



## COVID-19

# COVID-19 Vaccines While Pregnant or Breastfeeding

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### What You Need to Know

- People who are pregnant or recently pregnant are more likely to get severely ill with COVID-19 compared with people who are not pregnant.
- Getting a COVID-19 vaccine can help protect you from severe illness from COVID-19.
- COVID-19 vaccination is recommended for people who are pregnant, breastfeeding, trying to get pregnant now, or might become pregnant in the future.
- People who are pregnant may receive a COVID-19 vaccine booster shot.
- Evidence about the safety and effectiveness of COVID-19 vaccination during pregnancy has been growing. These data suggest that the benefits of receiving a COVID-19 vaccine outweigh any known or potential risks of vaccination during pregnancy.
- There is currently no evidence that any vaccines, including COVID-19 vaccines, cause fertility problems in women or men.

## Increased Risk for Severe Illness from COVID-19

Although the overall risks are low, people who are [pregnant or recently pregnant](#) are at an increased risk for severe illness from COVID-19 compared with people who are not pregnant. Severe illness includes illness that requires hospitalization, intensive care, need for a ventilator or special equipment to breathe, or illness that results in death. Additionally, people who have COVID-19 during pregnancy are at increased risk of preterm birth and stillbirth and might be at increased risk of other pregnancy complications.

## Safety and Effectiveness of COVID-19 Vaccination during Pregnancy

Evidence about the safety and effectiveness of COVID-19 vaccination during pregnancy, although limited, has been growing. It suggests that the benefits of receiving a COVID-19 vaccine outweigh any known or potential risks of vaccination during pregnancy. Below is a brief summary of the growing evidence:

- **COVID-19 vaccines do not cause COVID-19 infection, including in people who are pregnant or their babies.** None of the COVID-19 vaccines contain live virus and cannot make anyone sick with COVID-19, including people who are pregnant or their babies.
- **Early data on the safety of receiving an mRNA COVID-19 vaccine (Moderna or Pfizer-BioNTech) during pregnancy are reassuring.**
  - Early data from three [safety monitoring systems](#) did not find any safety concerns for people who received an mRNA COVID-19 vaccine late in pregnancy or for their babies.<sup>1</sup>
  - Scientists have not found an increased risk for miscarriage among people who received an mRNA COVID-19 vaccine just before and during early pregnancy (before 20 weeks of pregnancy).<sup>2,3</sup>

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- The monitoring of COVID-19 vaccination during pregnancy is ongoing. CDC will continue to follow people vaccinated during all trimesters of pregnancy to better understand effects on pregnancy and babies.
- **Early data suggest receiving an mRNA COVID-19 vaccine during pregnancy reduces the risk for infection.** Recent studies from Israel compared people who were pregnant and received an mRNA COVID-19 vaccine with people who did not. Scientists found that vaccination lowered the risk of infection from the virus that causes COVID-19.<sup>4,5</sup>



- **Vaccination during pregnancy builds antibodies that might protect the baby.** When people receive an mRNA COVID-19 vaccine during pregnancy, their bodies build antibodies against COVID-19, similar to people who are not pregnant. Antibodies made after a pregnant person received an mRNA COVID-19 vaccine were found in umbilical cord blood. This means COVID-19 vaccination during pregnancy might help protect babies against COVID-19. More data are needed to determine how these antibodies, similar to those produced with other vaccines, may provide protection to the baby.<sup>6</sup>
- **No safety concerns were found in animal studies.** Studies in animals receiving a [Moderna](#), [Pfizer-BioNTech](#), or [Johnson & Johnson's Janssen \(J&J/Janssen\)](#) COVID-19 vaccine before or during pregnancy found no safety concerns in pregnant animals or their babies.
- **No adverse pregnancy-related outcomes occurred in previous clinical trials that used the same vaccine platform as the J&J/Janssen COVID-19 vaccine.** Vaccines that use the same viral vector as the J&J/Janssen COVID-19 vaccine have been given to people in all trimesters of pregnancy, including in a large-scale Ebola vaccination trial. No adverse pregnancy-related outcomes, including adverse outcomes affecting the baby, were associated with vaccination in these trials. Learn more about [how viral vector vaccines work](#).

More clinical trials on the safety of COVID-19 vaccines and how well they work in people who are pregnant are underway or planned. Vaccine manufacturers are also collecting and reviewing data from people in the completed clinical trials who received a vaccine and became pregnant during the trial.

#### **If you are pregnant and receive a COVID-19 vaccine, consider participating in the v-safe pregnancy registry**

If you are pregnant and have received a COVID-19 vaccine, we encourage you to enroll in [v-safe](#). **V-safe** is CDC's smartphone-based tool that uses text messaging and web surveys to provide personalized health check-ins after vaccination. A [v-safe pregnancy registry](#) has been established to gather information on the health of people who are pregnant who have received a COVID-19 vaccine. If people enrolled in **v-safe** report that they were pregnant at the time of vaccination or after vaccination, the registry staff\* might contact them to learn more. Participation in **v-safe** is **voluntary** and **participants may opt out at any time**.

\*[Abt Associates](#) [🔗](#) has been contracted by the CDC to contact participants for CDC's **v-safe** COVID-19 Vaccine Pregnancy Registry.

