COVID-19 Vaccine, Protein Subunit (Novavax)

This sheet is about exposure to a protein subunit COVID-19 vaccine in pregnancy and while breastfeeding. This information is based on published research studies. It should not take the place of medical care and advice from your healthcare provider.

What is COVID-19?

COVID-19 (Coronavirus Disease 2019) is an illness caused by a virus called SARS-CoV-2. The virus spreads mostly by close person-to-person contact. When an infected person breathes, talks, coughs, or sneezes, the virus can spread to others who are nearby.

Having a COVID-19 infection while pregnant increases the chance of severe illness and pregnancy complications. Studies have shown that women who are up to date with COVID-19 vaccines in pregnancy are less likely to get very sick or have pregnancy complications from a COVID-19 infection than women who are not up to date. For more information on COVID-19, please see the MotherToBaby fact sheet at https://mothertobaby.org/fact-sheets/covid-19/.

What is a protein subunit COVID-19 vaccine?

A protein subunit COVID-19 vaccine contains the proteins needed to make antibodies to protect against the COVID-19 virus. Protein subunit vaccines do not contain live virus, and do not cause COVID-19. The protein subunit COVID-19 vaccine approved for use in the United States is made by Novavax (Nuvaxovid®). There are other protein subunit COVID-19 vaccines used outside of the United States. While no vaccine is 100% effective at preventing COVID-19, a protein subunit vaccine can greatly reduce the chance of getting very sick from the virus.

Medical organizations including the American College of Nurse Midwives (ACNM), the American College of Obstetricians and Gynecologists (ACOG), and the Society for Maternal-Fetal Medicine (SMFM) recommend that women who are planning a pregnancy, pregnant, or recently pregnant stay up to date with the latest COVID-19 vaccine. A protein subunit COVID-19 vaccine can be given at any time in pregnancy.

For more information on mRNA COVID-19 vaccines, please see the MotherToBaby fact sheet at https://mothertobaby.org/fact-sheets/covid-19-mrna/.

Does getting a protein subunit COVID-19 vaccine make it harder to get pregnant?

Studies have not been done to see if getting a Novavax protein subunit COVID-19 vaccine can make it harder to get pregnant.

I just got a protein subunit COVID-19 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 protein subunit COVID-19 vaccine.

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

Miscarriage is common and can occur in any pregnancy for many different reasons. Studies have not been done to see if getting a Novavax protein subunit COVID-19 vaccine can increase the chance of miscarriage. Several studies of women receiving other protein subunit vaccines did not show an increased chance of miscarriage.

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

Birth defects can happen in any pregnancy for different reasons. Out of all babies born every year, about 3 out of 100 (3%) will have a birth defect. We look at research studies to try to understand if an exposure, like a protein subunit COVID-19 vaccine, might increase the chance of birth defects in pregnancy. Studies have not been done in humans to see if the Novavax protein subunit COVID-19 vaccine can increase the chance of birth defects. Animal studies in rats did not show an increased chance of birth defects. Several studies of women receiving other protein subunit vaccines have not shown an increased chance of birth defects.

Fever is a possible side effect of the protein subunit COVID-19 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 protein subunit COVID-19 vaccine in pregnancy increase the chance of other pregnancy-related problems?

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

COVID-19 virus can increase the chance of pregnancy complications, including preterm delivery. Some studies show that the chance for pregnancy complications is lower in vaccinated women compared to unvaccinated women.

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

Based on what is known about how this and other vaccines work in the body, getting a protein subunit COVID-19 vaccine is not expected to increase the chances of behavior or learning problems for the child.

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

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

Breastfeeding and protein subunit COVID-19 vaccines:

Studies have not been done to see if the Novavax protein subunit COVID-19 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.

There is no recommendation to stop or delay breastfeeding or discard breast milk after getting the Novavax protein subunit COVID-19 vaccine. Be sure to talk to your healthcare provider about all your breastfeeding questions.

If a man gets a protein subunit COVID-19 vaccine, could it affect his fertility or increase the chance of birth defects?

Protein subunit COVID-19 vaccines have not been studied to see if they can affect men’s fertility (ability to get a partner pregnant) 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/.

Please click here for references.