

# Nirmatrelvir/Ritonavir (Paxlovid®)

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This sheet is about exposure to nirmatrelvir/ritonavir 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 nirmatrelvir/ritonavir?***

Nirmatrelvir and ritonavir are medications that have been used together to treat COVID-19 (the illness caused by the SARS-CoV-2 virus). The combination of nirmatrelvir/ritonavir is sold under the brand name Paxlovid®. To be most effective, nirmatrelvir/ritonavir treatment should be started as soon as possible after diagnosis of COVID-19 and within 5 days of the start of symptoms. For more information on COVID-19, please see the fact sheet at <https://mothertobaby.org/fact-sheets/covid-19/>.

Sometimes when people find out they are pregnant, they think about changing how they take their medication, or stopping their medication altogether. However, it is important to talk with your healthcare providers before making any changes to how you take your medication. Your healthcare providers can talk with you about the benefits of treating your condition and the risks of untreated illness during pregnancy.

## ***I need to take nirmatrelvir/ritonavir. Can it make it harder for me to get pregnant?***

Studies have not been done in humans to see if nirmatrelvir/ritonavir can make it harder to get pregnant. Animal studies on ritonavir have not shown effects on the ability to get pregnant (fertility).

## ***Does taking nirmatrelvir/ritonavir 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 nirmatrelvir/ritonavir can increase the chance of miscarriage.

## ***Does taking nirmatrelvir/ritonavir increase the chance of birth defects?***

Birth defects can happen in any pregnancy for different reasons. Out of all babies born each year, about 3 out of 100 (3%) will have a birth defect. Studies have not been done in humans to see if the combination of nirmatrelvir/ritonavir can increase the chance of birth defects. Case reports of ritonavir use in human pregnancy have not suggested an increased chance of birth defects.

The National Institutes of Health (NIH) recommends that nirmatrelvir/ritonavir not be withheld from people who are pregnant and have COVID-19 if they otherwise qualify to receive this medication. The American College of Obstetricians and Gynecologists (ACOG) states that nirmatrelvir/ritonavir is the preferred treatment for people who are pregnant and have COVID-19 that does not require hospitalization. If you have COVID-19, your healthcare providers can talk with you about what treatment is best for you.

## ***Does taking nirmatrelvir/ritonavir in pregnancy increase the chance of other pregnancy-related problems?***

Small studies looking at people who took nirmatrelvir/ritonavir for COVID-19 infection during pregnancy have not reported an increased 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). Among those who had gone on to deliver at the time of these reports, no side effects related to nirmatrelvir/ritonavir were reported in their infants at the time of delivery. Most of those who had delivered were vaccinated against COVID-19 and received nirmatrelvir/ritonavir in the third trimester.

Having a COVID-19 infection in pregnancy can increase the chance of pregnancy problems such as stillbirth and preterm delivery.

## ***Does taking nirmatrelvir/ritonavir in pregnancy affect future behavior or learning for the child?***

Studies have not been done to see if nirmatrelvir/ritonavir can increase the chance of behavior or learning issues for the child.

***Breastfeeding while taking nirmatrelvir/ritonavir:***

Information on the use of nirmatrelvir/ritonavir during breastfeeding is limited. Two people who used nirmatrelvir/ritonavir while breastfeeding did not report side effects related to breastfeeding. More information is available about ritonavir used by itself during breastfeeding. Ritonavir passes into breast milk in low amounts, and low levels of the medication have been found in the blood of some breastfed infants. No side effects in breastfed infants have been reported.

Since the amount of nirmatrelvir/ritonavir in the milk is expected to be low, it is not expected to cause side effects in nursing infants. If you suspect the baby has any symptoms (such as diarrhea or irritability) contact the child's healthcare provider. Be sure to talk to your healthcare provider about all your breastfeeding questions.

***If a male takes nirmatrelvir/ritonavir, could it affect fertility or increase the chance of birth defects?***

Studies have not been done in humans to see if nirmatrelvir/ritonavir could affect male fertility (ability to get partner pregnant) or increase the chance of birth defects above the background risk. Animal studies on ritonavir have not shown an effect on fertility. 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/>.

**Please click here for references.**

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

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