



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

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## COVID-19 VACCINE RECOMMENDATIONS

COVID-19 vaccine recommendations have recently been updated for some populations. This page will be updated to align with the updated immunization schedule.

[Learn more.](#)

### WHAT TO KNOW

- CDC recommends everyone ages 6 months and older get an updated COVID-19 vaccine, including if you are pregnant, breastfeeding, trying to get pregnant now, or might become pregnant in the future. 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.



## Recommendations

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

Professional medical organizations [\[1\]](#) [\[2\]](#) [\[3\]](#) [\[4\]](#) [\[5\]](#) serving people of reproductive age, including adolescents, emphasize that there is no evidence that COVID-19 vaccination causes problems with fertility.

#### Did you know?

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



### Pregnancy After Vaccination

Many women have become pregnant after receiving a [COVID-19 vaccine](#), including some who got vaccinated during COVID-19 vaccine clinical trials [\[6\]](#) [\[7\]](#) [\[8\]](#). In addition, [a recent report](#) [\[9\]](#) using the [COVID-19 vaccine pregnancy safety monitoring system](#) data showed that 4,804 women 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 women who completed COVID-19 vaccination (with any COVID-19 vaccine) before becoming pregnant.

#### KEEP READING

[COVID-19 Vaccination for Women Who Are 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

(for example, in vitro fertilization) [\[9\]](#) [\[10\]](#) [\[11\]](#).

- A [study](#) [\[12\]](#) 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 [\[12\]](#).

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 [\[13\]](#) [\[14\]](#) [\[15\]](#) [\[16\]](#) [\[17\]](#) show that women **may not observe any changes or they may observe small and temporary changes in their periods** 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, there is no evidence that shows vaccines, including COVID-19 vaccines, cause male fertility problems. A [recent small study of 45 healthy men](#) [\[18\]](#) 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.** [\[18\]](#)
  - However, one study [\[12\]](#) found that COVID-19 infection may be associated with a decline in fertility for men for up to 60 days after infection.
- Fever from any illness has been associated with a short-term decrease in sperm production [\[19\]](#) in healthy men. 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 to avoid taking these medications.

Fever, for any reason, has been associated with adverse pregnancy outcomes. Fever in pregnancy may be treated with acetaminophen as needed, and in consultation with a healthcare provider. It is not recommended you take these medicines before vaccination to try to prevent side effects.

### KEEP READING

[Staying Up to Date with COVID-19 Vaccines](#)

### SOURCES

#### CONTENT SOURCE:

National Center for Immunization and Respiratory Diseases; Coronavirus and Other Respiratory Viruses Division

### 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: [Medical Experts Continue to Assert that COVID Vaccines Do Not Impact Fertility | ACOG](#) [\[20\]](#)
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/> [\[21\]](#).
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> [\[22\]](#).

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> [PDF](#) [↗](#).
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 [joint-statement-regarding-covid-19-vaccine-in-men-smru-ssmr.pdf](#) [PDF](#) [↗](#)
6. Vaccines and Related Biological Products Advisory Committee Meeting. FDA Briefing Document. Janssen Ad26.COV2.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. Aharon D, Lederman M, Ghofranian A, et al. In Vitro Fertilization and Early Pregnancy Outcomes After Coronavirus Disease 2019 (COVID-19) Vaccination. *Obstet Gynecol.* 2022 Apr 1;139(4):490-497. doi: 10.1097/AOG.0000000000004713. Epub 2022 Jan 25. PMID: 35080199
10. 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
11. 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
12. Wesselink AK, Hatch EE, Rothman KJ, Wang TR, Willis MD, Yland J, Crowe HM, Geller RJ, Willis SK, Perkins RB, Regan AK, Levinson J, Mikkelsen EM, Wise LA. A Prospective Cohort Study of COVID-19 Vaccination, SARS-CoV-2 Infection, and Fertility. *Am J Epidemiol.* 2022 Jul 23;191(8):1383-1395. doi: 10.1093/aje/kwac011. PMID: 35051292; PMCID: PMC8807200
13. Edelman A, Boniface ER, Benhar E, et al. Association Between Menstrual Cycle Length and Coronavirus Disease 2019 (COVID-19) Vaccination: A U.S. Cohort. *Obstet Gynecol.* 2022 Apr 1;139(4):481-489. doi: 10.1097/AOG.0000000000004695. Epub 2022 Jan 5. PMID: 34991109; PMCID: PMC8936155
14. 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://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3998180](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3998180) [↗](#)
15. Wong KK, Heilig CM, Hause A. et al. Menstrual irregularities and vaginal bleeding after COVID-19 vaccination reported to v-safe active surveillance, USA in December, 2020–January, 2022: an observational cohort study. Published: August 09, 2022 DOI: [https://doi.org/10.1016/S2589-7500\(22\)00125-X](https://doi.org/10.1016/S2589-7500(22)00125-X) [↗](#)
16. Laganà AS, Veronesi G, Ghezzi F, Ferrario MM, Cromi A, Bizzarri M, Garzon S, Cosentino M. Evaluation of menstrual irregularities after COVID-19 vaccination: Results of the MECOVAC survey. *Open Med (Wars).* 2022 Mar 9;17(1):475-484. doi: 10.1515/med-2022-0452. PMID: 35350834; PMCID: PMC8919838
17. Gibson EA, Li H, Fruh V, et al. Covid-19 vaccination and menstrual cycle length in the Apple Women's Health Study. *NPJ Digit Med.* 2022;5(1):165. Published 2022 Nov 2. doi:10.1038/s41746-022-00711-9
18. 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
19. 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

#### SOURCES

- [National Center for Immunization and Respiratory Diseases \(NCIRD\), Division of Viral Diseases](#)
- 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
- 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> [↗](#)