

What's a Pregnant Mom to Do? Flu Vaccine in Pregnancy

Adapted from Dr. Aviva Romm's Blog post. Full article available at: <http://avivaromm.com/flu-vaccine-in-pregnancy-whats-a-girl-to-do>

Recommendations from the CDC and ACOG

The Centers for Disease Control (CDC) and the American College of Obstetricians and Gynecologists (ACOG), the two primary groups that issue recommendations to doctors caring for pregnant women, unequivocally recommend that all women who are pregnant during flu season – roughly October through the end of March – receive the flu vaccine unless they have a health contraindication, such as a severe allergy to eggs since the vaccine contains egg proteins. ACOG has stated that “preventing influenza during pregnancy is an essential element of prenatal care, and the most effective strategy for preventing influenza is annual immunization.”

Note that prior to 1995, the CDC did not recommend universally vaccinating all pregnant women in any trimester; the recommendation was to vaccinate only those pregnant women with pre-existing medical conditions.

The CDC and ACOG assert the following importance of vaccinations in pregnancy:

- Physiologic changes in pregnancy make pregnant women more susceptible to the flu and to serious complications should flu occur, particularly pneumonia
- Flu can lead to high fevers, and high fevers in the first trimester have been associated with an increased rate of birth defects
- Flu during pregnancy seems to increase the risks of miscarriage, premature birth, and low birth weight.
- Babies are at high risk of complications from the flu, but cannot get vaccinated until they are 6 months old. Babies born to pregnant women who have received the flu shot are less likely to develop flu and related complications
- Flu shots have not been shown to cause harm to mom or baby in any trimester

Are the Risks of Flu in Pregnancy Really that Serious?

In the winter of 2009, the CDC and the media predicted a catastrophic flu epidemic with dire outcomes. I did, in fact, see two pregnant women very sick with H1N1 flu. One ended up in our ICU; she eventually died. Her pregnancy had already been complicated by severe asthma and obesity. Serious, sad, and scary things can happen. But the overwhelming data suggests that these are the exception, not the rule, and the exceptions are usually associated with an already complicated medical situation (i.e., asthma and obesity way up the ante on pregnancy risk) rather than happening to the average healthy pregnancy woman. This is not how the media portrays things.

The CDC website reports that the “CDC does not know exactly how many people die from seasonal flu each year.”...Now I don't want to minimize the death of any pregnant woman – this is a serious event. But to put it in perspective, **1,000 women would have to be vaccinated to prevent even just 1-2 pregnant women from being hospitalized for influenza related treatment.** (Ayoub and Yazbak)...Further, according to Margulis, “The scientific evidence that pregnant women are actually dying from influenza is all but nonexistent, even when pneumonia and influenza are lumped together.”...Two studies have found that that there were significantly more hospitalizations related to flu-like illness of women who were vaccinated than of women who weren't. (Munoz, Neuzil)

Regarding the claim that influenza in pregnancy is more serious than in the general population, and that it increases risks to the fetus, the ACIP's recent policy cites only limited evidence, which actually showed that for those pregnant women who actually contracted the flu based on serologic evidence of infection, influenza infection had no significant impact on labor outcomes, health of the newborn, or maternal wellbeing. (The ACIP is the CDC's vaccine advisory group.)

Is the Flu Vaccine Safe in Pregnancy?

Many women decline to receive the flu vaccine because they are worried about introducing chemicals and medications into their systems – and their baby's – during the precious months when their babies are growing and developing. And since we all pretty much know somebody who said they got the flu right after getting the flu shot – actually more likely to be vaccine side effects, but nonetheless, enough to make a lot of people think the vaccine makes you sick. In 2009, the highest recorded number of pregnant received the flu vaccine, and this was still only 50%. Many are skeptical about both the safety and the effectiveness of the flu vaccine, and after what turned out to be as much media hype as reality about the dangers of H1N1, even more women are concerned.

Potential problems with the flu shot:

- Because the vaccine, and the strain of flu vary from year to year, the vaccination is more – or less – effective in any given year. In some years the vaccine may only be effective in as many as 50% of case. So bottom line, it often doesn't work!

