

COVID-19

This sheet is about having a COVID-19 infection in pregnancy and while breastfeeding. This information is based on available published literature. 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 COVID-19 virus spreads mostly by close person-to-person contact. When an infected person breathes, talks, coughs, or sneezes, the COVD-19 virus can spread to others who are nearby.

The most common symptoms of COVID-19 include fever, cough, and shortness of breath. Other symptoms may include chills, muscle or body aches, headache, sore throat, new loss of taste or smell, runny nose, nausea or vomiting, and diarrhea. During pregnancy, infection is more likely to result in hospitalization, admission to the intensive care unit (ICU) and death. Some people have only mild symptoms or no symptoms at all (asymptomatic), but they could still spread the virus to other people.

If you are pregnant and test positive for COVID-19, be sure to let your healthcare provider know. Your healthcare provider may recommend antiviral medication to help lower the chance of severe illness. For more information, see the MotherToBaby fact sheet: https://mothertobaby.org/fact-sheets/nirmatrelvir-ritonavir-paxlovid/.

How can I help prevent getting COVID-19?

Staying up to date with recommended COVID-19 vaccines is the best way to protect yourself and others from COVID-19. You can read more about COVID-19 vaccines on the MotherToBaby fact sheets at

https://mothertobaby.org/fact-sheets/covid-19-mrna/ and

https://mothertobaby.org/fact-sheets/covid-19-protein-subunit-vaccine/. Other ways to help protect yourself and others from infection include wearing a mask in public, avoiding large indoor gatherings, avoiding contact with people who might have COVID-19, and washing your hands often. More information is available for people who are pregnant or recently pregnant at https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/pregnant-people.html.

I have COVID-19. Can it make it harder for me to get pregnant?

Based on the data available, it is not known if having COVID-19 could make it harder to get pregnant.

Does having COVID-19 increase the chance for miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. The available studies on COVID-19 infections in pregnancy have not suggested an increased chance of miscarriage compared to the general population.

Does having COVID-19 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. The available studies on COVID-19 infections in pregnancy have not reported an increased chance for birth defects beyond the background risk.

Fever is a possible symptom of COVID-19. A high fever in the first trimester can increase the chance of certain birth defects. Acetaminophen is usually recommended to reduce fever in pregnancy. If you get sick with COVID-19 or any other illness and develop a fever, talk with your healthcare provider to confirm that taking acetaminophen is the best way to lower it. For more information about fever and pregnancy, see the MotherToBaby fact sheet about hyperthermia at https://mothertobaby.org/fact-sheets/hyperthermia-pregnancy/.

Does having COVID-19 increase the chance of other pregnancy related problems?

Studies have shown that people who are pregnant or recently pregnant and get COVID-19 have higher chances of becoming very sick, being admitted to intensive care, and needing to be put on a ventilator (machine that helps you breathe). Some studies have also reported a higher chance of death. The chance of these outcomes is higher among people who also have other underlying health conditions, such as obesity, pre-pregnancy diabetes, and/or chronic hypertension. Just as in the general population, pregnant people who are up to date on COVID-19 vaccines are less



likely to get infected, and less likely to get severely ill, be hospitalized, or die from a COVID-19 infection.

Having COVID-19 in pregnancy can increase the chance of preterm delivery (birth before 37 weeks of pregnancy). Some studies have also reported increased chances of stillbirth, preeclampsia (dangerously high blood pressure), blood clots, and the need for emergency c-section. Sometimes the virus can infect the placenta (called placentitis), which can lead to problems with how well the placenta works to support the pregnancy and the baby's growth and development. Having COVID-19 can also make it harder to manage other health conditions that are common in pregnancy, such as other infections or high blood pressure. People who are up to date with COVID-19 mRNA vaccines in pregnancy are less likely to experience pregnancy complications from a COVID-19 infection than people who are not up to date.

Can the virus that causes COVID-19 pass to the baby during pregnancy or at the time of delivery?

The virus can pass from a person who is pregnant to their baby during pregnancy, but this appears to be rare. The chance of the baby getting the virus during or soon after birth may be higher if the mother has an active infection at the time of delivery. However, most infants who test positive soon after delivery have only mild or no symptoms, and fully recover from the virus. Severe illness may be more likely in infants who are born preterm or have other health problems.

Does having COVID-19 in pregnancy cause long-term problems in learning or behavior for the baby?

Two studies have looked at the development of infants ages 5-11 months born to people who had COVID-19 during pregnancy. Most of the COVID-19 infections were mild or asymptomatic (no symptoms). These studies found no differences in cognition (thinking), communication, motor (movement) skills, problem solving, or personal-social skills in the infants.

Two other studies reported that infants born to people who had COVID-19 during pregnancy were more likely to be diagnosed with a neurodevelopmental (brain-related) issue by one year of age. In one of these studies, the issues were mostly related to motor skills and speech and language, and were more common following COVID-19 infection in the 3rd trimester. In the other study, only male infants were more likely to have been diagnosed with a neurodevelopmental issue. Since these studies could not control for all the things that might have affected the children's development (such as the home environment, other possible exposures in pregnancy, and stress from the pandemic), it is not clear if having COVID-19 in pregnancy affects long-term development in children. More research is needed to fully understand the possible long-term effects of a COVID-19 infection during pregnancy.

Breastfeeding and COVID-19:

The virus that causes COVID-19 has not been found to pass through the breast milk. There have not been any reported cases of infants getting COVID-19 through breast milk. Breast milk provides protection against many childhood infections, and people are often encouraged to continue breastfeeding or providing breast milk even when they are sick with a virus, such as flu.

People who are breastfeeding while sick with COVID-19 can help prevent passing the virus to their babies through contact by washing their hands frequently and wearing a mask while nursing. They can also consider pumping milk for someone else to feed their baby while they recover. CDC has information on COVID-19 and breastfeeding at https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/pregnant-people.html. Be sure to talk to your healthcare provider about all your breastfeeding questions.

If a male has COVID-19, could it affect fertility or increase the chance of birth defects?

Two small studies found that men who had COVID-19 had fewer and slower sperm after recovery compared to men who had only mild cases of COVID-19 or healthy men who did not have COVID-19. Another study found that men who had COVID-19 had a short-term decline in fertility (ability to get partner pregnant). There is not enough information to know if COVID-19 infection could have long-term effects on sperm or male fertility. 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 on Paternal Exposures at

https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

If you have received the Moderna or Pfizer vaccine in the last 3 months, you may be a good match for our COVID-19 mRNA vaccine study. Help us help other pregnant people. If you are interested in learning more about this study, please call 1-877-311-8972 or visit: https://mothertobaby.org/join-study/.

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Questions? Call 866.626.6847 | Text 855.999.3525 | Email or Chat at MotherToBaby.org.

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