



COVID-19

COVID-19 Vaccines for People Who Would Like to Have a Baby

Updated July 14, 2022

What You Need to Know About COVID-19 Vaccination and Fertility

- CDC recommends COVID-19 vaccines for everyone ages 6 months and older, including people who are pregnant, breastfeeding, trying to get pregnant now, or might become pregnant in the future and getting boosters, if eligible. Learn which vaccines are available by age and how to [stay up to date](#) with your COVID-19 vaccination.
- There is currently no evidence that any vaccines, including COVID-19 vaccines, cause fertility problems (problems trying to get pregnant) in women or men.
- COVID-19 can make you very sick during pregnancy. Additionally, if you have COVID-19 during pregnancy, you are at [increased risk of complications](#) that can affect your pregnancy and developing baby.

CDC and Medical Professionals Recommend COVID-19 Vaccination for People Who Want to Have Children

Evidence continues to grow showing that COVID-19 vaccination is safe and effective during pregnancy

[Professional medical organizations](#) [🔗](#) serving people of reproductive age, including adolescents, emphasize that there is no evidence that COVID-19 vaccination causes problems with fertility.¹⁻⁵

Pregnancy After Vaccination

Many people have become pregnant after receiving a [COVID-19 vaccine](#), including some who got vaccinated during COVID-19 vaccine clinical trials.⁶⁻⁸ In addition, [a recent report](#) [🔗](#) using the [v-safe COVID-19 vaccine pregnancy safety monitoring system](#) data showed that 4,800 people had a positive pregnancy test after receiving the first dose of [an mRNA COVID-19 vaccine](#). [Another report](#) [🔗](#) using data from eight U.S. healthcare systems documented more than 1,000 people who completed COVID-19 vaccination (with any COVID-19 vaccine) before becoming pregnant.

Learn more: [COVID-19 Vaccines While Pregnant or Breastfeeding](#).

No Evidence that COVID-19 Vaccines Affect Fertility

There is currently no evidence that vaccine ingredients or antibodies made following COVID-19 vaccination would cause any problems with becoming pregnant now or in the future.

- Recent studies have found no differences in pregnancy success rates among women who had antibodies from [COVID-19 vaccines](#) or from a recent COVID-19 infection, and women who had no antibodies, including for patients undergoing assisted reproductive technology procedures (e.g., in vitro fertilization).¹¹⁻¹³

- A [study](#) of more than 2,000 females aged 21-45 years and their partners found that COVID-19 vaccination of either partner did not affect the likelihood of becoming pregnant.¹⁴

Like with all vaccines, scientists continue to study COVID-19 vaccines carefully and will continue to report findings as they become available.

Limited, Temporary Impact of COVID-19 Vaccines on Menstrual Cycles

Results from recent [research studies](#)^{15,16} show that people who menstruate may observe small, temporary changes in menstruation after COVID-19 vaccination, including:

- Longer-lasting menstrual periods
- Shorter intervals between periods
- Heavier bleeding than usual

Despite these temporary changes in menstruation, there is no evidence that COVID-19 vaccines cause fertility problems.

Research Studies of Fertility in Healthy Men

- Currently, no evidence shows that any vaccines, including COVID-19 vaccines, cause male fertility problems. A [recent small study of 45 healthy men](#) who received an [mRNA COVID-19 vaccine](#) looked at sperm characteristics, like quantity and movement, before and after vaccination. **Researchers found no significant changes in these sperm characteristics after vaccination.**¹⁷
 - However, [one study](#) found that COVID-19 infection may be associated with a decline in fertility for men for up to 60 days after infection.¹⁴
- [Fever from any illness has been associated with a short-term decrease in sperm](#) production in healthy men.¹⁸ Although fever can be a [side effect](#) of COVID-19 vaccination, there is no current evidence that fever after COVID-19 vaccination affects sperm production. Fever is also a common symptom of COVID-19 infection.

Safety Monitoring

COVID-19 vaccines are undergoing the most intense [safety monitoring](#) in U.S. history. [Data](#) continue to accumulate and show that COVID-19 vaccines are safe and effective for use before and during pregnancy.

Managing Side Effects

If you have [side effects](#) after COVID-19 vaccination, talk to your healthcare provider about taking over-the-counter medicine, such as ibuprofen, acetaminophen, or antihistamines, for any pain or discomfort you may experience, including fever. You can take these medications to relieve short-term side effects after getting vaccinated if you have no medical reasons that prevent you from taking these medications.

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. It is [not recommended](#) you take these medicines before vaccination to try to prevent side effects. Learn about other ways to [relieve side effects](#).

Learn more about [getting your COVID-19 vaccine](#).

