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 long-acting beta2-agonists. Beta2-agonists are bronchodilators. Bronchodilators help to open the airways in the lungs. Formoterol is taken by inhalation (breathing it in). It is usually 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/pdf/. Formoterol can be found in some combination medications such as: Symbicort® and Dulera®.

I just found out that I am pregnant. Should I stop using my formoterol inhaler?
No. It is recommended that you first talk to your healthcare provider before you stop taking this 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/pdf/.

There is more experience with the use of other beta2-agonist bronchodilators, such as albuterol, during pregnancy. However, if a woman’s asthma is well-controlled with formoterol prior to pregnancy, it might be appropriate to continue its use during pregnancy. 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?
This is not clear. There is limited data on the use of 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.

Can taking formoterol during pregnancy cause other pregnancy complications?
Probably not. 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). Another study compared 162 formoterol-exposed pregnancies to another long acting beta agonist and did not find a difference in low birth weight, gestational age or preterm delivery. 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 on women taking formoterol while breastfeeding. Information on the use of related medications, suggest that the use of a formoterol inhaler would be unlikely 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 of your breastfeeding questions.

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/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 see https://mothertobaby.org/join-study/.

Selected References: