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# Nitrofurantoin

This sheet is about exposure to nitrofurantoin 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 nitrofurantoin?

Nitrofurantoin is an antibacterial medication that has been used to treat urinary tract infections (UTIs). Some brand names are Macrobid<sup>®</sup>, Macrodantin<sup>®</sup>, and Furadantin<sup>®</sup>.

Sometimes when women 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 provider can talk with you about using nitrofurantoin and what treatment is best for you.

The American College of Obstetricians and Gynecologists (ACOG) states that it is "reasonable to offer" nitrofurantoin in the first trimester when other medication is not available. ACOG also states that the use of nitrofurantoin in the second and third trimester has been considered a first-line treatment for UTIs.

The product label for nitrofurantoin recommends that women who are near the end of their pregnancy (38 to 42 weeks gestation) or are otherwise close to delivery should not use this medication.

### I take nitrofurantoin. Can it make it harder for me to get pregnant?

It is not known if nitrofurantoin can make it harder to get pregnant.

### Does taking nitrofurantoin increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Two studies including 173 pregnancies did not find an association with nitrofurantoin use and an increased chance for miscarriage. However, women with untreated urine infections might have a greater chance for miscarriage.

### Does taking nitrofurantoin 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. Most studies with nitrofurantoin do not suggest an increased chance of birth defects. Some studies on nitrofurantoin have suggested an increased chance of birth defects with use in pregnancy. However, study design flaws make some of the results in these studies questionable. There are also many studies on nitrofurantoin use in pregnancy that did not find birth defects. Overall, an increased chance for birth defects has not been confirmed.

### Does taking nitrofurantoin in pregnancy increase the chance of other pregnancy-related problems?

It is not known if nitrofurantoin can cause other 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). However, women with untreated urine infections might have a greater chance for these and other pregnancy complications, including preeclampsia (high blood pressure and problems with organs, such as the kidneys) that can lead to seizures (called eclampsia), and cesarean section (C-section).

There have been reports of newborns with hemolytic anemia (breakdown of red blood cells) when they were exposed to nitrofurantoin late in pregnancy. For this reason, the manufacturer has recommended using different antibiotics to treat urine infections later in pregnancy.

### Does taking nitrofurantoin in pregnancy affect future behavior or learning for the child?

Studies have not been done to see if nitrofurantoin can cause behavior or learning issues for the child.

### Breastfeeding while taking nitrofurantoin:

Nitrofurantoin gets into breast milk in small amounts. In a report on 6 women taking nitrofurantoin while breastfeeding, 2 noted that their children had diarrhea. When any antibiotic is taken during breastfeeding, babies can

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be watched for diarrhea or rash.

The product label for nitrofurantoin recommends that women who are breastfeeding should not use this medication when infants are less than 1 month old or if the nursing infant has a diagnosis of glucose-6-phosphate dehydrogenase deficiency (G6PD) due to the risk of hemolytic anemia (breakdown of red blood cells). However, the benefits of treating your condition, as well as the benefits of breastfeeding, may outweigh possible risks. Use of nitrofurantoin while breastfeeding an older infant without G6PD is unlikely to cause side effects. Your healthcare providers can talk with you about using nitrofurantoin and what treatment is best for you while you are nursing. Be sure to talk to your healthcare provider about all your breastfeeding questions.

#### If a man takes nitrofurantoin, could it affect fertility or increase the chance of birth defects?

When nitrofurantoin was given to men at doses higher than typically used for 2 weeks, sperm production was low or stopped in 13 out of the 36 study participants. Low sperm production could affect fertility (ability to get a woman pregnant). However, use of typical doses of 100mg twice daily for one week did not have this same effect. This means that with typical use, nitrofurantoin is unlikely to affect a man's fertility. In general, exposures that men 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.

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

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