

Kids, Pregnancy, and the Latest on COVID-19 Vaccines

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With schools back in full swing, fall activities underway, and children gathered once again in classrooms and other indoor settings, parents—including those who are pregnant—have renewed questions about COVID-19 and COVID-19 vaccines. MotherToBaby is seeing an increase in questions from pregnant women who want to protect themselves and their families as much as possible. Although more and more women are confident about getting vaccinated against COVID-19 in pregnancy, we continue to get questions about vaccine safety, as well as inquiries about eligibility for the updated boosters. MotherToBaby has teamed up with the Centers for Disease Control and Prevention (CDC) to give you the latest about vaccination for those who are pregnant and for children.

What is the current impact of COVID-19 and pregnancy?

At this point in the pandemic, we know the importance of taking steps to help prevent a COVID-19 infection in pregnancy. Research has shown that women who are pregnant have a higher chance of becoming very sick, being admitted to intensive care, and needing to be put on a ventilator if they get COVID-19. Some studies have reported a slightly higher chance of death. Researchers have also found increased chances of adverse effects on the pregnancy itself, including preterm delivery, stillbirth, and complications such as preeclampsia.

The good news is, a recent study found that pregnant women who received two doses of an mRNA COVID-19 vaccine had lower rates of stillbirth than those who were unvaccinated. Furthermore, those who also received a booster had lower rates of infection, hospitalization, and pregnancy complications related to COVID-19 than those who received only the two primary doses. This finding is reassuring that staying up to date on the vaccines provides good protection in pregnancy in case of a breakthrough infection.

Why should women who are pregnant and those trying to expand their families consider getting vaccinated against COVID-19?

Vaccination is the best way to protect yourself against getting seriously ill, being hospitalized, and dying from COVID-19. This is true for everyone, but especially for those who are pregnant and others who are at higher risk of complications from COVID-19. Getting vaccinated during pregnancy has the added benefit of passing antibodies to the developing baby, which has been shown to lower the baby's chances of infection or hospitalization with COVID-19 during the first few months of life.

For those planning a pregnancy, the preconception period is a great time to become up to date on recommended immunizations, including COVID-19 vaccines. This helps ensure that future pregnancies will start out as protected as possible from COVID-19 and other vaccine-preventable illnesses. CDC has helpful information here about vaccines before pregnancy: <https://www.cdc.gov/vaccines/pregnancy/vacc-before.html>.

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

It will take time to follow the children of women who were vaccinated in pregnancy to be able to answer this question with data. However, based on what is known about how these and other vaccines work, getting a COVID-19 vaccine during pregnancy is not expected to cause long-term problems for the child. In fact, a pregnancy that stays up to date on the vaccines is more protected and less likely to have complications from COVID-19 that could affect a child's future growth and development, such as preterm delivery. In addition, studies have demonstrated antibody protection for the infant following vaccination during pregnancy. And, of course, vaccination during pregnancy will continue to protect the parent after delivery while they are caring for their newborn.

Should women who are pregnant get an updated booster?

It is common for vaccines to be updated over time to give better protection against new variants spreading in the community, just as the flu shot is updated every year to provide the best protection against current strains of influenza. The updated COVID-19 booster, which gives added protection against the Omicron variant, is also referred to as bivalent. Women who are pregnant should receive this latest booster for the most up-to-date protection against COVID-19. CDC and the American College of Obstetricians and Gynecologists strongly recommend that pregnant women stay up to date with COVID-19 vaccines, including booster doses.

Like most other people, women who are pregnant are eligible for the updated booster if they have completed a primary COVID-19 vaccine series and it has been at least two months since their last dose (primary or booster). The updated booster can be given in any trimester of pregnancy. Anyone who has had a recent COVID-19 infection can consider delaying the booster by up to 3 months from the time their symptoms started or they tested positive.

Are COVID-19 vaccinations recommended for breastfeeding?

Studies have found that the components of mRNA COVID-19 vaccines are unlikely to enter the breast milk, and no serious side effects have been reported for the breastfed baby. In rare cases, there may be a temporary reduction in milk supply when a person gets an mRNA COVID-19 vaccine, but reassuringly, supply is expected to return to normal within a day or two. In more good news, antibodies against the virus that causes COVID-19 have been found in the breast milk of women who have been vaccinated with mRNA COVID-19 vaccines while breastfeeding. This is a promising finding, although more research is needed to know how much and for how long these antibodies might protect a breastfeeding child against the virus.

CDC, the Academy of Breastfeeding Medicine, and the American Academy of Pediatrics recommend that women who are breastfeeding stay up to date with COVID-19 vaccines, including booster doses.