References

1. American Society of Reproductive Medicine (ASRM), American College of Obstetricians and Gynecologists (ACOG) and the Society for Maternal-Fetal Medicine (SMFM) Issue Joint Statement: Medical Experts Continue to Assert that COVID

- Vaccines Do Not Impact Fertility. February 5, 2021. Available at: <https://www.asrm.org/news-and-publications/news-and-research/press-releases-and-bulletins/asrm-smfm-acog-issue-joint-statement-medical-experts-continue-to-assert-that-covid-vaccines-do-not-impact-fertility/> .
2. American Academy of Pediatrics (AAP). About the COVID-19 Vaccine: Frequently Asked Questions. Available at: <https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/covid-19-vaccine-for-children/about-the-covid-19-vaccine-frequently-asked-questions/> .
 3. American College of Obstetricians and Gynecologists (ACOG). COVID-19 Vaccination Considerations for Obstetric–Gynecologic Care. <https://www.acog.org/clinical/clinical-guidance/practice-advisory/articles/2020/12/covid-19-vaccination-considerations-for-obstetric-gynecologic-care> .
 4. American Society for Reproductive Medicine (ASRM) Patient Management and Clinical Recommendations During the Coronavirus (COVID-19) Pandemic: UPDATE No. 16 – Reproductive Facts Regarding COVID-19 Vaccination. Available at: <https://www.asrm.org/covid-update-16> .
 5. Joint Statement Regarding COVID-19 Vaccine in Men Desiring Fertility. Society for Male Reproduction and Urology (SMRU) and Society for the Study of Male Reproduction (SSMR). January 9, 2021. Available at <https://www.asrm.org/news-and-publications/covid-19/statements/joint-statement-regarding-covid-19-vaccine-in-men-desiring-fertility-from-the-society-for-male-reproduction-and-urology-smru-and-the-society-for-the-study-of-male-reproduction-ssmr/> .
 6. Vaccines and Related Biological Products Advisory Committee Meeting. FDA Briefing Document. Janssen Ad26.CO2.S Vaccine for the Prevention of COVID-19. February 26, 2021. Available at: <https://www.fda.gov/media/146217/download> .
 7. Vaccines and Related Biological Products Advisory Committee Meeting. FDA Briefing Document. Pfizer-BioNTech COVID-19 Vaccine. December 10, 2020. Available at: <https://www.fda.gov/media/144245/download> .
 8. Vaccines and Related Biological Products Advisory Committee Meeting. FDA Briefing Document. Moderna COVID-19 Vaccine. December 17, 2020. Available at: [Vaccines and Related Biological Products Advisory Committee December 17, 2020 Meeting Briefing Document – FDA](#) .
 9. Shimabukuro TT, Kim SY, Myers TR, et al. Preliminary Findings of mRNA Covid-19 Vaccine Safety in Pregnant Persons [published correction appears in N Engl J Med. 2021 Oct 14;385(16):1536]. N Engl J Med. 2021;384(24):2273-2282. doi:10.1056/NEJMoa2104983
 10. Razzaghi H, Meghani M, Pingali C, et al. COVID-19 Vaccination Coverage Among Pregnant Women During Pregnancy — Eight Integrated Health Care Organizations, United States, December 14, 2020–May 8, 2021. MMWR Morb Mortal Wkly Rep 2021;70:895–899. DOI: <http://dx.doi.org/10.15585/mmwr.mm7024e2> .
 11. Aharon D, Lederman M, Ghofranian A, et al. In Vitro Fertilization and Early Pregnancy Outcomes After Coronavirus Disease 2019 (COVID-19) Vaccination [published online ahead of print, 2022 Jan 25]. Obstet Gynecol. 2022;10.1097/AOG.0000000000004713. doi:10.1097/AOG.0000000000004713
 12. Morris RS. SARS-CoV-2 spike protein seropositivity from vaccination or infection does not cause sterility. F S Rep. 2021;2(3):253-255. doi:10.1016/j.xfre.2021.05.010
 13. Orvieto R, Noach-Hirsh M, Segev-Zahav A, Haas J, Nahum R, Aizer A. Does mRNA SARS-CoV-2 vaccine influence patients' performance during IVF-ET cycle?. Reprod Biol Endocrinol. 2021;19(1):69. Published 2021 May 13. doi:10.1186/s12958-021-00757-6
 14. Wesselink AK, Hatch EE, Rothman KJ, et al. A prospective cohort study of COVID-19 vaccination, SARS-CoV-2 infection, and fertility [published online ahead of print, 2022 Jan 20]. Am J Epidemiol. 2022;kwac011. doi:10.1093/aje/kwac011
 15. Edelman A, Boniface ER, Benhar E, et al. Association Between Menstrual Cycle Length and Coronavirus Disease 2019 (COVID-19) Vaccination: A U.S. Cohort [published online ahead of print, 2022 Jan 5]. Obstet Gynecol. 2022;10.1097/AOG.0000000000004695. doi:10.1097/AOG.0000000000004695
 16. Trogstad, L. Increased Occurrence of Menstrual Disturbances in 18- to 30-Year-Old Women after COVID-19 Vaccination (January 1, 2022). Available at SSRN: <https://ssrn.com/abstract=3998180> or <http://dx.doi.org/10.2139/ssrn.3998180> .
 17. Gonzalez DC, Nassau DE, Khodamoradi K, et al. Sperm Parameters Before and After COVID-19 mRNA Vaccination. JAMA. 2021;326(3):273-274. doi:10.1001/jama.2021.997
 18. Carlsen E, Andersson AM, Petersen JH, Skakkebaek NE. History of febrile illness and variation in semen quality. Hum Reprod. 2003;18(10):2089-2092. doi:10.1093/humrep/deg412