- Allergic reactions can happen; i.e., folks with severe egg allergy cannot get this vaccine
- A rare reaction called Guillaine-Barre Syndrome (GBS) occurs in 20-40 people who receive the flu shot annually
- Side effects are relatively common and include fever, aches, and redness/soreness at the injection site
- Most flu vaccines still contain thimerosal, that mercury derived preservative that has been removed from most vaccinations due to risk of mercury neurotoxicity from exposure through vaccinations and other environmental sources.

Overall the rates of overt adverse reactions, such as Guillaine-Barre Syndrome, are rare, though it is true that many people who receive the vaccine do report flu-like symptoms in the days immediately post-vaccination. The greater concern is not severe acute reactions, but the long-term unknown effects of fetal vaccine exposure, and the reality is that they are just not well-studied. We know that thimerosal is a neurotoxin, and that the fetus accumulates mercury from the mother's system; therefore it is ideal to accept only thimerosal-free vaccines during pregnancy. Some manufacturers produce single dose injections that are free or, or contain only minimal amounts of this chemical. According to Ayoub and Yazbak, "Because the benefits of influenza vaccination during pregnancy appear lacking, a safety-benefit analysis should not tolerate any risk to vaccine recipients or their offspring, even at a theoretical level."

If You Do Choose the Vaccine

Choosing to get the flu vaccine is a reasonable decision and not one to beat yourself up about. There are a few things you can do to optimize safety:

- Do NOT get the nasal spray vaccine during pregnancy. It is made with live virus and is not considered safe in pregnancy. The flu shot is made from an inactivated virus, and is the only recommended vaccination for use in pregnancy.
- Don't get vaccinated if you have a fever or otherwise feel unwell
- Don't get the flu vaccine if you have a moderate to severe egg allergy
- **ASK YOUR DOCTOR FOR A THIMEROSAL FREE flu vaccine.** They are available and it may need to be special ordered for you. The thimerosal-free versions usually come as a single dose injection; the multi-vial preparations are much more likely to contain the preservative.

If You Choose Not to Receive the Vaccine

If you choose not to vaccinate, you have somewhat more chance of getting the flu – how much more is unclear. As I said, the vaccine sometimes only works 50% of the time and success varies from year to year as does the vaccine viral strains. It's statistically better than a crapshoot but unpredictable. Knowing the symptoms and when to call your midwife or doctor is important. **Any pregnant woman with a high fever should call her midwife or physician immediately! Ditto if she is having any breathing difficulty or severe headache, either of which can be a symptom of a medical emergency.**

- Hand hygiene – washing with soap and water or using an alcohol based hand cleanser like Purell, can greatly reduce transmission. I do not recommend antimicrobial hand soaps, which actually increased bacterial resistance and probably cause more problems than they solve.
- A healthy diet, adequate sleep, and minimizing stress go a long way to preventing illness and supporting resilience. Several herbal medicines and supplements are safe for use in pregnancy and can also boost your immune system. My 2 favorites for cold and flu prevention are Elderberry syrup and Zinc. Elderberry syrup can be taken daily; 2 tablespoons is a recommended dose. Zinc tablets can be taken in doses of 20-40 mg daily.
- Garlic and ginger, also safe in pregnancy, make good daily additions to the diet, and yellow and orange vegetables such as winter squashes and sweet potatoes are rich in vitamin A which helps to keep the respiratory passage tissue healthy and optimize its immune functions. Finally, echinacea is an herbalist's favorite for preventing upper respiratory infections and has demonstrated safety during pregnancy. A typical dose for prevention is 5 ml of the liquid extract twice daily.

No matter what, make the best choice for YOU. Take your own situation into consideration: Are you likely to have frequent exposures to sick patients or children due to your work? Do you have underlying medical conditions that make you more vulnerable to illness? There is no right or wrong answer. The most important thing is to make a deliberate, educated choices.

Additional Resources:

- CDC Perspective on the Flu Vaccine in Pregnancy: www.cdc.gov/features/pregnancyandflu/
- <http://www.doh.wa.gov/YouandYourFamily/Immunization/Vaccines/InfluenzaFluVaccine.aspx>

- Suspension of WA State Mercury Limits on Certain Flu Vaccine for Pregnant Women: <http://www.doh.wa.gov/PublicHealthandHealthcareProviders/PublicHealthSystemResourcesandServices/Immunization/FluVaccineMercurySuspension.aspx>