# Health care workers FAQs COVID-19 vaccination during pregnancy and breastfeeding

Eddie Miller, M.D., Division Director for Maternal-Fetal Medicine Sara Petruska, M.D., Medical Director for Labor and Delivery UofL Physicians

#### What is a vaccine?

Vaccines are medications that stimulate the body to provide immunity against infectious diseases. Vaccines are commonly administered through needle injections, and some are available to take by mouth or by spray through the nose. Different vaccines work in different ways with the goal of vaccination to provide immunity against potentially dangerous diseases

#### Are vaccines safe in pregnancy?

Many vaccines are not only safe but are part of recommended care for women before, during and after their pregnancy to keep them and their babies healthy. There are over one hundred vaccines and many of them, such as the yearly flu vaccine, are recommended and safe during pregnancy. Other vaccines, particularly those that contain live viruses, such as Varicella, should not be taken during pregnancy. If you are pregnant or thinking of becoming pregnant, ask your doctor which vaccines you should take or are safe for you to take.

#### What is the risk of coronavirus infection in pregnancy?

According to the CDC, pregnancy increases the risk of severe disease in patients with coronavirus infection. Pregnant women are three times more likely to need admission to an intensive care unit, two to three times more likely require a breathing tube or other life saving measures and have a slightly increased risk of death compared to non-pregnant patients. Pregnant patients who have conditions such obesity, diabetes or cardiac disease may have even further increased risks from coronavirus infection.

## How do the currently available COVID-19 vaccines work?

The COVID-19 vaccine is a new type of vaccine called an mRNA vaccine. mRNA vaccines work by using genetic material called mRNA which teaches our cells how to make proteins and antibodies that trigger a protective response inside our bodies. These antibodies protect us from getting infected if we encounter the real virus. mRNA vaccines do not cause genetic changes in the patient or her developing baby. The vaccine is rapidly cleared from the body after injection and is gone from the body within days.

The currently available vaccine is given in two doses and the vaccine is considered effective one to two weeks following the second dose. When administered this way, the vaccination is 95% effective.

## Should I choose to receive the coronavirus vaccine if I am pregnant?

- Pregnant and lactating women were kept out of COVID-19 vaccination studies and as a result there is not data on the safety of the COVID-19 vaccine in pregnant populations. Based on the mechanism of action of these vaccines, it is expected that the safety and efficacy profile of the vaccine for pregnant individuals would be similar to that observed in non-pregnant individuals. There does not appear to be an increased risk of genetic abnormalities secondary to the vaccination. The risk to the developing fetus while purely theoretical is thought to be low and early studies have been reassuring.
- Based on the available data, the Society of Maternal Fetal Medicine (SMFM) recommends that pregnant
  and lactating people have access to COVID-19 vaccines. Vaccination should occur after weighing the
  potential benefits and unknown risks to vaccination. The American College of Obstetrics and
  Gynecology (ACOG) recommends that pregnant individuals should be able to choose to receive the
  COVID-19 vaccine if they are members of the groups the Advisory Committee on Immunization

Practice (ACIP) designated for vaccine priority: health care workers, workers in essential and critical industries and people at high risk for severe COVID-19 illness due to underlying medical conditions.

- A discussion with your prenatal care provider may be helpful, but ACOG recommends that this not be a requirement to receive the vaccine.
- ACOG recommends that you weigh the prevalence of the virus in your community, your personal risk for exposure, your personal risk for developing severe disease if you contract the coronavirus and what is known about the risks and benefits of the vaccine to which you have access.
- Expected side effects are the same for pregnant and non-pregnant people. Muscle aches, headache and fever can be treated with acetaminophen in pregnancy. Since fever can be dangerous to the fetus, it is recommended to treat fever with acetaminophen if fever occurs.
- Pregnant patients who decline vaccination should be supported in their decision.
- The University of Washington has opened a registry for pregnant patients receiving the vaccine which will gather data on the use of the vaccine in pregnancy. The CDC and the biotechnology companies producing vaccines will also continue to collect data on use in pregnancy.

CDC registry for pregnant and lactating vaccine recipients: <a href="https://vsafe.cdc.gov">https://vsafe.cdc.gov</a> University of Washington Registry <a href="https://redcap.iths.org/surveys/?s=87JFRCL8R8">https://redcap.iths.org/surveys/?s=87JFRCL8R8</a>



#### Should I receive the coronavirus vaccine if I am breastfeeding?

There is no data on the safety of COVID-19 vaccines in breastfeeding or the effects of mRNA vaccines on the breastfed infant. mRNA vaccines are not are not thought to pose a significant risk to the breastfed infant. SMFM recommends the vaccination for breastfeeding persons.

There is no need for patients who receive a COVID-19 vaccine to avoid initiation or discontinue breastfeeding.

## What if I am trying to become pregnant?

ACOG recommends vaccination of people who are actively trying to become pregnant or are contemplating pregnancy if they are members of the ACIP vaccine priority groups mentioned above. It is not necessary to delay pregnancy after completing both doses of the COVID-19 vaccine.

It is not necessary to have a pregnancy test prior to receiving the vaccination.

## Are there particular considerations for racial and ethnic minority groups?

Black and Hispanic individuals who are pregnant appear to have disproportionately higher prevalence of COVID-19 infection, a higher chance for severe illness and an increased risk of death. This is likely due to a range factors including disparities in socioeconomic status, access to care, rates of chronic conditions and occupational exposure, systemic racism and historic and continued inequities in the health care system.

Willingness to consider vaccination varies by patient characteristics, in part due to historic injustices and systemic racism that has eroded trust in some communities of color. When discussing COVID-19 vaccines with people who expresses concerns, it is critical to:

- Be aware of historical and current injustices perpetuated on communities of color.
- Actively listen to and validate expressed fears and concerns.
- Continue to support patients who decide not to be vaccinated, share resources and encourage the continued use of prevention measures.

If the patient is amenable to further discussion:

• Inform them about the testing process, existing safety data and continued monitoring of safety and efficacy data on COVID-19 vaccines; there have not been shortcuts with the testing of this vaccine.

- Discuss the increased incidence of infection and severe illness from COVID-19 in racial and ethnic minority groups.
- Explain that individuals representing racial and ethnic minority groups were included in clinical trials (9.8% of Pfizer-BioNtech overall Phase II/III participants were Black and 26.2% were Hispanic/Latinx).