

Carbamazepine (Tegretol®)

This sheet is about exposure to carbamazepine in pregnancy and while breastfeeding. This information is based on published research studies. It 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 bipolar disorder, schizophrenia, and pain disorders. A brand name for carbamazepine is Tegretol®.

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. If you have been taking carbamazepine and you suddenly stop taking it, you could experience a return of your symptoms (relapse). Your healthcare providers can talk with you about the benefits of treating your condition and the risks of untreated illness during pregnancy.

Carbamazepine might make hormonal contraception (birth control) not work as well. If you are taking carbamazepine and do not want to become pregnant, talk to your healthcare provider about effective ways to prevent 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. Women who use seizure medications for a long time might not have regular periods, which might 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 women 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 being treated, or other factors are the cause of a miscarriage.

Does taking carbamazepine 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. We look at research studies to try to understand if an exposure, like carbamazepine, might increase the chance of birth defects in a pregnancy.

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

Other studies on carbamazepine have reported a higher chance of other major birth defects, such as heart or kidney defects, hypospadias (opening of the penis is on the underside instead of at the tip), and cleft lip and/or palate (opening in the upper lip or the roof of the mouth). Some studies have also suggested an increased chance of minor birth defects, such as a small nose, greater distance between the nose and upper lip, small fingernails and toenails, and smaller head size. The chance of birth defects might be higher with higher doses of carbamazepine. Since some of the conditions that carbamazepine is used to treat (like epilepsy) can also increase the chance of birth defects, it is hard to know if the medication, the condition being treated, or other factors are the cause of a birth defect.

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

It is not known if carbamazepine can increase the chance of 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). Some studies have suggested an increased chance of poor growth of the fetus. Some of the conditions that carbamazepine is used to treat can also increase the chance of pregnancy-related problems.

Taking carbamazepine during pregnancy can lower vitamin K levels in the fetus and cause bleeding problems in some newborns. 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 healthcare provider before delivery about giving your baby a vitamin K supplement at birth.

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

It is not known if carbamazepine can increase the chance of behavior or learning issues for the child. Some studies have found a small increased chance for speech delay or lower IQ scores in children who also have minor facial defects after exposure to carbamazepine during pregnancy. Other studies have found no differences in child development or intelligence.

What screenings or tests 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 to screen for some birth defects, such as neural tube defects, heart defects, and cleft lip or palate. Ultrasound can also be used to track the growth of the pregnancy. Talk with your healthcare provider about any prenatal screenings or testing that are available to you. There are no tests available during pregnancy that can tell how much effect there could be on future behavior or learning.

Breastfeeding while taking carbamazepine:

Carbamazepine gets into breast milk in small amounts. Most breastfeeding children have not had reported side effects. Breastfeeding while taking just carbamazepine (no other medications) has not been shown to affect child growth or development. If you suspect the baby has any symptoms of jaundice (yellowing skin and eyes), drowsiness, or poor weight gain, contact the child's healthcare provider. If needed, healthcare providers can measure the levels of carbamazepine in a child's blood. Be sure to talk to your healthcare provider about all your breastfeeding questions.

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

It is not known if carbamazepine could affect men's fertility (ability to get a woman pregnant) or increase the chance of birth defects. Small studies have suggested that carbamazepine might affect sperm production, which might 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](https://mothertobaby.org).

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