



MotherToBaby

Medications & More During Pregnancy & Breastfeeding  
Ask The Experts

Fact Sheet

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

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## Albuterol

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 albuterol 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 albuterol?***

Albuterol (also called salbutamol) is a medication used for the treatment of asthma. It is in a class of medications called beta2-agonists. Beta2-agonists are called bronchodilators, meaning that they help to open the airways in the lungs. Albuterol is used in fast-acting inhalers for treatment of asthma.

### ***I just found out that I am pregnant. Should I stop using my albuterol inhaler?***

No. You should not stop taking any medications without first talking with your health care provider. Albuterol is considered a preferred medicine for the treatment of asthma during pregnancy. It is important to consider the benefits of controlling asthma symptoms during pregnancy. Untreated asthma increases the risk for complications for both the mother and the baby. For more information about asthma in pregnancy, please see the MotherToBaby fact sheet Asthma and Pregnancy (<https://mothertobaby.org/fact-sheets/asthma-and-pregnancy/pdf/>).

### ***Does albuterol cross the placenta and get to the baby?***

When albuterol is inhaled, very limited amounts of the drug enter the blood, and even less is expected to reach the developing baby. The amount of medicine that would reach a developing baby is thought to be small.

### ***Can taking albuterol during my pregnancy cause a birth defect?***

Although data is limited, studies do not suggest an increased risk for birth defects with the use of inhaled albuterol during pregnancy. One study evaluated the safety of five different inhaled beta2-agonist bronchodilators in the first trimester of pregnancy. This study did not find an increase in the number of birth defects with use of any of these medications. Only 20 of the 259 women in this study took albuterol. Other studies do not support the suggestion that albuterol causes an increased risk for a pattern of birth defects.

Due to concerns with untreated maternal asthma, plus the lower fetal doses expected with an inhaled medicine, albuterol is considered a preferred treatment for asthma when a fast-acting inhaler is needed for immediate symptoms. Use of albuterol more than two days per week is a sign that asthma symptoms may not be well controlled. If so, additional treatment should be discussed with your health care provider.

### ***Can taking albuterol during pregnancy cause other pregnancy complications?***

Albuterol was at one time used in the second and third trimester of pregnancy to prevent preterm labor (labor starting before 37 weeks gestation). For treatment of preterm labor, albuterol was given in high oral doses (by mouth). Treatment with high oral doses has been associated with an increase in maternal and fetal heart rate and a drop in maternal blood pressure. These effects are transient (meaning they do not last). Long term effects from increased fetal heart rate have not been reported. Treatment with inhaled albuterol at prescribed doses has not been shown to cause these effects.

### ***Can I take albuterol while breastfeeding?***

There have not been any studies of women taking albuterol while breastfeeding. However, using an albuterol inhaler is not thought to cause high enough levels in the mother's bloodstream to pass into breast milk in large amounts. Inhaled

bronchodilators are generally considered acceptable for use during breastfeeding. Be sure to talk to your health care provider about all your choices for breastfeeding.

***Is there a concern if my partner was taking albuterol when I got pregnant?***

There is currently no data to suggest that a father's use of albuterol at the time of conception increases the risk for 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 about Paternal Exposures and Pregnancy (<https://mothertobaby.org/factsheets/paternal-exposures-pregnancy/pdf/>).

***MotherToBaby is currently conducting a study looking at asthma and the medications used to treat asthma in pregnancy. If you are interested in taking part in this study, please call 1-877-311-8972.***

**Selected References:**

- Baker ER and Flanagan MF. 1997. Fetal atrial flutter associated with maternal beta-sympathomimetic drug exposure. *Obstet Gynecol* 89:861.
- Freysz H, et al. 1977. A long term evaluation of infants who received a beta-mimetic drug while in utero. *J Perinat Med* 5:94-99.
- Klln B, Otterblad Olausson P. 2007 Use of anti-asthmatic drugs during pregnancy. 3. Congenital malformations in the infants. *Eur J Clin Pharmacol.* 63(4):383-388.
- Lin S, et al. 2012. National Birth Defects Prevention Study. Maternal asthma medication use and the risk of selected birth defects. *Pediatrics.*129 (2) :e317-324.
- Munsie JPW, et al. 2011. Maternal bronchodilator use and the risk of orofacial clefts. *Hum Reprod.* Nov;26(11):3147-3154.
- National Asthma Education and Prevention Program. Working Group. 2004. Report on managing asthma during pregnancy: Recommendations for pharmacologic treatment. Update 2004. NIH publication NO.05-5236. Bethesda, MD: US Department of Health and Human Services; National Institutes of Health; National Heart, Lung and Blood Institute.
- Rayburn WF, et al. 1994. Short-term effects of inhaled albuterol on maternal and fetal circulations. *Am J Obstet Gynecol* 171:770-773.
- Schatz M, et al. 1998. The safety of inhaled (beta)- agonist bronchodilators during pregnancy. *J Allergy Clin Immunol* 82:686-695.

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