

Carbamazepine

This sheet is about exposure to carbamazepine in pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

What is carbamazepine?

Carbamazepine is a medication that has been used to control seizures. It has also been used to treat other conditions, such as bipolar disorder, schizophrenia, or pain disorders. A brand name for carbamazepine is Tegretol®.

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 this medication. Your healthcare providers can talk with you about the benefits of treating your condition and the risks of untreaded illness during pregnancy.

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

It is not known if carbamazepine can make it harder to get pregnant. People who use seizure medications for a long time might not have regular periods, which may make it harder to get pregnant.

Does taking carbamazepine increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. A few studies have reported slightly more miscarriages among those taking carbamazepine during pregnancy, while other studies have not reported this finding. As there can be many causes of miscarriage, it is hard to know if a medication, the medical condition, or other factors are the cause of a miscarriage.

Does taking carbamazepine 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 studies reviewed, taking carbamazepine in early pregnancy can increase the chance of some birth defects, including neural tube defects.

A neural tube defect happens when the spinal cord or skull do not form properly. The most common type of neural tube defect is spina bifida (an opening anywhere along the spine). The chance for neural tube defects to happen in the general population is less than 1 in 1000. For someone taking carbamazepine, the chance of a neural tube defect might increase to about 1% (1 in 100). Folic acid has been found to lower the chance for neural tube defects. If you take carbamazepine, your healthcare provider might have you take extra folic acid before and during pregnancy.

A few studies have reported a greater chance for other major birth defects, such as heart defects or cleft lip (an opening in the upper lip). Some studies have also suggested an increased chance for minor birth defects, such as a small nose with a long space between the nose and upper lip, small finger and toenails, and small head size. The chance for birth defects might be increased in those who take higher doses of carbamazepine, especially in early pregnancy.

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

Based on the studies reviewed, it is not known if carbamazepine 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 [2500grams] at birth). Some studies have suggested an increased chance for growth issues.

Sometimes taking carbamazepine during pregnancy can cause bleeding problems in the newborn because of low vitamin K levels. People who are pregnant and taking carbamazepine should talk with their healthcare providers about taking vitamin K supplements near the end of pregnancy. You can also talk with your child's pediatrician before delivery about giving your baby a vitamin K supplement at birth.

What screenings or test are available to see if my pregnancy has birth defects or other issues?

Blood screenings during pregnancy can look for neural tube defects and other issues. Prenatal ultrasounds can be used

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to screen for some birth defects, such as neural tube defects, heart defects, and clefts. Ultrasound can also be used to monitor the growth of the pregnancy. Your healthcare provider can talk with you about any screenings or tests recommended for your pregnancy.

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

Based on the studies reviewed, it is not known if carbamazepine increases the chance for behavior or learning issues. Some studies have found a small increased chance for developmental delays, such as speech delay. Other studies have found no differences in development or intelligence.

Breastfeeding while taking carbamazepine:

Carbamazepine passes into breast milk. The amount in milk is not expected to affect a nursing child. Breastfeeding while taking carbamazepine only (no other medication use) does not appear to affect child growth or development. Most breastfeeding children have not had side effects. If you suspect the baby has any symptoms of jaundice (yellowing of the skin and/or eyes), drowsiness, or poor weight gain, contact the child's healthcare provider. If needed, healthcare providers can measure levels of carbamazepine in a child's blood. Be sure to talk to your healthcare provider about all your breastfeeding questions.

If a male takes carbamazepine, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?

Based on the studies reviewed, it is not known if carbamazepine could affect male fertility or increase the chance of birth defects above the background risk. One small animal study and a few small human studies have suggested that carbamazepine might affect sperm production. This may make it harder to conceive a pregnancy. 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/.

Please click here for references.

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

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