



ACE Inhibitors

This sheet is about exposure to ACE inhibitors 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 an ACE inhibitor?

ACE inhibitor stands for: angiotensin-converting-enzyme (ACE) inhibitor. ACE inhibitors is the name used to describe a group of medications used to treat high blood pressure. ACE inhibitors have also been used for treating problems with the heart and kidneys.

ACE inhibitors are sold under many names, such as: benazepril (Lotensin®), captopril (Capoten®), cilazapril (Inhibace®), enalapril (Vasotec®, Epaned®), fosinopril (Monopril®), lisinopril (Listril®, Lopril®, Novatec®, Prinivil®, Zestril®), perindopril (Acon®), quinapril (Accupril®), ramipril (Altace®), and trandolapril (Mavik®).

It is difficult to study a class of medications. Discuss your specific medication with your healthcare provider or a MotherToBaby specialist to see if there are studies for that particular medication.

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

I take an ACE inhibitor. Can it make it harder for me to get pregnant?

Studies have not been done to see if ACE inhibitors can make it harder to get pregnant.

Can high blood pressure during my pregnancy cause problems?

Uncontrolled high blood pressure in pregnancy could affect the placenta (organ that develops in pregnancy to help get food and oxygen to the baby). This can then cause problems for the developing baby, such as: slow growth (infant smaller overall), low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth), or preterm delivery (birth before 37 weeks of pregnancy). Uncontrolled high blood pressure in pregnancy can also affect the woman who is pregnant, by damaging organs, such as kidneys and heart.

Does taking ACE inhibitors increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. It is not known if ACE inhibitors increases the chance for miscarriage.

Does taking ACE inhibitors in the first trimester 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. There is no proven risk of birth defects with first trimester use of ACE inhibitors. The majority of studies have not found birth defects to occur more often in those who took or were prescribed an ACE inhibitor in the first trimester of their pregnancy. It is difficult to study medications as a group because even though the ACE inhibitors work in similar ways, there are some differences among the individual medications. When drugs are studied as a group, differences for individual drugs could be missed. Also, problems reported in studies may be related to high blood pressure / medical condition being treated, and might not be due to the medication.

Does taking ACE inhibitors in the second or third trimester cause other pregnancy related problems?

ACE inhibitors should be avoided during the second and third trimester of pregnancy. When used after the first trimester, ACE inhibitors can cause low levels of amniotic fluid (fluid that surrounds the baby). Low levels of amniotic fluid can lead to health problems for the developing baby. Some of these problems include poor lung development, poor growth, poor development of the skull bones, birth defects, problems with the development of the kidneys and in the most severe cases, death of the developing baby.



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

Prenatal ultrasounds can be used to screen for some birth defects. Ultrasound can also be used to monitor the growth of the pregnancy. There are no tests available during a pregnancy that can tell if there has been any effect on behavior or ability to learn. If you took an ACE inhibitor during pregnancy, talk to your healthcare provider about screening options, your healthcare provider can help to arrange any appropriate monitoring.

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

Studies have not been done to see if ACE inhibitors, in general, can cause behavior or learning issues for the child.

Breastfeeding while taking ACE Inhibitors:

It may be possible to breastfeed while taking an ACE inhibitor, depending on the specific medication. Contact MotherToBaby to learn more about your specific medication(s). Be sure to talk to your healthcare provider about all of your breastfeeding questions.

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

There is no evidence to suggest that a man's use of an ACE inhibitor causes infertility (ability to get a woman pregnant) or birth defects. 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](#) to view references.

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

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