my power to prevent him from getting seriously ill! ”



CDC partners with MotherToBaby



Sertraline (Zoloft®)

This sheet is about exposure to sertraline in pregnancy and while breastfeeding. This informal published literature. It should not take the place of medical care and advice from your healthcare provider.

What is sertraline?

Sertraline is a medication that has been used to treat depression, anxiety, obsessive-compulsive disorder, post-traumatic stress disorder, premenstrual dysphoric disorder (a severe form of premenstrual syndrome), and social phobia. Sertraline belongs to the class of antidepressants known as selective serotonin reuptake inhibitors (SSRIs). A brand name for sertraline is Zoloft®.

Sometimes when people find out they are pregnant, they think about changing how they take their medication altogether. However, it is important to talk with your healthcare provider about any changes to how you take your medication. Your healthcare providers can talk with you about treating your condition and the risks of untreated illness during pregnancy.

Stopping this medication suddenly can cause some people to have withdrawal symptoms. It is important to talk with your healthcare provider about how to stop this medication. You should slowly lower the dose instead of stopping all at once. Some people may have a return of their symptoms if they stop this medication during pregnancy. If you stop taking this medication, it is important to talk with your healthcare provider about a plan to restart the medication after delivery.

I take sertraline. Can it make it harder for me to get pregnant?

It is not known if sertraline can make it harder to get pregnant. One study found that people who take SSRIs have a slightly lower chance of getting pregnant. However, some conditions, including depression, can make it harder to get pregnant. This makes it hard to know if the medication, the condition being treated, or other factors might affect fertility. For more information on depression, please see our fact sheet at <https://mothertobaby.org/fact-sheets/depression-pregnancy/>.

Does taking sertraline increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Use of sertraline during pregnancy has not been well studied. One study found no differences in the chance of miscarriage for sertraline during the first 35 days of pregnancy and those who stopped before pregnancy. Also, some conditions, including depression, may increase the chance of miscarriage. However, most studies have not found an increased chance of miscarriage if the medication, the condition being treated, or other factors might affect the pregnancy.

Does taking sertraline increase the chance of birth defects?

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. For sertraline, research has not found an increased chance of heart defects or other birth defects. However, most studies have not found an increased chance of birth defects above the background risk.

Does taking sertraline in pregnancy increase the chance of other pregnancy-related problems?

Some studies suggest a higher chance for pregnancy-related problems, such as preterm delivery or low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth) with the use of sertraline. However, research has also shown that when conditions such as depression or anxiety are untreated during pregnancy, there could be an increased chance for pregnancy complications. If you are taking sertraline, the underlying condition, or other factors that might increase the chance of pregnancy-related problems.

Some, but not all, studies have suggested that when people who are pregnant take SSRIs during pregnancy, their babies might have an increased chance for a serious lung condition called persistent pulmonary interstitial emphysema (PPHNE).

Sertraline (Zoloft®)
August 1, 2023



A screenshot of the MotherToBaby website. The header includes the logo, navigation menu (ABOUT, EXPOSURES, STUDIES, HEALTH PROFESSIONALS, MEDIA, IN YOUR AREA, OTIS, DONATE, CONTACT), a search bar, and the phone number 866.626.6847. Below the header is a large image of a pregnant woman in a pink top looking down. The article title is "Balancing Act: The Importance of Medication Dose in Pregnancy" with a date of September 29, 2023. A search bar is visible on the right side of the article preview.

Ep. 64: Weight Loss and Ozempic in Pregnancy

January 31, 2024

Sarah Obican, MD, a maternal-fetal medicine specialist at the University of South Florida and medical director of MotherToBaby Florida, joins host Chris Stallman, CGC to discuss what's known about Ozempic, berberine supplement and other weight loss trends during pregnancy and breastfeeding.

A screenshot of a podcast player interface. The title is "The MotherToBaby Podcast" and the episode is "Weight Loss and Ozempic in Pregnancy" hosted by Chris Stallman, CGC. The player shows a progress bar at 0:00, a duration of 14:27, and a play button. There are also icons for follow, share, and a refresh symbol.

Sertraline (Zoloft®)
August 1, 2023

CDC engages with clinical partners

- **Ensure consistent recommendations**
- **Educate and empower women's health providers**
- **Recruit and engage champions and trusted messengers**



Future steps

- **Short-term action**

- Assess info available on digital platforms for healthcare providers (e.g., UpToDate)
- Pitch content to digital platforms for pregnant individuals (e.g., WTE, BabyCenter)
- Expand partnerships with nurses, midwives, nurse practitioners
- Translate new findings for audiences

- **Longer-term opportunities**

- Improve messaging and training for pharmacists, specialty care (e.g., psychiatry)
- Enhance communication materials for patients, free of jargon, inclusive of personal stories and easy-to-understand visuals
- Partner with other experts (e.g., lactation, immunization, response)
- Consolidated hub to house information on this topic

Key points



For more information

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

