



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

Asthma

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 asthma 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 asthma?

Asthma refers to inflammation (swelling and tightening) in the airways of the lungs. When an asthma attack occurs, it is difficult for air to pass through the lungs which leads to wheezing, coughing, and trouble breathing. Asthma is often treated with a combination of short acting inhalers for immediate symptom relief and daily medicines to reduce inflammation.

Triggers that can cause an asthma attack vary from person to person. Common triggers include breathing in cold air, cold/flu viruses, strenuous exercise, chemicals, cigarette smoke, and allergies to dust, animals, pollen, or mold. Avoiding these triggers can reduce the number of asthma attacks.

I have asthma and am planning on getting pregnant. Is there anything I need to know?

Asthma management during pregnancy should continue to include the medicines that best control an individual's asthma symptoms.

It is not possible to predict how a woman's asthma will act during pregnancy. For about one third of women, symptoms will improve during pregnancy, another one third will have no change in asthma symptoms, and a final one third of women will have symptoms that become worse. It appears that the more severe the asthma is when you conceive, the more likely it is that the symptoms will get worse during pregnancy. Therefore, it is important that a woman's asthma be in good control with carefully chosen medications prior to getting pregnant.

Can asthma cause birth defects?

Some studies have suggested an increased chance for birth defects while others have not. In these studies, it is difficult to determine whether the problems noted were due to the mother's asthma, the medicines needed to control the asthma, or other factors. If a pregnant woman has trouble breathing she will take in less oxygen. This could lead to a lower amount of oxygen getting to the baby. Low oxygen to the developing baby could cause problems in organ development. If there is a risk from asthma itself, it is expected to be very low. The vast majority of women with asthma have babies without birth defects..

Can asthma lead to any other pregnancy problems?

Yes. Maternal asthma, especially poorly controlled asthma, is associated with higher rates of pregnancy complications, such as placental problems, high blood pressure, premature delivery, higher rates of cesarean section, and low birth weight. It is important for women who are pregnant to speak with their health care provider about the best way to treat their asthma during pregnancy. The benefits of treating asthma during pregnancy generally outweigh the potential risks of the medication.

Can taking medicine for asthma during pregnancy cause birth defects?

Most asthma medicines have not been shown to have harmful effects on the developing baby. Speak with your health care provider and contact MotherToBaby with questions about your specific medicines.

Fast acting inhalers (like albuterol) and inhaled corticosteroids are considered preferred treatments for asthma during pregnancy. Inhaled medications are absorbed into the body in lower amounts compared to oral (taken by mouth)

medicines, so less of the medication should reach the developing baby. For many women, fast acting inhalers and inhaled corticosteroids are very effective for treating asthma during pregnancy.

Some studies have suggested an increased chance for cleft lip with or without cleft palate (split in the lip or roof of the mouth) when corticosteroid pills are taken during the first trimester. Based on the available information, if there is a real risk for cleft lip and/or palate, the absolute risk would be small (less than 1%).

For more information about asthma medicines during pregnancy, see the MotherToBaby fact sheets about prednisone/prednisolone (<http://mothertobaby.org/fact-sheets/prednisoneprednisolone-pregnancy/pdf/>), albuterol (<http://mothertobaby.org/fact-sheets/albuterol-pregnancy/pdf/>), salmeterol, (<http://mothertobaby.org/fact-sheets/salmeterol-pregnancy/pdf/>), formoterol (<http://mothertobaby.org/fact-sheets/formoterol-pregnancy/pdf/>) and inhaled corticosteroids (<http://mothertobaby.org/fact-sheets/inhaled-corticosteroids-icss-pregnancy/pdf/>).

Can taking medicine for asthma during pregnancy cause other pregnancy problems?

Lower birth weights have been associated with corticosteroid pills but it isn't clear whether that is due to the medicine alone, to the maternal disease being treated, or a combination of both. For more information, see the MotherToBaby fact sheet about [prednisone/prednisolone](#).

If I have asthma, can I breastfeed my baby?

Most asthma medicines are compatible with breastfeeding. For example, the amount of medicine in breastmilk from fast acting inhalers and inhaled corticosteroids is expected to be too small to be harmful for an infant. For more information about asthma medicine during breastfeeding, see the MotherToBaby fact sheets about [prednisone/prednisolone](#), [albuterol](#), [salmeterol](#), [formoterol](#) and [inhaled corticosteroids](#). Be sure to talk to your health care provider about all your choices for breastfeeding. You can also contact MotherToBaby with breastfeeding questions on your specific medicines.

What if the father of the baby has asthma?

A father's asthma or a father's use of asthma medicines does not increase the chance for birth defects or pregnancy complications. 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 (<http://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/pdf/>).

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

Selected References:

- Blais L, et al. 2010. Effect of maternal asthma on the risk of specific congenital malformations: A population-based cohort study. *Birth Defects Res A* 88(4):216-222.
- Garne E, et al. 2015. Use of asthma medication during pregnancy and risk of specific congenital anomalies: A European case-malformed control study. *J Allergy Clin Immunol*. Jul 25. pii: S0091-6749(15)00837-4.
- Kallen B 2007. The safety of asthma medications during pregnancy. *Expert Opin Drug Saf* 6(1):15-26.
- Kwon HL, et al. 2006. The epidemiology of asthma during pregnancy: prevalence, diagnosis, and symptoms. *Immunol Allergy Clin North Am* 26(1):29-62.
- Murphy VE, et al. 2005. Asthma during pregnancy: mechanisms and treatment implications. *Eur Respir J* 25:731-750.
- Namazy JA, Schatz M. 2015. Pharmacotherapy options to treat asthma during pregnancy. *Expert Opin Pharmacother*;16(12):1783-91.
- 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.
- Schatz M and Dombrowski MP 2009. Clinical practice: Asthma in pregnancy. *N Engl J Med* 360(18):1862-1869.
- Vanders RL, Murphy VE. 2015. Maternal complications and the management of asthma in pregnancy. *Womens Health (Lond Engl)*;11(2):183-91.

August, 2015