Nothing matters more to pregnant people than the health of the baby they are carrying. Yet just one-third of pregnant people in the U.S. are fully vaccinated against COVID-19, according to the Centers for Disease Control and Prevention (CDC). Given the reluctance of pregnant people to get vaccinated against COVID-19, three physicians have set out to answer common questions and concerns about COVID-19 vaccines and pregnancy.

The AMA’s What Doctors Wish Patients Knew™ series gives physicians a platform to share what they want patients to understand about today’s health care headlines, especially throughout the COVID-19 pandemic.

For this installment, three obstetrician-gynecologists took time to discuss what doctors wish patients knew about pregnancy and COVID-19 vaccination. These AMA members are:

- Nariman Heshmati, MD, senior medical director at the Everett Clinic in Washington.
- Mary LaPlante, MD, who practices in Cleveland and serves on the AMA Council on Science and Public Health.
- Lanny F. Wilson, MD, chair of the Physician Well-being Program at Amita Health in Hinsdale, Illinois and chair of obstetrics and gynecology at Avalon University School of Medicine in Youngstown, Ohio.

**It is safe to get a COVID-19 vaccine**

“The American College of Obstetricians and Gynecologists, or ACOG, recommends that all eligible persons 12 years and older—including pregnant and lactating individuals—receive a COVID-19 vaccine series,” Dr. Wilson explained.
“All of the data shows that it is safe for anybody who is planning to conceive, for any stage in pregnancy, for the postpartum period and for breastfeeding mothers,” said Dr. LaPlante. “And on the flip side of that, it will protect pregnant women from having increased complications and increased adverse health outcomes that are related to pregnant women who get COVID-19 during their pregnancy.”

“We’ve had a lot of pregnant women get the vaccine,” said Dr. Heshmati. “When you look at the numbers from the end of September, over 160,000 pregnant women have been vaccinated and we haven't seen any unexpected maternal or fetal adverse reactions from the vaccine, so we’ve got that data now to say that it’s safe.”

Get any of the available vaccines

It is best for people to “get vaccinated before pregnancy, so they are protected before they conceive,” said Dr. LaPlante. “But if they are currently pregnant, it is still important for them to get vaccinated right away.”

“Any of the three approved vaccines—Pfizer, Moderna and the Johnson & Johnson vaccine (J&J) —are all safe to use in pregnancy,” Dr. Wilson said. “But with the J&J vaccine, there is a risk of thrombosis with thrombocytopenia syndrome, or TTS.”

“Most cases of TTS reported to date, following receipt of the J&J vaccine, have occurred in women of reproductive age,” he said.

But “it is important to stress that those additional concerns are extremely rare,” said Dr. Heshmati, noting that “we’re not talking about something that happened one in every 10 people, one of 100 or one in 1,000. We’re talking about things that happened at a rate of seven in one million.”

“That’s something we’ve got to keep in mind. The bigger risk is not getting any vaccines at all,” he added. “Anyone who is trying to get pregnant, is pregnant or even breastfeeding should go and get a COVID-19 vaccine.”

This isn’t a new concept

Pregnant people “figure that they can take care of the baby naturally by eating healthy and taking care of themselves without getting vaccinated,” said Dr. Wilson. “This hesitancy goes back to the early days of vaccines. When the smallpox vaccine was developed, the same kind of negativity was occurring well over 200 years ago.”

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"Negativity continues today despite the fact that the influenza vaccine is so popular and the smallpox vaccine has eradicated the disease," he said, adding that the "polio vaccine has also nearly eliminated polio throughout the world."

“If people would listen to lessons of history, they would realize that vaccines are very safe and effective,” said Dr. Wilson.

Read about how a decade of coronavirus research paved way for COVID-19 vaccines.

**Pregnancy places you at high risk**

The reason why the Society of Maternal Fetal Medicine, ACOG and the CDC all recommend COVID-19 vaccination for pregnant people is “because if you’re pregnant and you get COVID-19, you’re three times more likely to end up in the intensive care unit than somebody who is not pregnant,” said Dr. Heshmati.

“You’re also two to three times more likely to end up intubated,” he added, noting that “there’s possibly a higher incidence of stillbirth and preterm labor.”

“If a woman gets COVID-19 during her pregnancy, she is more likely to be severely ill. She is more likely to end up on the ventilator. She’s more likely to die than one of her peers,” said Dr. LaPlante.

“The sooner the person gets the vaccine, the sooner their protection is built in because pregnancy is one of those high-risk situations,” said Dr. Wilson. “Just like influenza in pregnancy, the effects are much more severe with COVID-19 than for a person the same age who is not pregnant.”

