



I'm pregnant. Should I get a COVID* vaccine?

*The information here is about the *Pfizer* and *Moderna* COVID-19 vaccines.
These are also called "mRNA" vaccines.

For most people, getting the COVID vaccine as soon as possible is the safest choice.
However, these vaccines have not been tested in pregnant and breastfeeding people yet.
The information below will help you make an informed choice about whether to get an mRNA COVID vaccine while you are pregnant or trying to get pregnant.

YOUR OPTIONS:



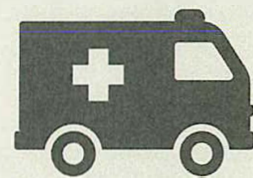
Get a COVID vaccine
as soon as it is available



Wait for more information
about the vaccines in pregnancy

What are the benefits of getting an mRNA COVID Vaccine?

1. COVID is dangerous. It is *more* dangerous for pregnant people.
 - COVID patients who are pregnant are 5 times more likely to end up in the intensive care unit (ICU) or on a ventilator than COVID patients who are not pregnant.¹
 - Preterm birth may be more common for pregnant people with severe COVID.²
 - Pregnant people are more likely to die of COVID than non-pregnant people with COVID who are the same age.^{3,4}
2. The mRNA COVID vaccines prevent about 95% of COVID infections.
 - As COVID infections go up in our communities, your risk of getting COVID goes up too.
 - Getting a vaccine will prevent you from getting COVID and may help keep you from giving COVID to people around you, like your family.



3. The mRNA COVID vaccines cannot give you COVID.

- These vaccines have no live virus.⁵
- These vaccines do NOT contain ingredients that are known to be harmful to pregnant people or to the fetus.
- Many vaccines are routinely given in pregnancy and are safe (for example: tetanus, diphtheria, and flu).

Please ask your provider about any questions you may have about the vaccine.

What are the risks of getting an mRNA COVID vaccine?

1. These COVID vaccines have not yet been tested in pregnant people.

- These vaccines were tested in over 40,000 people, and there were no serious side effects related to the vaccine.
- We do not know if the vaccines work as well in pregnant people as they did in non-pregnant people.
- We do not know whether there are unique downsides in pregnancy, like different side effects or an increased risk of miscarriage or fetal abnormalities.
- The Moderna vaccine was tested in female rats to look at its effects on pregnancy. No **significant negative effects** were found on female fertility or fetal development.
- Some women became pregnant during the vaccine studies. Eighteen of these women were in the vaccine group, and two months later none had miscarried. There were seventeen women in the placebo group who became pregnant, and two months later two of them had had miscarriages. (In general, 10-20% of pregnancies end in miscarriage).
- Because these studies are still ongoing, we don't know how the rest of the pregnancy went for these women.



2. People getting the vaccine will probably have some side effects.

- Many people had symptoms caused by their immune system's normal response to the vaccine. The most common side effects were:⁶
 - injection site reactions like sore arm (~84%)
 - muscle pain (~38%)
 - fatigue (~62%)
 - chills (~32%)
 - headache (~55%)
 - joint pain (~24%)
 - fever (~14%)
- Of 100 people who get the vaccine, 1 will get a high fever (over 102°F). A persistent high fever during the first trimester might increase the risk of fetal abnormalities or miscarriage. The CDC recommends using Tylenol (acetaminophen) during pregnancy if you have a high fever. Another option is to delay your COVID vaccine until after the first trimester.

What do the experts recommend?

Because COVID is dangerous and easily spread, the CDC says that the mRNA vaccines for COVID-19 are recommended for adults.⁷

However, because there are no studies of pregnant people yet, there are no clear recommendations for pregnant people. This is standard for a new drug and is not due to any particular concern with this vaccine.

The Society for Maternal-Fetal Medicine ***strongly recommends*** that pregnant individuals have access to COVID vaccines. They recommend that each person talk to their doctor or midwife about their own personal choice.⁸

The American College of Obstetricians and Gynecologists recommends that the COVID vaccine should not be withheld from pregnant individuals.⁹

What else should I think about to help me decide?

1. Make sure you understand as much as you can about COVID and about the vaccine. Ask a trusted source, like your midwife or doctor.

