



Pregnancy, COVID-19 and COVID-19 Vaccines Facts and Recommendations

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Physicians took an oath to prioritize the health and safety of our patients. Based on science and available facts, we provide guidance to patients, staffs, friends and even our own families. Below are my professional recommendations on COVID-19, vaccinations and pregnancy. References are included for those who seek more information.

Effect of COVID-19 on Pregnancy

COVID-19 infections put pregnant and recently pregnant (up to six weeks after childbirth) women at increased risk for severe illness.^{1,2} Compared to non-pregnant women with COVID-19 of same age, pregnant women are:

- 2-3 times more likely to be admitted to the ICU
- 2.5-3 times more likely to be put on a ventilator
- 1.7 times more likely to die

COVID-19 in pregnancy can lead to poor outcomes compared to pregnant women who did not contract the infection.³

- Risk of pre-eclampsia is 1.33 times higher
- Preterm birth 1.82 times higher
- Stillborn birth 2.11 times
- These risks are even higher with severe COVID: preeclampsia 4.16, preterm birth 4.29, gestational diabetes 1.99; low birth weight 1.89 times higher

Certain factors further increase the risk of contracting or developing severe COVID-19 while pregnant:⁴

- Underlying medical conditions
- Being 25 years of age or older
- High community transmission
- Low community vaccination
- Workplace conditions in which social distancing difficult
- Certain racial and ethnic minority groups

¹ [BMJ.com](https://www.bmj.com), February 2021, accessed August 2021

² [CDC.gov](https://www.cdc.gov), November 2021, accessed August 2021

³ [CMAJ.ca](https://www.cmaaj.ca), April 2021, accessed August 2021

⁴ [CDC.gov](https://www.cdc.gov), August 2021, accessed August 2021

While most pregnant women with a COVID-19 infection do well with home care, it is important to be in close contact with your obstetrician for guidance. Patients should watch for warning signs such as worsening shortness of breath or pulse oximetry of 93 or below, unremitting fever, chest pain, confusion, inability to keep down food and water, and reduced fetal movements in the third trimester. Your physician may consider you an appropriate candidate for early monoclonal antibody infusion to avoid further worsening your COVID-19 infection. **The Delta variant is particularly infectious among pregnant women.** Several pregnant women in the Northland have been admitted to the ICU and placed on ventilators. In some cases, death occurred.⁵

Safety and Efficacy of COVID-19 Vaccines in Pregnancy

Animal studies on the three vaccines did not generate safety concerns on pregnant animals or their babies. None of the COVID vaccines contain live virus, and, therefore, cannot cause COVID.⁶

U.S. data recently released from three [safety monitoring systems](#) did not identify safety concerns for vaccinated pregnant women or their babies.⁷ Another CDC analysis of 2,500 women who received vaccines before 20 weeks of pregnancy showed no increased risk of miscarriages. The normal miscarriage range is 11-16%. With the vaccine, the miscarriage rate was 13%.⁸

Data from Israel on 15,060 pregnant women suggest that receiving an mRNA COVID vaccine during pregnancy significantly reduces the risk for infection (adjusted hazard ratio of 0.22). Only 68 of 7,530 vaccinated women reported adverse events; none were severe; and all resolved in a day.⁹

Antibodies found in umbilical cord blood demonstrates vaccination of pregnant women builds antibodies that may protect babies.¹⁰

Conclusions

1. A COVID-19 infection during pregnancy can be dangerous for both mother and baby.
2. Available data show COVID-19 vaccines to be safe and effective during pregnancy.
3. COVID-19 mRNA vaccines degrade in the body within 48 hours. The spike protein naturally produced by the body generates immunity. Vaccine related side effects usually occur within weeks of administration and are highly unlikely to appear long after the injection.
4. The [Centers for Disease Control](#) and other professional medical organizations serving pregnant women, including the [American College of Obstetricians and Gynecologists](#) and the [Society for Maternal Fetal Medicine](#), recommend vaccinating pregnant women.
5. In the United State, 96% of physicians have received COVID-19 vaccines,¹¹ and the majority recommend that their pregnant patients do so as well.
6. Talk with your physician, whom you trust for your care. His/her recommendation along with peer-reviewed professional data should supersede what you may read online.

⁵ [FOX4](#), August 2021

⁶ [CDC.gov](#), November 2021, accessed August 2021

⁷ [NEJM.org](#), June 2021, accessed August 2021

⁸ [Researchsquare.com](#), August 2021, accessed August 2021

⁹ [JAMAnetwork.com](#), 2021, accessed August 2021

¹⁰ [Ajog.org](#), March 2021, accessed August 2021

¹¹ [Ama-assn.org](#), June 2021, accessed August 2021