



MotherToBaby

Medications & More During Pregnancy & Breastfeeding
Ask The Experts

Fact Sheet

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

For more information about us or to find a service in your area,
call **(866) 626-6847**. Visit us online at **www.MotherToBaby.org**.

Find us! Facebook.com/MotherToBaby or @MotherToBaby on Twitter

Salmeterol

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 salmeterol 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 salmeterol?

Salmeterol is a medication used for the treatment of asthma and chronic obstructive pulmonary disease (COPD). It is in a class of medications called beta2-agonists. Beta2-agonists are bronchodilators, meaning that they help to open the airways in the lungs. Salmeterol is a long-acting beta2-agonist taken by breathing it into the lungs (by inhalation). It is used together with an inhaled corticosteroid to treat asthma. For information on inhaled corticosteroids, see the MotherToBaby fact sheet Inhaled Corticosteroids and Pregnancy at <https://mothertobaby.org/fact-sheets/inhaled-corticosteroids-icss-pregnancy/pdf/>.

I just found out that I am pregnant. Should I stop using my salmeterol inhaler?

No. You should not stop taking any medications without first talking with your healthcare provider. It is important to think about the benefits of controlling asthma symptoms during pregnancy. Untreated asthma increases the chance for complications for both mother and baby. For more information, please see the MotherToBaby fact sheet Asthma in Pregnancy at <https://mothertobaby.org/fact-sheets/asthma-and-pregnancy/pdf/>.

Salmeterol has been considered a medication of choice if long-acting beta agonist treatment is needed during pregnancy. If a woman's asthma was well-controlled with salmeterol before pregnancy, it may be recommended to continue using it during pregnancy. It is important to talk with your healthcare provider about your options for controlling your asthma during pregnancy.

Does salmeterol cross the placenta and get to the baby?

The amount of salmeterol that reaches a developing baby is thought to be small. When salmeterol is inhaled, very limited amounts of the drug enter the mother's blood. Even less of the medication is expected to reach the developing baby.

Can taking salmeterol during my pregnancy cause a birth defect?

Small studies do not suggest an increased chance for birth defects with the use of inhaled salmeterol during pregnancy. A study of 47 babies whose mothers used salmeterol during the first trimester of pregnancy did not report an increase in the number of birth defects. Also, no increase in birth defects was seen in the babies of 126 women who were treated with salmeterol during pregnancy. Most of these women took salmeterol during the first trimester. While this is reassuring, results from more studies are needed to better learn about effects of salmeterol on a pregnancy.

Can taking salmeterol during pregnancy cause other pregnancy complications?

Although there is limited information, at this time the available data does not suggest an increased risk for pregnancy complications with the use of salmeterol during pregnancy. One report of 65 women who used salmeterol during pregnancy described three cases of premature birth (babies born before 37 weeks of pregnancy). This rate of premature birth is not higher than the background rate seen in the general population.

Can I take salmeterol while breastfeeding?

Most likely. There have not been any studies of women taking salmeterol during breastfeeding. Using a salmeterol inhaler is not thought to cause high enough levels in the mother's bloodstream to pass into breast milk in

large amounts. Using inhaled bronchodilators is usually thought to be compatible with breastfeeding. Be sure to talk to your healthcare provider about all of your breastfeeding questions.

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

There are currently no data to suggest a father's use of salmeterol 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 Paternal Exposures and Pregnancy at:

<https://mothertobaby.org/fact-sheets/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 or sign up at <https://mothertobaby.org/join-study>.

Selected References:

- Committee on Drugs. American Academy of Pediatrics. 2001. The transfer of drugs and other chemicals into human milk. *Pediatrics* 108:776-789.
- Jones KL, et al. 2002. Salmeterol use and pregnancy outcomes: a prospective multi-center study. *J Allergy Clin Immunol* 109:S156.
- Lim A, et al. 2011 Systematic review of the safety of regular preventive asthma medications during pregnancy. *Ann Pharmacother*. 2011 Jul;45(7-8):931-45.
- 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.
- Taddio A, Ito S. 2001. Drugs and breast-feeding. In: Koren G, ed. *Maternal-fetal toxicology. A clinician's guide*. 3rd ed. New York: Marcel Dekker, 177-32.
- Wilton LV, et al. 1998. The outcomes of pregnancy in women exposed to newly marketed drugs in general practice in England. *Br J Obstet Gynaecol* 105:882-889.

February, 2018