

Asthma

Learning to control your symptoms

What is asthma?

Asthma is a disease of the lungs. The airways of people with asthma are extra sensitive to things that they're allergic to (*allergens*) and to other irritating things in the air (*irritants*).

Asthma symptoms start when allergens or other irritants cause the lining of the airways to swell (become inflamed) and narrow. The muscles around the airways can then spasm, causing the airways to narrow even more. When the lining of the airways is inflamed, it produces more mucus. The mucus clogs the airways and further blocks the flow of air.

What can I do about allergens and irritants?

If outdoor pollen and mold cause you to have symptoms, try to stay in air-conditioned places with the windows closed during the midday and afternoon, when pollen is at its worst.

Pets like cats and dogs can cause problems if you're allergic to them. If you have a pet in the house, it should be kept out of your bedroom. The heating and cooling vents in your bedroom should be shut.

To keep mold down, clean and air out bathrooms, kitchens and basements often. Keep the level of humidity under 50%. You can do this with an air conditioner or a dehumidifier. If you use a humidifier in the winter, keep it clean so that mold doesn't grow in it.

Don't allow smoking in your house or car. Tobacco smoke can make you have problems more often.

What about dust?

People who are allergic to dust are actually allergic to the dust mites that live in the dust. Dust mites in your house may be reduced by washing pillow cases and bedding weekly in hot water, covering mattresses and pillows in airtight covers, and removing carpets and drapes.

If you have carpet, treating it with chemicals can reduce dust mites for up to six months. You might also need to avoid using feather pillows. Stuffed animals, dried flowers and other things that catch dust should be avoided.

Things that may trigger an asthma attack

- Air pollution
- Aspirin, ibuprofen (Advil, Medipren, Motrin, Nuprin)
- Changes in temperature
- Dust
- Exercise
- Heartburn
- Mold
- Perfume
- Pets
- Pollen
- Sinus infections
- Some foods
- Spray-on deodorants
- Strong emotions
- Sulfite (food preservative in red wine, beer, salad bars, dehydrated soups and other foods)
- Tobacco smoke
- Viruses

How do I use a peak flow meter?

A *peak flow meter* is a hand-held device that measures how fast you can blow air out of your lungs. To use a peak flow meter, take a deep breath and blow as hard as you can into the mouthpiece. Do the test three times and write down your best result. This is called your “peak flow.”

Measuring your peak flow regularly can help you notice early symptoms of asthma before more severe symptoms begin. If the meter tells you that your peak flow is down by 20% or more from your usual best effort, an asthma attack may be on the way. Talk to your doctor about what steps to take.

Warning signs of an asthma attack

- Peak flow 20% below your best
- Cough or wheeze
- Shortness of breath
- Tightness in chest

What kind of medicines may my doctor suggest?

Your doctor may prescribe *anti-inflammatory* medicines for you to use regularly to help prevent attacks and *bronchodilator* medicines to treat symptoms during attacks.

Anti-inflammatory medicines reduce the swelling in your airways. In many people with asthma, anti-inflammatory medicines will be needed on a regular basis to make the airways less likely to react to allergens and

irritants. Anti-inflammatory medicines include *inhaled corticosteroids* (Vanceril, Beclovent, Azmacort), *cromolyn* (Intal) and nedocromil (Tilade). Anti-inflammatory medicines take hours or days to start to help and usually don't work well unless you take them regularly.

Inhaled bronchodilators help the muscles around your airways relax. This allows your airways to open for several hours. Bronchodilators (Proventil, Alupent, Brethine) can be used on a regular basis or only when they are needed to reduce symptoms quickly. They can be used every four hours if needed. If your bronchodilator doesn't relieve symptoms within 15 to 30 minutes, call your doctor. Some bronchodilators come in tablets or liquid forms.

In a few people, corticosteroid pills and other medicines may be needed for the worst times.

Won't steroids be bad for me?

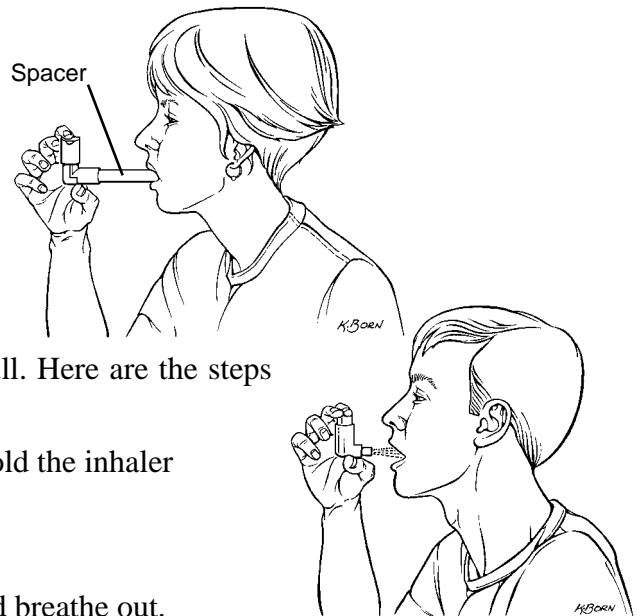
No. The inhaled corticosteroids used to treat asthma go right where they're needed—into your lungs—so very little gets into the rest of your body to cause side effects.

Your doctor may prescribe corticosteroid pills for you if inhaled corticosteroids aren't working well enough. These steroids usually don't cause side effects if they're only taken for short periods (two weeks or less).

How do I use a metered-dose inhaler?

First, make sure your inhaler has medicine in it. Put the canister (not the mouthpiece) in a cup of water. If the canister floats sideways on the surface, it's empty. If it tips up, it's partly full. If it sinks, it's full. Here are the steps for using an inhaler:

1. Remove the cap and hold the inhaler upright.
2. Shake the canister.
3. Tilt your head back and breathe out.
4. Put the inhaler one to two inches away from your mouth or, if you're using a spacer, put the end of it in your mouth and seal your lips around it. A spacer is a tube that you attach to your inhaler. It makes using an inhaler easier and more efficient.



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5. Press down on the inhaler to release the medicine as you slowly breathe in for three to five seconds. If you use inhaled dry powder capsules, close your mouth tightly around the mouthpiece of the inhaler and inhale rapidly.
 6. Hold your breath for 10 seconds so the medicine can get deep into your lungs.
 7. Repeat as many times as your doctor suggests. Wait one minute between puffs so each puff can get deeper into your lungs.

If your chest feels tight, you may use your bronchodilator right before you use your corticosteroid, cromolyn or nedocromil inhaler. This helps open your airways and allows more medicine to go deeper into your lungs.

Get help if any of these occur

- Your medicine doesn't control symptoms.
- Your peak flow keeps dropping after treatment or falls below 50% of your best.
- Your fingernails or lips turn gray or blue.
- You have trouble walking or talking.
- You have extreme difficulty breathing.
- Your neck, chest or ribs are pulled in with each breath.
- Your nostrils flare when you breathe.

How can I tell if my asthma is getting worse?

Signs that your asthma is getting worse include having symptoms at night, a drop in your peak flow meter readings and the need to use your bronchodilator more often. Talk to your doctor if you think that your asthma is getting worse. You may need to change the amount of medicine you're taking or the way you're taking it.

This handout provides a general overview on this topic and may not apply to everyone. To find out if this handout applies to you and to get more information on this subject, talk to your family doctor.



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