That is “because the immune system is somewhat depressed during pregnancy to allow the baby to grow,” he added. “That depression of the immune system allows other things to grow in addition to the baby, including the influenza virus” and SARS-CoV-2.

Learn how Olmsted Medical Center ob-gyn Diane M. Gillman, MD, is working to sway vaccine-hesitant pregnant patients.

**Antibodies are passed to the baby**

“We have some vaccines, like the Tdap vaccine that we now recommend in pregnancy because we've got very concrete data—it can provide some protection to the baby,” said Dr. Heshmati.
Additionally, “we know that with breastmilk, for the first period of life, the mother passes antibodies for many things to the baby,” said Dr. LaPlante. COVID-19 antibodies also are similarly passed on and could provide protection for the baby.

“That's one of the advantages of getting the vaccine. The baby receives antibodies from mom while it's in the stage of life where vaccines aren't given to infants,” said Dr. Wilson. “The impact of the vaccine on the baby—and this is the case in pregnancy as well as with lactating moms—is that antibodies built up in mom will go to the baby, giving the baby that extra immunity that it needs.”

Watch this episode of the “AMA COVID-19 Update” about the importance of COVID-19 vaccine during pregnancy and breast feeding.

**Expect the same side effects**

“If you take a look at all the common side effects—like muscle aches, soreness at the site, feeling a little fatigue—they're similar between those who've been vaccinated,” said Dr. Heshmati. “The other key thing is, of the 160,000 plus pregnant women who've been vaccinated for COVID-19, we specifically haven't seen any unexpected pregnancy, fetal side effects or problems.”

Looking at the side effects, “injection-site reactions are the most common,” said Dr. Wilson, adding that “fatigue occurs in about 60% and chills in about 40% while muscle aches affect around half.”

Additionally, “joint discomfort affects about 25%, headaches occur in about half of people,” he said. “But fever was the least common side effect reported.”

**Make sure to get a booster**

“ACOG’s recommending a booster of an mRNA COVID-19 vaccine at least six months after the last dose for pregnant women,” or a booster of the J&J vaccine at least two months after the last dose, said Dr. LaPlante, adding that it is important that “women who have been vaccinated and are pregnant, get a booster dose.”

Discover what doctors wish patients knew about COVID-19 vaccine boosters.

**It's OK to get with a flu vaccine**


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“We want to prevent a twin pandemic, not only in nonpregnant people, but in pregnancy as well,” said Dr. Wilson. “If a pregnant person gets the flu, it’s bad. Many have been hospitalized with severe illness throughout the years with influenza, but if SARS-CoV-2 would be added to the influenza virus, what a tragic combination that could be!”

That’s why, along with other individuals, pregnant people “should get both vaccines the same day,” he said.

Here is what to know about coadministration of flu and COVID-19 vaccines.

**There’s no increased miscarriage risk**

“In fact, just the opposite is true. If people get COVID-19 during the first trimester, they’re at increased risk of pregnancy loss, especially if their illness is severe,” Dr. Wilson said.

“The miscarriage rate in the general population—we’re not talking about after a vaccine or after the virus—is around 25% to 30%, so about one out of four pregnancies will end in a miscarriage,” he explained. “But that has definitely not changed. Depending on when you get the vaccine, it doesn’t increase the risk of infertility. It doesn’t increase the risk of miscarriage, and it doesn’t increase the risk of premature labor.”

**Fertility is not affected**

“There is a myth out there that the COVID-19 vaccines cause infertility, and the data says that it does not,” said Dr. LaPlante, adding that “there have also been myths that COVID-19 vaccination increases pregnancy loss or spontaneous abortion, and the answer is it does not.”

Additionally, “the science shows that COVID-19 vaccination does not affect fertility treatment,” she said. In fact, the American Society for Reproductive Medicine has recommended that people get vaccinated even when getting fertility treatment.

“What’s important to know is a lot of pregnant women have gotten this vaccine now and we really aren’t seeing anything unexpected,” said Dr. Heshmati.

**Ask your doctor if you have questions**
“I broach this topic with all my ob-gyn patients, and I ask if they have been vaccinated and if I can answer any questions,” said Dr. Heshmati. “That relationship is there with their doctor and if they’ve got questions, they should ask.”

“It’s a partnership—they want what’s best for the baby and I want to do what’s best for their baby,” he said.

The AMA has developed frequently-asked-questions documents on COVID-19 vaccination covering safety, allocation and distribution, administration and more. There are two FAQs, one designed to answer patients’ questions (PDF), and another to address physicians’ COVID-19 vaccine questions (PDF).