



Formoterol

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 formoterol 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 formoterol?

Formoterol (also called eformoterol) 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. Formoterol is a long-acting beta2-agonist taken by inhalation (breathing it in). It is used in combination with an inhaled corticosteroid for asthma treatment. For information about inhaled corticosteroids and pregnancy, see the MotherToBaby fact sheet Inhaled Corticosteroids at <https://mothertobaby.org/fact-sheets/inhaled-corticosteroids-icss-pregnancy/>.

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

It is recommended that you talk to your health care provider before you stop taking any medication. It is important to consider the benefits of controlling asthma symptoms during pregnancy. Untreated asthma increases the chance 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 at <https://mothertobaby.org/fact-sheets/asthma-and-pregnancy/>.

There is more experience with the use of other beta2-agonist bronchodilators, such as albuterol, during pregnancy. However, if a woman's asthma was well-controlled with formoterol prior to pregnancy, it might be appropriate to continue its use during pregnancy.

Does formoterol cross the placenta and get to the baby?

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

Can taking formoterol during my pregnancy cause a birth defect?

Limited data do not suggest an increased chance for birth defects with the use of inhaled formoterol during pregnancy. One report of 33 women who used formoterol during pregnancy described two children born with birth defects. The birth defects were unrelated and there is no indication that they were caused by formoterol. Another report, not published in detail, described 53 women who used a beta2-agonist (including formoterol) in pregnancy. No increased chance for harmful effects was reported. While data are limited, there is currently no evidence that formoterol use in pregnancy increases the chance for a birth defect.

Can taking formoterol during pregnancy cause other pregnancy complications?

One report of 33 women who used formoterol during pregnancy described five cases of premature birth (three would be expected due to the background risk). It is unlikely that the chance for preterm delivery was increased by the use of formoterol during pregnancy. There may have been a relationship of preterm labor with poorly controlled or more severe asthma in pregnancy.

Can I take formoterol while breastfeeding?

There have not been any studies of women taking formoterol while breastfeeding. The use of a formoterol inhaler is not expected to result in high enough levels in the mother's bloodstream to pass into breast milk in significant 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 formoterol when I got pregnant?

There are currently no data to suggest paternal use of formoterol at the time of conception increases the chance for a birth defect. 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/>.

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.
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- Tamasi L, et al. 2005. The management of bronchial asthma during pregnancy – Hungarian experiences. *Orv Hetil.* 146(45):2035-2039.
- Wilton LV and Shakir SA. 2002. A postmarketing surveillance study of formoterol (Foradil). Its use in general practice in England. *Drug Saf* 25:213-223.

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