2. Think about your own personal risk. Look at the columns below and think about your risk of getting COVID (left). Think about your safety - are you able to stay safe (right)?

The risks of getting sick from COVID are higher if...

- You have contact with people outside your home
- You are 35 years old or older
- You are overweight
- You have other medical problems like diabetes, high blood pressure, or heart disease
- You are a smoker
- You are a racial or ethnic minority, or your community has a high rate of COVID infections
- You are a healthcare worker¹⁰

If you are at a higher risk of getting COVID, it probably makes sense to get the vaccine.

If you are not at higher risk for COVID and...

- You are always able to wear a mask
- You and the people you live with can socially distance from others for your whole pregnancy
- Your community does NOT have high or increasing COVID cases
- You think the vaccine itself will make you very nervous (you are more worried about the unknown risks than about getting COVID)
- You have had a severe allergic reaction to a vaccine

... it might make sense for you to wait for more information.

What about breastfeeding?

The Society for Maternal-Fetal Medicine and the Academy of Breastfeeding Medicine report that there is no reason to believe that the vaccine affects the safety of breastmilk.^{8, 11} The vaccine does not contain the virus, so there is no risk of infecting your baby. Because mRNA is fragile, it is very unlikely that any part of the vaccine gets into breastmilk.

When we have an infection or get a vaccine, our bodies make antibodies to fight the infection. Antibodies can pass into the breastmilk and then to the baby - and may help prevent infections.

Summary

1. COVID seems to cause more harm in pregnant people than in people of the same age who are not pregnant.
2. The risks of getting an mRNA COVID vaccine during pregnancy are thought to be small but are not totally known.
3. You should consider your own personal risk of getting COVID. If your personal risk is high, or there are many cases of COVID in your community, it probably makes sense for you to get a vaccine while pregnant.
4. Whether to get a COVID vaccine during pregnancy is your choice.

* This decision aid was created by the *Shared Decision- Making: COVID Vaccination in Pregnancy* working group at the University of Massachusetts Medical School – Baystate.

1. DeBolt CA, et al. Pregnant women with severe or critical COVID-19 have increased composite morbidity compared to non-pregnant matched controls. *Am J Obstet* 2020 Nov doi: 10.1016/j.ajog.2020.11.022
2. Adhikari EH, et al. Pregnancy outcomes among women with and without severe acute respiratory syndrome coronavirus 2 infection. *JAMA Network Open* 2020 Nov 3(11):e2029256
3. DiMascio D. WAPM working group on COVID-19. Maternal and Perinatal Outcomes of Pregnancy Women with SARS-CoV-2 infection. *Ultrasound Obstet Gynecol.* 2020 Sept. doi: 10.1002/uog.23107.
4. Centers for Disease Control and Prevention. Update: Characteristics of Symptomatic Women of Reproductive Age with Laboratory-Confirmed SARS-CoV-2 Infection by Pregnancy Status — United States, January 22–October 3, 2020. *November 2020*:1-7.
5. Abbasi J. COVID-19 and mRNA Vaccines—First Large Test for a New Approach. *JAMA.* 2020;324(12):1125–1127. doi:10.1001/jama.2020.16866
6. <https://www.fda.gov/media/144245/download>
7. <https://www.cdc.gov/vaccines/acip/recs/grade/covid-19-pfizer-biontech-etr.html> (Accessed Dec14, 2020)
8. SMFM statement on COVID vaccination in pregnancy: <https://www.smfm.org/publications/339-society-for-maternal-fetalmedicine-smfm-statement-sars-cov-2-vaccination-in-pregnancy>
9. <https://www.acog.org/en/clinical/clinical-guidance/practice-advisory/articles/2020/12/vaccinating-Pregnant-and-Lactating-Patients-Against-COVID-19> (Accessed December 14, 2020)
10. Mutambudzi M, Niedwiedz C, Macdonald EB, et al. Occupation and risk of severe COVID-19: prospective cohort study of 120 075 UK Biobank participants. *Occupational and Environmental Medicine* Published Online First: 09 December 2020. doi: 10.1136/oemed-2020-106731
11. <https://abm.memberclicks.net/abm-statement-considerations-for-covid-19-vaccination-in-lactation>