



MotherToBaby

Medications & More During Pregnancy & Breastfeeding  
Ask The Experts

Fact Sheet

by the **Organization of Teratology Information Specialists (OTIS)**

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## Phenylephrine

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. This sheet talks about whether exposure to phenylephrine may increase the risk for birth defects over that background risk. This information should not take the place of medical care and advice from your health care provider.

### ***What is phenylephrine?***

Phenylephrine is a decongestant. Decongestants are often in over-the-counter medication used to treat nasal congestion (“stuffy nose”) caused by colds or allergies. Phenylephrine has also been used to treat temporary low blood pressure caused by anesthesia used during surgeries.

### ***How long does phenylephrine stay in my body?***

People eliminate medications at different rates. In healthy adults, it can take up to 18 hours, on average, for almost all of this medication to be gone from the body.

### ***Can using phenylephrine make it more difficult for me to become pregnant?***

There are no studies looking at whether phenylephrine could make it harder to get pregnant.

### ***Can using phenylephrine increase the chance of miscarriage?***

There are no studies looking at whether phenylephrine would increase the chance for a miscarriage.

### ***I am in my first trimester of pregnancy and have a very stuffy nose. Will taking phenylephrine cause birth defects?***

This is unclear. Studies involving more than 1500 women who took phenylephrine in the first trimester did not show an increased chance for birth defects. There was one study on 1,249 women who took phenylephrine in the first trimester that reported a slightly higher chance for minor differences of the eyes or ears, small changes that are not a birth defect. Because phenylephrine can make blood vessels smaller, there are theoretical concerns that using this medication could reduce blood flow through the placenta (organ that grows during pregnancy to supply the developing baby with food and oxygen). Studies on other medications that work in the same way (make blood vessels smaller) have raised questions about a small chance for birth defects. Do not use if you have high blood pressure.

### ***I am 8 months pregnant and for the past few days I have been suffering from a cold. Can I use phenylephrine to relieve my nasal congestion?***

If you use a decongestant after the first trimester, it is best to choose one that contains only one active ingredient (not one with many active ingredients). This avoids exposing the baby to other medications that may not be needed. Never take more than the recommended dose. The dose is found on the product label. Talk to your healthcare provider if you have questions about how much to take.

Because phenylephrine can constrict blood vessels, using this medication could raise your blood pressure. Do not use if you have high blood pressure. Your healthcare provider can help you choose the medication that is best for you.

### ***Will taking phenylephrine during pregnancy affect my baby’s behavior or cause learning problems?***

There are no studies looking at whether phenylephrine would affect long term development.

### ***Can I use phenylephrine if I am breastfeeding?***

There are no studies looking at the use of phenylephrine in breastfeeding mothers. Studies in animals have shown that phenylephrine may reduce milk supply. Because there is little information about the safety of phenylephrine while breastfeeding, use of nasal sprays or other medication may be preferred. Talk with your healthcare provider about your breastfeeding questions.

### ***What if the father of the baby takes phenylephrine?***

There are no studies looking at possible risks to a pregnancy when a father takes pseudoephedrine or phenylephrine, but a father's use of these common decongestants is not expected to cause birth defects. In general, exposures that fathers have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet on Paternal Exposures at <https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/pdf/>.

### **Selected References**

- Bruckmaier R, et al. 1991. Effects of alpha- and beta-adrenergic agonists in intramammary pressure and milk flow in dairy cows. *J Dairy Res.* 58:411-419.
- Cottle MKW, et al. 1982. Effects of phenylephrine and sodium salicylate on maternal and fetal cardiovascular indices and blood oxygenation in sheep. *Am J Obstet Gynecol.* 143:170-176.
- Gilbert-Barnes E, Drut RM. 2000. Association of sympathomimetic drugs with malformations. *Vet Hum Toxicol.* 42:168-71.
- Heinonen OP, et al. 1977. *Birth Defects and Drugs in Pregnancy*, Littleton, Publishing Sciences Group, pp 345-56, 439, 476, 491.
- Rothman KJ, et al. 1979. Exogenous hormones and other drug exposures of children with congenital heart disease. *Am J Epidemiol.* 109:433-439.
- Schatz M, et al. 1997. Asthma and allergy in pregnancy. *Clin Perinatol.* 24(2):407-432.
- Ugen KE, Scott WJ Jr. 1987. Reduction of uterine blood flow by phenylephrine, an alpha-adrenergic agonist, in the day 11 pregnant rat: relationship to potentiation of acetazolamide teratogenesis. *Teratology.* 36(1):133-41.
- Yau W-P, et al. 2013. Use of decongestants during pregnancy and the risk of birth defects. *Am J Epidemiol.* 178(2):198-208.
- Werler MM, et al. 2003. Association of vasoconstrictive exposures with risks of gastroschisis and small intestinal atresia. *Epidemiology.* 14(3):349-54.
- Werler MM, et al. 2002. Maternal medication use and risks of gastroschisis and small intestinal atresia. *Am J Epidemiol.* 155(1):26-31.
- Werler MM, et al. 2004. Vasoactive exposures, vascular events, and hemifacial microsomia. *Birth Defects Res A Clin Mol Teratol* 70(6):389-395.
- Zierler S, Rothman KJ. 1985. Congenital heart disease in relation to maternal use of Bendectin and other drugs in early pregnancy. *N Engl J Med.* 313:347-352.

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