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Fact sheet: Asthma in pregnancy



Many women who have asthma find that it actually improves in early pregnancy, or at least stays the same. But for about 1 in 3 women, the changes of pregnancy will make their asthma worse. Towards the end of pregnancy it often becomes increasingly difficult to stay physically active. Carrying the extra weight around can even make women who do not have asthma get out of breath. Many are unable to sleep properly, feel tired and exhausted. This does not make pregnancy any easier.

Asthma can cause the growing baby problems, so many women worry about avoiding triggers for asthma attacks - and they may worry about passing on their asthma or allergies to their baby.

Most pregnant women are concerned about their asthma medications, too: will the medicine harm the baby or will it help the baby as well as the mother? What else can a pregnant woman do to help reduce the risk of harm from asthma? Research is slowly starting to provide us with more answers about these important questions.

What effects does asthma have on the baby during pregnancy?

Mild or well-controlled asthma will usually cause no major health problems for either the woman or her baby. But asthma that is not well-controlled can have serious consequences for the woman and, more often, her baby. One of the concerns for babies during pregnancy is that they need to be getting a good regular supply of enough oxygen. If the mother has periods where she is having trouble getting enough oxygen herself due to asthma, this can mean the baby will not get enough oxygen either. Babies do not breathe in the womb (uterus), but they do need to get a steady supply of oxygen from their mothers' blood to stay healthy and grow well.

Whenever a woman who has moderate or severe asthma does not control her asthma with regular medications that can prevent asthma attacks, she is at increased risk of having a major asthma attack. In pregnancy that is riskier than usual. One reason for this is because the hormonal changes and the extra burdens on the body during later pregnancy make it more difficult for women to cope with a physical crisis like a major asthma attack. This can harm the woman and her baby in several ways, in part because it reduces the amount of oxygen that gets through to the baby. Poorly controlled asthma increases the risk of:

- Preterm birth: where the baby is born too early and is often undeveloped - you can read more about preterm birth here.
- Pre-eclampsia: a pregnancy-related illness that can become life-threatening for both mother and baby, involving high blood pressure (hypertension) and large amounts of protein in the urine (proteinuria). Pre-eclampsia can limit the baby's growth and make the mother very ill, including the risk of having fits (convulsions).
- Growth restriction: where the baby does not grow well and is born too small for his or her age, even after nine months of pregnancy.

Researchers have estimated that about 1 in 5 pregnant women with asthma have asthma attacks (exacerbations) requiring medical help and that about a third of these will need to go to hospital because of asthma attacks. However, keeping asthma under control, particularly with the regular use of inhaled corticosteroids, can greatly reduce this risk.

Is it safe to keep using asthma "controller" medication regularly in pregnancy?

When they get pregnant, women who have asthma usually carry on taking the same medication as they did before they were pregnant. Most medication for asthma has not been specifically tested to see whether it is safe to use during pregnancy, but there are no major safety concerns. The best-studied type of medication is inhaled corticosteroids.

As far as researchers can tell, inhaled corticosteroids are suitable and safe to use in pregnancy. There is a question mark and concern about the safety for the baby of regular use of tablets (oral corticosteroids) in the first three months of pregnancy. However, breathing corticosteroids in through an inhaler has fewer effects on the body: the medication goes straight to the lungs and does not spread as widely through the body. That means that less medication reaches the baby.

In any event, if you have asthma and are pregnant, your doctor will work with you to find out if less medication can control your asthma. If you have not been actively self-managing your asthma before, pregnancy would be a good time to start. Learning to be more responsible for your own treatment will help to keep your asthma under control. As well as good asthma control, regular monitoring of your and your baby's health will be

essential during pregnancy.

The medication that has been the best-studied for asthma in pregnancy is the inhaled corticosteroid called budesonide. You can read more about that research here (URL: <http://www.informedhealthonline.org/index.476.en.html>) . Regular use of inhaled steroids can:

- reduce the number of asthma attacks in pregnancy and
- reduce the number of times women have to be re-admitted to hospital for asthma attacks.

