COVID-19 Vaccines

* Information on COVID-19 vaccines is rapidly evolving, and this fact sheet could become outdated by the time you read it. For the most up to date information, please call MotherToBaby at 866-626-6847.

This sheet is about COVID-19 vaccines 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 are COVID-19 vaccines?**

COVID-19 vaccines help protect against the virus that causes COVID-19. Three different COVID-19 vaccines are currently approved for use in the United States: two messenger RNA (mRNA) vaccines (Moderna/Spikevax® and Pfizer/Comirnaty®) and a viral vector vaccine (Johnson & Johnson/Janssen). None of these vaccines contains live virus that could cause COVID-19. Since the protection provided by the vaccines starts to decrease over time, booster doses are recommended. COVID-19 vaccines and booster doses are not 100% effective at preventing infection, but can greatly reduce the chance of getting very sick from the virus.

You can learn more about the different vaccines and booster shot recommendations here: https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines.html.

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

Organizations including the Centers for Disease Control and Prevention (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 may become pregnant in the future stay up to date on their COVID-19 vaccines, including getting a booster shot when they are eligible.

Having a COVID-19 infection while pregnant increases the chance of severe illness and pregnancy complications. Studies have shown that pregnant people who get vaccinated are less likely to get COVID-19. If they do get COVID-19, they are less likely to get very sick and may have a lower chance of pregnancy complications related to the illness. If you have questions about vaccines and pregnancy, talk with your healthcare provider or contact a MotherToBaby specialist.

**Is there anyone who shouldn’t get a COVID-19 vaccine?**

People should not get a COVID-19 vaccine if they have had a severe allergic reaction (anaphylaxis) or an immediate (within 4 hours) allergic reaction of any kind to a previous dose of that vaccine or any ingredient in the vaccine. Other COVID-19 vaccines may be available to them. Those who have had a severe allergic reaction to any other vaccine or injection should talk to their healthcare providers about whether or not they should get a COVID-19 vaccine.

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

There is no evidence that getting a COVID-19 vaccine makes it harder to get pregnant. Several studies of people undergoing in-vitro fertilization (IVF) found that getting a COVID-19 mRNA vaccine did not affect the function of the ovaries (the organ that releases the egg), number of oocytes (immature eggs), hormone levels, or success rates of embryo implantation. The American Society for Reproductive Medicine recommends that people undergoing fertility treatment get the vaccine. There is no recommendation to postpone fertility treatment after getting the vaccine or to avoid getting the vaccine after treatment.

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

Since COVID-19 vaccines are not live vaccines, there is no recommendation to wait before trying to get pregnant. In
addition, if someone becomes pregnant after getting the first dose of an mRNA vaccine, they can still receive the second dose on time as scheduled.

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

Miscarriage can occur in any pregnancy. A study reported no increase in miscarriages among 2,456 people who received COVID-19 mRNA vaccines before 20 weeks of pregnancy (when a miscarriage can happen). Another study looked at over 105,000 pregnancies and found that those who had miscarriages were no more likely to have gotten a COVID vaccine in the past month than those who did not have miscarriages.

**Does getting a COVID-19 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. Based on what is known about these and other vaccines, getting a COVID-19 vaccine is not expected to increase the chance of birth defects.

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

Studies involving thousands of people who have given birth after getting COVID-19 vaccines in the second and third trimesters of pregnancy have not found increased risks for pregnancy complications such as stillbirth, preterm delivery (before 37 weeks of pregnancy), babies born smaller than expected, or neonatal death. The majority of people in published studies have gotten mRNA vaccines (Moderna/Spikevax® or Pfizer/Comirnaty®).

**Does getting a COVID-19 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 these and other vaccines, getting a COVID-19 vaccine is not expected to cause long-term problems for the child.

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

The antibodies that a person makes after getting the vaccine during pregnancy can pass to the developing baby. Studies suggest that getting the vaccine in pregnancy passes more antibodies to the baby than having a COVID-19 infection in pregnancy does. More research is needed to know how much these antibodies protect the baby from infection after delivery and if there is a better time in pregnancy to be vaccinated in order to pass more antibodies to the baby.

**Breastfeeding and COVID-19 vaccines:**

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 vaccine.

Small studies have found that mRNA from the vaccines is unlikely to enter the breast milk. If any small amounts of vaccine ingredients did enter the breast milk, they would most likely be destroyed in the baby’s stomach. Studies have not reported serious adverse reactions to the vaccine in people who are breastfeeding or their infants.

Antibodies against the virus that causes COVID-19 have been found in the breast milk of people who have been vaccinated. More research is needed to know if these antibodies might protect a breastfeeding child against the virus and how long that protection might last. Talk to your healthcare provider about all of your breastfeeding questions.

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

Two studies found no differences in sperm production before and after getting a COVID-19 mRNA vaccine. 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 certain COVID-19 vaccines in pregnancy. If you have been vaccinated against COVID-19 and are interested in taking part in this study, please call 1-877-311-8972 or sign up at [https://mothertobaby.org/join-study/](https://mothertobaby.org/join-study/).

Please click here to view references.