

# COVID-19 Protein Subunit Vaccine (Novavax)

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This sheet is about exposure to the COVID-19 protein subunit vaccine (Novavax) in pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

## **What is COVID-19?**

COVID-19 (short for Coronavirus Disease 2019) is an illness caused by a virus (called SARS-CoV-2). The virus easily spreads from person to person through respiratory droplets that come from our mouths and noses when we breathe, talk, cough, or sneeze. For more information on COVID-19, please see the MotherToBaby fact sheet at <https://mothertobaby.org/fact-sheets/covid-19/>.

## **What is a COVID-19 protein subunit vaccine?**

COVID-19 protein subunit vaccines help protect against the virus that causes COVID-19. At this time, one protein subunit vaccine is approved for use in the United States, made by Novavax. Protein subunit vaccines do not contain live virus that can cause COVID-19. The Centers for Disease Control and Prevention (CDC) have more information about protein subunit vaccines here:

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/proteinsubunit.html>.

The Novavax protein subunit vaccine is given as 2 doses. At this time, there are no recommendations for a booster dose of this vaccine. You can find COVID-19 vaccine recommendations from the CDC here:

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/stay-up-to-date.html>. The Novavax protein subunit vaccine is not 100% effective at preventing COVID-19, but can greatly reduce the chance of getting very sick from the virus.

For more information on other types of COVID-19 vaccines that are available, please see the MotherToBaby fact sheets at <https://mothertobaby.org/fact-sheets/covid-19-mrna/> and

<https://mothertobaby.org/fact-sheets/covid-19-viral-vector-vaccine/>.

## **Are COVID-19 protein subunit vaccines recommended for people who are pregnant?**

Organizations including the CDC, the American Academy of Pediatrics, and the American College of Obstetricians and Gynecologists (ACOG) recommend that people who are pregnant, recently pregnant, planning a pregnancy, or could become pregnant in the future stay up to date on recommended doses of COVID-19 vaccines and boosters. The Novavax COVID-19 protein subunit vaccine can be given at any time in pregnancy.

Having a COVID-19 **infection** while pregnant increases the chance of severe illness and pregnancy complications. Studies have shown that people who are vaccinated are less likely to get COVID-19. If they do get COVID-19, they are less likely to get very sick.

## **Does getting a COVID-19 protein subunit vaccine make it harder to get pregnant or affect fertility treatments?**

COVID-19 protein subunit vaccines have not been studied for possible effects on fertility or fertility treatments. However, there is currently no evidence that any vaccines, including any kind of COVID-19 vaccines, cause fertility problems. The American Society for Reproductive Medicine recommends that people undergoing fertility treatment stay up to date on recommended doses of COVID-19 vaccines and boosters. There is no recommendation to postpone fertility treatment after getting a COVID-19 protein subunit vaccine, or to avoid getting the vaccine after treatment.

## **I just got a COVID-19 protein subunit vaccine. How long do I need to wait before I get pregnant?**

There is no recommendation to wait before trying to get pregnant after getting a COVID-19 protein subunit vaccine.

## **Does getting a COVID-19 protein subunit vaccine increase the chance of miscarriage?**

Miscarriage is common and can occur in any pregnancy for many different reasons. Studies have not been done in humans to see if getting a Novavax COVID-19 protein subunit vaccine during pregnancy would increase the chance for miscarriage.

***Does getting a COVID-19 protein subunit vaccine increase the chance of birth defects?***

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. Studies have not been done in humans to see if the Novavax COVID-19 protein subunit vaccine would increase the chance for birth defects. Animal studies in rats did not show an increased chance for birth defects.

Fever is a possible side effect of the COVID-19 protein subunit vaccine. A high fever in the first trimester can increase the chance of certain birth defects. Acetaminophen is usually recommended to reduce fever during pregnancy. For more information about fever and pregnancy, see the MotherToBaby fact sheet about fever/hyperthermia at <https://mothertobaby.org/fact-sheets/hyperthermia-pregnancy/>.

***Does getting a COVID-19 protein subunit vaccine in pregnancy increase the chance of other pregnancy-related problems?***

Studies have not been done in humans to see if the Novavax COVID-19 protein subunit vaccine would increase the chance of other pregnancy-related problems, such as preterm delivery (before 37 weeks of pregnancy) or low birth weight (weighing less than 5 pounds, 8 ounces (2500 grams) at birth). Animal studies in rats did not report other pregnancy problems.

***Does getting a COVID-19 protein subunit vaccine in pregnancy affect future behavior or learning for the child?***

It will take time to follow the children of people who were vaccinated in pregnancy in order to answer this question. However, based on what is known about this and other vaccines, getting a COVID-19 protein subunit vaccine is not expected to cause long-term problems for the child.

***Does getting a COVID-19 protein subunit vaccine during pregnancy protect the baby from the virus after delivery?***

It is not known if getting a Novavax COVID-19 protein subunit vaccine during pregnancy would protect the baby from COVID-19 after delivery. Studies looking at another type of COVID-19 vaccine (mRNA) suggest that the antibodies a person makes after getting the vaccine in pregnancy can pass to the developing baby. Research is needed to know if this is also true for protein subunit vaccines.

***Breastfeeding and COVID-19 protein subunit vaccines:***

Studies have not been done to see if the Novavax COVID-19 protein subunit vaccine passes into breast milk. However, because it is not a live vaccine that can make copies of itself (replicate) and spread through the body, it is not expected to get into the milk.

Organizations including the Academy of Breastfeeding Medicine and the American Academy of Pediatrics agree that people who are breastfeeding can receive COVID-19 vaccines. There is no recommendation to postpone breastfeeding or discard breast milk after getting the Novavax COVID-19 protein subunit vaccine. Talk to your healthcare provider about all of your breastfeeding questions.

***If a male gets a COVID-19 protein subunit vaccine, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?***

COVID-19 protein subunit vaccines have not been studied to see if they can affect male fertility or increase the chance of birth defects. In general, exposures that fathers or sperm donors have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures at <https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/>.

*MotherToBaby is currently conducting an observational study looking at COVID-19 vaccines in pregnancy. If you have never been vaccinated against COVID-19, or were vaccinated before your pregnancy, you may be eligible to participate. If you are interested in taking part in this study, please call 1-877-311-8972 or sign up at <https://mothertobaby.org/join-study/>.*

**Please click [here](#) for references.**

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

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