## People who are Pregnant

COVID-19 vaccination is recommended for people who are pregnant. People who are pregnant may also receive a COVID-19 vaccine [booster shot](#). Getting a COVID-19 vaccine can protect you from severe illness from COVID-19, and a healthy mom is important for a healthy baby. If you are pregnant, you might want to have a conversation with your healthcare provider about

COVID-19 vaccination. While such a conversation might be helpful, it is not required before vaccination. You can receive a COVID-19 vaccine, including a booster shot, without any additional documentation from your healthcare provider.

CDC recommendations align with those from professional medical organizations serving people who are pregnant, including the [American College of Obstetricians and Gynecologists](#) and the [Society for Maternal Fetal Medicine](#), along with many other professional medical organizations.



If you got pregnant after receiving your first shot of a COVID-19 vaccine that requires two doses (i.e., Pfizer-BioNTech COVID-19 vaccine or Moderna COVID-19 vaccine), you should get your [second shot](#) to get as much protection as possible. If you experience fever following vaccination, you should take acetaminophen (Tylenol®) because fever—for any reason—has been associated with adverse pregnancy outcomes.

#### If you are pregnant and have questions about COVID-19 vaccine

If you would like to speak to someone about COVID-19 vaccination during pregnancy, you can contact MotherToBaby whose experts are available to answer questions in English or Spanish by phone or chat. The free and confidential service is available Monday–Friday, 8am–5pm (local time). To reach MotherToBaby:

- Call 1-866-626-6847
- Chat live or send an email [MotherToBaby](#)

## People who are Breastfeeding

COVID-19 vaccination is recommended for people who are breastfeeding. Clinical trials for the COVID-19 vaccines currently used in the United States did not include people who are breastfeeding. Therefore, there are limited data available on the:

- Safety of COVID-19 vaccines in people who are breastfeeding
- Effects of vaccination on the breastfed baby
- Effects on milk production or excretion

COVID-19 vaccines cannot cause COVID-19 infection in anyone, including the mother or the baby, and vaccines are effective at preventing COVID-19 in people who are breastfeeding. Recent reports have shown that breastfeeding people who have received mRNA COVID-19 vaccines have antibodies in their breastmilk, which could help protect their babies. More data are needed to determine what level of protection these antibodies may provide to the baby.<sup>6-9</sup>

## Prevent the Spread of COVID-19 after Vaccination: Follow Recommendations

After you are fully vaccinated, you may be able to participate in many of the activities that you did before the pandemic. Learn more about what you can do [when you have been fully vaccinated](#).

If you have a condition or are taking medications that weaken your immune system, you may NOT be fully protected even if you are fully vaccinated. Even after vaccination, you may need to continue taking all [precautions](#). CDC recommends that people with moderately to severely compromised immune systems receive an [additional primary dose](#) of mRNA COVID-19 vaccine at least 28 days after a second dose of [Pfizer-BioNTech COVID-19 vaccine](#) or [Moderna COVID-19 vaccine](#). Talk to your healthcare provider about whether getting an additional primary dose is appropriate for you.

## Vaccine Side Effects

Side effects can occur after receiving any of the available COVID-19 vaccines, especially after the second dose for vaccines that require two doses. People who are pregnant have not reported different side effects from people who are not pregnant after vaccination with mRNA COVID-19 vaccines (Moderna and Pfizer-BioNTech vaccines). If you experience fever following vaccination you should take acetaminophen (Tylenol®) because fever—for any reason—has been associated with adverse pregnancy outcomes. Learn more at [Possible Side Effects After Getting a COVID-19 Vaccine](#).

Although rare, some people have had allergic reactions after receiving a COVID-19 vaccine. Talk with your healthcare provider if you have a history of allergic reaction to any other vaccine or injectable therapy (intramuscular, intravenous, or subcutaneous).

Key considerations you can discuss with your healthcare provider include:

- The benefits of vaccination
- The unknown risks of developing a severe allergic reaction
- If you have an allergic reaction after receiving a COVID-19 vaccine during pregnancy, you can receive treatment for it.

## People Who Would Like to Have a Baby

COVID-19 vaccination is recommended for people who are [trying to get pregnant now or might become pregnant in the future](#), as well as their partners.

**Johnson & Johnson's Janssen (J&J/Janssen) COVID-19 vaccine:** Women younger than 50 years old should especially be aware of the rare risk of blood clots with low platelets after vaccination. There are other COVID-19 vaccines available for which this risk has not been seen. If you received a J&J/Janssen COVID-19 vaccine, [here is what you need to know](#). Read the [CDC/FDA statement](#).

**Find a COVID-19 vaccine:** Search [vaccines.gov](#), text your ZIP code to 438829, or call 1-800-232-0233 to find locations near you.

### Related Pages

- › [Allergic Reactions](#)
- › [People Who Would Like to Have a Baby](#)

### For Healthcare and Public Health

- [Considerations for the Use of COVID-19 Vaccines Currently Available in the U.S.](#)
- [COVID-19 Vaccination among Pregnant People](#)
- [Management of Anaphylaxis after COVID-19 Vaccination](#)
- [ACOG Recommendations for Vaccinating Pregnant People](#) [↗](#)
- [ACOG Practice Advisory: COVID-19 Vaccination Considerations for Obstetric-Gynecologic Care](#) [↗](#)
- [COVID-19 Clinical and Professional Resources](#)
- [Clinic Poster: Protect yourself and your baby from COVID-19](#)
- [Clinic Poster: Protect yourself and your baby from COVID-19 \(Español\)](#) [📄](#)

### More Information

## References

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