



COVID-19

COVID-19 Vaccines While Pregnant or Breastfeeding

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What You Need to Know

- [If you are pregnant or were recently pregnant](#), you are more likely to get very sick from COVID-19 compared to people who are not pregnant. Additionally, if you have COVID-19 during pregnancy, you are at increased risk of complications that can affect your pregnancy and developing baby.
- Getting a COVID-19 vaccine can help protect you from getting very sick 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 should stay [up to date](#) with their COVID-19 vaccines, including getting a COVID-19 booster shot when it's time to get one.
- [Evidence](#) continues to build showing that COVID-19 vaccination during pregnancy is safe and effective.
- 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, if you are [pregnant or were recently pregnant](#), you are more likely to get very sick from COVID-19 compared to people who are not pregnant. People who get very sick from COVID-19 may require hospitalization, admission to an intensive care unit (ICU), or use of a ventilator or special equipment to breathe. Severe COVID-19 illness can also lead to death. Additionally, if you have COVID-19 during pregnancy, you are at increased risk of complications that can affect your pregnancy and developing baby. For example, COVID-19 during pregnancy increases the risk of delivering a preterm or stillborn infant.

Safety and Effectiveness of COVID-19 Vaccination during Pregnancy

Evidence continues to build showing that COVID-19 vaccination before and during pregnancy is safe and effective. 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. They cannot make anyone sick with COVID-19, including people who are pregnant or their babies.
- **Data on the safety of receiving an mRNA COVID-19 vaccine, Moderna or Pfizer-BioNTech (Comirnaty), 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.¹

- 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).²⁻⁴
- In a study of more than 40,000 pregnant women, COVID-19 vaccination during pregnancy was not associated with preterm birth or delivering an infant small for their gestational age.⁵
- 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.



- **Data show that receiving an mRNA COVID-19 vaccine during pregnancy reduces the risk for infection and severe illness for people who are pregnant.** Recent studies compared people who were pregnant and received an mRNA COVID-19 vaccine with people who did not. Scientists found that COVID-19 vaccination lowered the risk of infection from the virus that causes COVID-19 and was even more effective at reducing the risk of getting very sick from COVID-19.⁶⁻¹⁰
- **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 have been 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.¹¹⁻¹³
 - A recent small study found that at 6 months old, the majority (57%) of infants born to pregnant people who were vaccinated during pregnancy **had detectable antibodies against COVID-19**, compared to 8% of infants born to pregnant people who had COVID-19 during pregnancy.¹⁴
- **New data show that completing a two-dose primary mRNA COVID-19 vaccine series during pregnancy can help protect babies younger than 6 months old from hospitalization due to COVID-19.** In this report, the majority (84%) of babies hospitalized with COVID-19 were born to pregnant people who were not vaccinated during pregnancy.¹⁵
- **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.

People who are Pregnant

COVID-19 vaccination is recommended for people who are pregnant. CDC recommendations align with those from professional medical organizations serving people who are pregnant, including the [American College of Obstetricians and Gynecologists](#) [↗](#), [Society for Maternal Fetal Medicine](#) [↗](#) and the [American Society for Reproductive Medicine](#) [↗](#), along with many other professional medical organizations.

Pfizer-BioNTech or Moderna (mRNA COVID-19 vaccines) are preferred over the J&J/Janssen COVID-19 vaccine for primary and booster vaccination, but the J&J/Janssen COVID-19 vaccine may be considered [in some situations](#).

Getting a COVID-19 vaccine can protect you from getting very sick from COVID-19, and keeping you as healthy as possible during pregnancy is important for the health of your baby. If you are pregnant, consider having a conversation with your healthcare professional 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 professional.



Common Questions about Vaccination during Pregnancy

What are the long-term effects on the baby when a person gets a COVID-19 vaccine during pregnancy?

Scientific studies to date have shown no safety concerns for babies born to people who were vaccinated against COVID-19 during pregnancy.^{1,5} Based on how these vaccines work in the body, experts believe they are unlikely to pose a risk for long-term health effects. CDC continues to monitor, analyze, and disseminate information from people vaccinated during all trimesters of pregnancy to better understand effects on pregnancy and babies.

When during pregnancy should a person get a COVID-19 vaccine?

CDC and professional medical organizations, including the American College of Obstetricians and Gynecologists and the Society for Maternal-Fetal Medicine, recommend COVID-19 vaccination at any point in pregnancy, as well as booster doses for those eligible. COVID-19 vaccination can protect you from getting very sick from COVID-19, and keeping you as healthy as possible during pregnancy is important for the health of your baby.

Which COVID-19 vaccine should pregnant people receive?

In most situations, including for people who are pregnant and people who are breastfeeding, Pfizer-BioNTech or Moderna COVID-19 vaccines (mRNA COVID-19 vaccines) are [preferred](#) over the J&J/Janssen COVID-19 vaccine for primary and booster vaccination due to the [risk of serious adverse events](#). Thrombosis with thrombocytopenia syndrome (TTS) is a rare but serious adverse event that causes blood clots in large blood vessels and low platelets (blood cells that help form clots) and is associated with the J&J/Janssen COVID-19 vaccine. Vaccine recipients must be informed of the risks and benefits of J&J/Janssen COVID-19 vaccination. The J&J/Janssen COVID-19 vaccine may be [considered in some situations](#), including for persons who

- Had a severe reaction after an mRNA vaccine dose or who have a severe allergy to an ingredient of Pfizer-BioNTech or Moderna (mRNA COVID-19 vaccines),
- Would otherwise remain unvaccinated for COVID-19 due to limited access to Pfizer-BioNTech or Moderna (mRNA COVID-19 vaccines); or
- Wants to get the J&J/Janssen COVID-19 vaccine despite the safety concerns.

Learn more about [the considerations for J&J/Janssen COVID-19 vaccine](#).

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. Pfizer-BioNTech or Moderna (mRNA COVID-19 vaccines) are preferred over the J&J/Janssen COVID-19 vaccine for primary and booster vaccination, but the J&J/Janssen COVID-19 vaccine may be considered [in some situations](#). Clinical trials for the COVID-19 vaccines currently used in the United States did not include people who were 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. None of the COVID-19 vaccines contain live virus. 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.^{13, 16-20}

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 or a booster. 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).¹ Fever, for any reason, has been associated with adverse pregnancy outcomes. Fever in pregnancy may be treated with acetaminophen as needed, in moderation, and in consultation with a healthcare provider. Learn more at [Possible Side Effects After Getting a COVID-19 Vaccine](#).

Although rare, some people have had severe 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. Pfizer-BioNTech or Moderna (mRNA COVID-19 vaccines) are preferred over the J&J/Janssen COVID-19 vaccine for primary and booster vaccination, but the J&J/Janssen COVID-19 vaccine may be considered [in some situations](#). In addition, everyone who is trying to get pregnant now, or might become pregnant in the future, should get a [booster](#) shot if eligible.

Find a COVID-19 vaccine or booster: 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](#) [↗](#)
 - [ACOG video about COVID-19 vaccines for people who are pregnant](#) [↗](#)
- [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

[Mother to Baby: Information for people who are pregnant of breastfeeding](#) [↗](#)

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