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* Information on COVID-19 vaccines is rapidly evolving, and this fact sheet could become outdated by the time you read it.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 and Pfizer/Comirnaty®) and a viral vector vaccine (Johnson & Johnson/Janssen). These vaccines work by helping the body develop immunity against the virus that causes COVID-19. None of these vaccines contains live virus that could cause COVID-19. You can learn more about how the different vaccines work here: https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/how-they-work.html.

COVID-19 vaccines are not 100% effective at preventing infection, but can greatly reduce the chance of getting very sick from the virus. For further protection, people who are pregnant (and those who live with them) might consider continuing to wear masks in public, even if they are fully vaccinated.

For general information about other kinds of vaccines, please see the MotherToBaby fact sheet about vaccines at https://mothertobaby.org/fact-sheets/vaccines-pregnancy/.

**Should people who are pregnant get a COVID-19 vaccine?**

Many organizations focusing on maternal, infant, and child health recommend that people who are pregnant, recently pregnant, planning a pregnancy, or may become pregnant in the future get a COVID-19 vaccine. These include the Centers for Disease Control and Prevention (CDC), American Academy of Pediatrics, and the American College of Obstetricians and Gynecologists (ACOG). If you have questions about the vaccines and pregnancy, talk with your healthcare provider or contact a MotherToBaby specialist.

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

You should not get a COVID-19 vaccine if you have had a severe allergic reaction (anaphylaxis) or an immediate allergic reaction of any kind (within 4 hours) to a previous dose of the vaccine or any ingredient in the vaccine. If you have had a severe allergic reaction to any other vaccine or injection, talk to your healthcare provider about whether or not you should get a COVID-19 vaccine.

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

There is no evidence that getting a COVID-19 vaccine makes it harder to get pregnant.

**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 should still receive the second dose on time as scheduled.

**I am undergoing fertility treatment. Can I get a COVID-19 vaccine?**

The American Society for Reproductive Medicine recommends that people undergoing fertility treatment get the vaccine. Three small studies of couples undergoing in-vitro fertilization (IVF) found that getting a COVID-19 mRNA
vaccine did not affect the function of the female partners’ ovaries (the organ that releases the egg), number of oocytes (immature eggs), hormone levels, or success rates of embryo implantation.

There is no recommendation to postpone fertility treatment after getting the vaccine or to avoid getting the vaccine after treatment. However, people scheduled for procedures including oocyte retrieval, embryo transfer, and intrauterine insemination should avoid COVID-19 vaccination at least three days before and three days after their procedure. This is not because being vaccinated is known to be unsafe, but because having common side effects from the vaccine might make it harder to monitor the person during and after surgery (such as knowing if their symptoms are related to the vaccine or to possible infection related to the procedure).

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 a COVID-19 mRNA vaccine 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 increase the chance of other pregnancy complications?

Four studies involving more than 4,000 people who gave birth after getting a COVID-19 vaccine in pregnancy have not found increased risks for pregnancy complications such as preterm birth (before 37 weeks of pregnancy), babies born smaller than expected, stillbirth, or neonatal death. The majority of people in these studies received mRNA vaccines (Pfizer or Moderna) in the 3rd trimester of pregnancy. Pregnancy data is still limited for the Johnson & Johnson/Janssen viral vector vaccine.

Having a COVID-19 infection while pregnant increases the chance of severe illness compared to people who are not pregnant. The infection can also lead to pregnancy complications such as preterm delivery. Getting a COVID-19 vaccine reduces the chance of severe illness and pregnancy complications caused by COVID-19.

Does getting a COVID-19 vaccine cause long-term problems in behavior or learning for the baby?

It will take time to follow the infants 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 baby.

If I get a COVID-19 vaccine during pregnancy, will it protect my baby from the virus after delivery?

After getting a vaccine, our bodies make antibodies against the virus. These antibodies have been found in the (umbilical) cord blood at the time of delivery in women who were vaccinated during pregnancy. This suggests that the antibodies can pass to the baby during pregnancy. More research is needed to know if these antibodies can protect the baby from the virus after delivery, how long that protection might last, and the best time in pregnancy to be vaccinated in order to pass more antibodies to the baby.

Can I get a COVID-19 vaccine if I am breastfeeding?

Many organizations, including the Academy of Breastfeeding Medicine and the American Academy of Pediatrics, recommend that people who are breastfeeding receive a COVID-19 vaccine. They do not recommend that people postpone breastfeeding or discard their breast milk after getting the vaccine.

The components of the COVID-19 vaccines are not expected to enter the breast milk. A small study confirmed that no mRNA from the vaccine was found in breast milk samples after vaccination. If any small amounts of vaccine
ingredients did enter the breast milk, they would most likely be destroyed in the baby’s stomach.

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.

I got the COVID-19 vaccine. Can it make it harder for me to get my 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 the 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/.

Please click here to view references.