

Asthma Basics

Asthma is a disease of the airways, the smaller wind pipes leading to the lungs. In normal breathing, the airways are wide open, and air moves freely in and out during breathing. In an asthma attack, the airways tighten up, trapping air in the lower lungs, making it very hard to breathe out. You can often hear a person with asthma breathing loudly, or wheezing, in an effort to force this trapped, stale air out.

Some young children with occasional wheezing may get better when they are about 4 or 5 years old. This is probably because their airways grow larger and they can breathe more easily. Most children do improve as they grow up, but it is important for a doctor to help take care of your child if they have asthma. Asthma often runs in families, and people with asthma usually suffer from some allergies as well. Many things can make a person have an asthma attack. These are called asthma triggers, and include such things as:

- Irritants and allergies such as smoke, dust, animal dander, molds, and certain foods.
- Cold, rainy weather storms, and thunderstorms.
- Running exercise for long, intense periods.
- Emotional upsets or excitement.
- Colds and respiratory infections.

There are several types of medication used to control asthma. Bronchodilators or rescue inhalers (medicines that open the airways) are the main medicines used to treat attacks. The other main class of asthma drugs are called asthma controllers (medicines that keep the airways from closing up) used on a daily basis to prevent attacks, but which are not helpful to treat any attack presently occurring.

Usually the best way for asthma rescue medications to work is by inhaling them directly into the airways with what is called a metered dose inhaler. The inhaler may or may not be used with a spacer device (like an Aerochamber) to deliver the medicine in a more natural way. Some young children are given a nebulizer machine that makes a mist of medicine that the child then breathes in through a mask. Generally, though, inhalers used with a chamber and mask work better and are more portable. Asthma controller medicines might come in an inhaler form or pill form.

In the case your child is seen in an emergency by another doctor it is vital that you know the names of the medicines your child is taking, both brand name and generic. For instance, albuterol is the generic name of the most commonly prescribed medicine for asthma. You also have to know the two brand names of this drug, Pro-Air® and Ventolin®. Another different but similar inhaler medicine is pirbuterol, more commonly known by its brand name of Maxair®. You may also want to monitor how well your child is breathing with a device that's called a peak flow meter.

Helping your child live with asthma requires a bit of ingenuity on your part. What steps you take will depend on what triggers your child's asthma.

- One very important rule if your child has asthma is that no one should smoke in your house. You should not use the fireplace, and the child should try to stay away from outdoor fires and smoke.
- It is best not to keep pets in the house if allergic. If you must get a new pet, fish are okay.
- You have to try to keep your house as free of dust as possible. Because carpets and rugs hold a lot of dust, it's usually better to have bare wood floors.
- Your child's mattress should have a plastic cover on it, and the pillow should be made of synthetic fibers, not feathers or down. Wash the pillow and blankets every month and the sheets every week.
- If mold allergies are a concern, keep the relative humidity in your house at 50% or less. Air conditioning can help keep the humidity low.

Exercise is OK. Your child doesn't have to avoid play and exercise, but you may want him to take his asthma drug before he exercises. Swimming may be an easier sport for someone who has more severe asthma. Running and other aerobic exercises are more difficult because they can make you breathe through your mouth, and the cool, dry air goes right into the airways. This can often cause a minor asthma attack. Even so, children can usually run and do any type of activity as long as they have proper pre-treatment. We strongly feel that if you often have to limit your child's activity because of asthma, then we're not doing enough to prevent the attacks. Please let us know if this is the case.

If it becomes necessary for your child to take the asthma medications to school, we'll fill out the order for the school nurse when you bring it to us. It's usually a good idea to get a refill on your child's inhaler medication three weeks after the first, so that you can have an extra inhaler for the school to use.

If your child has frequent asthma episodes, or requires hospitalization for an asthma attack we will want you to enroll in a formal asthma intervention program. All of the major health insurance programs have their own programs, and we will help you enroll in these programs if it becomes necessary.

We have other information on our website about inhaler use in both [younger children](#) and [older kids](#).