What resources help pregnant women make informed decisions about protecting themselves and their families against COVID-19?

For questions about COVID-19 vaccines and other exposures during pregnancy and breastfeeding, talk with your healthcare provider or contact a MotherToBaby specialist. You can find MotherToBaby resources on COVID-19 and COVID-19 vaccines at <https://mothertobaby.org/pregnancy-breastfeeding-exposures/covid-19/>.

For guidance surrounding kids, we'll turn to Leandris C. Liburd, PhD, MPH, the Associate Director for Minority Health and Health Equity for the Centers for Disease Control and Prevention (CDC).

Questions? Call 866.626.6847 | Text 855.999.3525 | Email or Chat at [MotherToBaby.org](https://mothertobaby.org).

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Morgan called late Friday afternoon with a question about COVID-19 booster shots. She shared that she was 37 weeks along and had received both shots of the Pfizer COVID-19 vaccine back in February, at the very beginning of her pregnancy. Morgan wanted to do what was best to protect her baby, and asked if she qualified for the booster shot that was now available.

As a Teratogen Information Specialist at MotherToBaby California, COVID-19 vaccine questions are my number one inquiry right now. With the guidance continuing to evolve as the pandemic rages on, it can be hard for pregnant

women to keep up! Luckily, that's what we are here to help with. I shared with Morgan that although the vaccines are still working well to prevent severe illness, hospitalization, and death, overall effectiveness has been shown to decrease over time (called waning immunity). Because of this decreased protection, the Centers for Disease Control and Prevention (CDC) have recommended booster shots for some people over the age of 18, including:

- **Certain groups** – including those who are pregnant or recently pregnant – who got both doses of an mRNA vaccine (Pfizer or Moderna) at least 6 months ago, and
- Everyone who got the Johnson & Johnson vaccine at least 2 months ago.

So, what does this mean for my pregnant caller Morgan? Women who are pregnant and recently pregnant (up to 42 days after delivery) may be more likely to get severely ill from COVID-19. We know that there are higher risks of ICU admission, need for a ventilator, and death when a woman gets COVID-19 while pregnant, so protection of this group through vaccination is extremely important. I shared with Morgan that since it has been more than 6 months since she received her first two doses of the Pfizer vaccine, and since she is currently pregnant, she may choose to get a booster shot. The American College of Obstetricians and Gynecologists (ACOG) and the Society for Maternal Fetal Medicine (SMFM) have both recommended the booster at any time in pregnancy once you're eligible for it.

Morgan and I went on to review the latest pregnancy data on the **COVID-19 vaccines**, which now includes thousands of women who have received mRNA vaccines (Pfizer or Moderna). Reassuringly, the available data does not suggest a risk for pregnancy complications (including miscarriage, preterm birth, stillbirth, effects on the baby's growth, or infant death). Although COVID-19 booster shots have not been specifically studied in pregnancy, the Pfizer and J&J boosters are the same dose and contain the same ingredients as the initial doses, and the Moderna booster contains just half of the original dose. Most experts agree that the components of the COVID vaccines only stay in our bodies for a short time, and are not expected to cross the placenta to reach the baby.

Morgan was happy to hear that she qualified for the booster shot. Her three-year-old was in preschool, and although he wore his mask every day, she was still worried about him bringing home COVID and infecting her. She also visited her grandparents often, and wanted to keep them safe. For her, the benefits of protecting herself and her unborn baby definitely outweighed any potential risks.

Before we disconnected, Morgan asked about her sister-in-law who received the Moderna vaccine three months ago and was now pregnant. "Would she be able to get a booster?" Looking at the latest CDC guidelines, I informed Morgan that her sister-in-law would need to wait until 6 months after her second dose of Moderna before she became eligible for the booster. However, I also reminded her that her sister-in-law still has good protection against becoming very sick or hospitalized from COVID-19 from her initial vaccination. Like everyone who is pregnant, she should continue to take other precautions, such as **wearing a mask** and avoiding crowded indoor gatherings.

If you are unsure whether or not you qualify for a booster or you have other vaccine-related questions, please reach out to a MotherToBaby Specialist. And for anyone who has not yet received their initial COVID-19 vaccine, please know that it is strongly recommended before or during pregnancy by many organizations focused on maternal and child health, including the CDC, the American College of Obstetricians and Gynecologists, and the Society for Maternal-Fetal Medicine. If you would like to go over the latest pregnancy information for the COVID-19 vaccines, COVID-19 boosters, or any other exposures, please give us a call.

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