Carbamazepine

This sheet talks about using carbamazepine in pregnancy or 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 used to control seizures in the treatment of epilepsy. It is also used to treat bipolar affective disorder, schizophrenia, trigeminal neuralgia and other specific pain disorders. A common brand name for carbamazepine is Tegretol® but there are others.

I take carbamazepine. Can it make it harder for me to become pregnant?
Women with seizure disorders who use seizure medications for a long time might have irregular periods and difficulty becoming pregnant. Talk to your healthcare provider if you are having trouble getting pregnant.

I just found out that I am pregnant. Should I stop taking carbamazepine?
Pregnant women should not stop this medication without talking to a healthcare provider. Having a seizure while pregnant may be harmful to the baby. Women with bipolar disorder who stop taking medication during their pregnancy may be at an increased risk for episodes of depression or mania that could be harmful to both the mother and the baby.

If possible, women with seizure disorders or bipolar disorder who could become pregnant should discuss their options for treatment, including medications, with their healthcare providers before becoming pregnant.

Does taking carbamazepine increase the chance for miscarriage?
Miscarriage can occur in any pregnancy. A few studies have observed slightly more miscarriages among women taking carbamazepine or other antiepileptic medications during pregnancy, while other studies have not. The women’s underlying health conditions might have been responsible for the increased incidence of miscarriage in the studies.

Does taking carbamazepine in the first trimester increase the chance of birth defects?
In every pregnancy, a woman starts out with a 3-5% chance of having a baby with a birth defect. This is called her background risk. Studies looking at women who have taken carbamazepine during the first trimester of pregnancy have found an increased chance of neural tube defects (when the spinal cord or skull do not form properly). The most common neural tube defect is spina bifida. The chance for neural tube defects in the general population is less than 1% (less than 1 in 100). Taking carbamazepine might increase that chance to about 1%.

Folic acid has been found to reduce the background risk for neural tube defects. If you take carbamazepine, your healthcare provider might recommend that you take extra folic acid before and during pregnancy.
Other studies have reported a greater chance for other major birth defects, such as heart defects or cleft 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, and small finger and toenails. Other studies have reported an increased chance of growth issues and small head size.

The chance for birth defects might increase with higher doses of carbamazepine, especially in early pregnancy. Talk to your healthcare provider about the lowest effective dose for your condition, and about the risks and benefits of your treatment. Blood tests and ultrasounds can screen for neural tube defects and other birth defects.
**Could taking carbamazepine in the second or third trimester cause other pregnancy complications?**

In rare cases, taking carbamazepine during pregnancy can cause bleeding problems in the newborn due to low vitamin K levels. Women taking carbamazepine in pregnancy should ask their healthcare providers about taking vitamin K supplements near the end of their pregnancies. They can also talk to their child’s pediatrician before delivery about giving the newborn a vitamin K supplement at birth.

**Does taking carbamazepine in pregnancy cause long-term problems in behavior or learning for the baby?**

Researchers are just beginning to look at the development of children who have been exposed to carbamazepine during pregnancy. Some studies have found a small increased chance for developmental delays. Other studies have found no differences in development or IQ. More studies are needed to know the long-term effects of carbamazepine.

**Can I breastfeed while taking carbamazepine?**

Carbamazepine passes into breast milk. However, the amount the baby might swallow in the milk is not expected to affect the infant. Breastfeeding while taking carbamazepine by itself (no additional seizure medications) does not appear to affect infant growth or development. Some healthcare providers can measure levels of carbamazepine in the baby’s system if there is concern. Be sure to talk to your healthcare provider about all your breastfeeding questions.

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

One small animal study and a couple small human studies have suggested that carbamazepine might affect sperm development, but the studies did not look at whether or not this caused problems with starting a pregnancy. More studies are needed to know if men who take carbamazepine have a harder time getting their partners pregnant. In general, exposures that fathers have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures and Pregnancy at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/pdf/.

Please click here for references.