Inhaled steroids do not appear to increase the number of babies who are born with abnormalities, so the drug is regarded as safe for use in pregnancy. Very little of this medication gets into breast milk, so using the medications while breastfeeding is also considered safe.

What else can be done to lower the risks for mother and baby?

Two important ways to lower the risk of the baby being born too small is:

- Quit smoking. Tobacco smoke can reduce the birthweight of the baby, which can cause the baby health problems after he or she is born. You can read about quitting smoking before and in pregnancy here.
- avoid other "triggers" for your asthma attacks.

It is also important to avoid places where people are smoking if you are pregnant because tobacco smoke can increase the risk of having an asthma attack. Indigestion (gastro-oesophageal reflux) or heartburn is a common problem in pregnancy. This can also trigger asthma attacks. Some of the things that women try to reduce their reflux in pregnancy is to elevate their head higher when they sleep, and eat several smaller meals during the day so that their stomach does not get over-full.

Is there anything that can be done in pregnancy to lower the chances that the baby will develop asthma or allergies?

Quitting smoking - both the mother and the father - can reduce the chances that a child will develop asthma. There is no pregnancy diet, however, that has been shown to prevent asthma or allergies developing in babies. That

means that while it is important to avoid foods or other substances that might trigger an asthma attack, there is no proven value in avoiding certain foods to try to protect the child from developing allergies later on.

Another option is to take probiotic supplements in the last few weeks of pregnancy, and possibly continue to take them while breastfeeding too. These supplements come in the form of tablets or liquids containing special bacteria that are found in dairy products like yoghurt. Probiotics are often called "friendly bacteria" because they may help to protect people against allergies later in life, as well as against the causes of some stomach and bowel problems. But it is far from certain that this will work, and still very early days for research on probiotic supplements. You can read more about this and the issue of allergy prevention here (URL: <http://www.gesundheitsinformation.de/fact-sheet.137.376.en.htm>) .

Many women with allergies will be using specific allergen immunotherapy or "desensitisation" before they become pregnant. This treatment aims to help a person become immune to their allergens (triggers). Some women might want to start using this treatment during pregnancy. There is a small risk of serious adverse effects that could quickly become life-threatening. For this reason, the American College of Obstetricians and Gynecologists recently cautioned pregnant women against starting this treatment during pregnancy or increasing the dose if they already started desensitisation therapy a long time before getting pregnant.

All of this concern about risks can make women very anxious, but the risks need to be kept in perspective as well. Although it is important to look after your health when you are pregnant, and to look after your asthma in particular, if you are controlling your asthma things are very likely to work out very well for both you and your baby. Stressing and worrying over triggers, diet and other issues too much is unlikely to help: stress is not good for you or your baby. Good self-management and medical care cannot completely eliminate the additional risks of asthma in pregnancy - but it can reduce the risks so much that it is highly likely that all be well for both you and your baby.

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Glossary

bacteria

Bacteria are micro-organisms that, unlike viruses, can exist on their own. Viruses, on the other hand, can only exist inside a living cell. Most bacteria are not harmful to people, and some are actually beneficial. Bowel bacteria support bowel health. However if they get into the urinary system, they can cause an infection there. Doctors prescribe antibiotics for illnesses where bacteria need to be stopped or killed off. Immunisation is also possible against some bacterial infections, such as diphtheria, tetanus or whooping cough.

allergy

An allergy is the body's overly sensitive reaction to a foreign substance. The body produces antibodies just as it would if the substance were a germ, although it is not dangerous to the body. The symptoms of the allergy partly depend on the substance causing it, the allergen. People with allergies often have symptoms like running nose, watery eyes, itching, rashes, stomach and bowel problems or asthma. Typical allergens are pollen, animal hair, proteins in certain food or house dust mite excrement.

asthma

Asthma (asthma bronchiale) is a permanent (chronic) disease with symptoms like coughing and breathlessness often occurring in acute attacks. In asthma, the airways are overly sensitive. The development of asthma is often associated with an overreaction to foreign substances or physical stimuli, frequently in connection with an allergy.

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You can find a list of the evidence and other scientific literature on which this information is based at [**www.informedhealthonline.org**](http://www.informedhealthonline.org)

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