

# Living with Asthma

Developed by the American Pharmacists Association. Improving medication use. Advancing patient care.

## My doctor says I have asthma. What is it?

Asthma is a condition that keeps you from breathing normally. When you have an asthma attack, you cough, make squeaking or whistling sounds, and feel short of breath. You may feel that letting air out is harder than taking air in. Asthma attacks may come more frequently for you at night or in the early morning.

In your chest, you have muscles that control the size of airways in your lungs. During an asthma attack, these muscles tighten causing the passageways to become rigid and even smaller. Mucus then flows into the passageways and takes up space, crowding out even more air. Finally, the passageways themselves become inflamed and swollen, and the space for air becomes even more limited. Because of this, doctors call asthma an inflammatory disease.

Asthma is a serious—but controllable—disease. Doctors believe that as many as 15 million Americans suffer from asthma. Nearly 5 million of those asthma sufferers are 18 years old or younger.

## What causes my asthma?

You may have been born with a predisposition for asthma, which means that you may have inherited a tendency toward developing the disease.

What causes asthma to develop from this predisposition, however, differs from person to person. Some of the common causes are:

- Indoor allergens, such as microscopic house dust mite feces, pet dander, cockroach allergen, and fungus (mold)
- Outdoor allergens, such as airborne fungus and tree, grass, and weed pollens
- Latex
- Nonsteroidal anti-inflammatory drugs (NSAIDs) and beta-blockers
- Food additives, such as sulfite preservatives

Other things in your world, referred to as triggers don't cause asthma, but they can make you more susceptible to experience symptoms. Examples of triggers are:

- Active and/or passive smoking
- Air pollution
- Respiratory infections
- Diet
- Rhinitis and sinusitis
- Gastroesophageal reflux disorder (GERD) or acid reflux
- Extreme emotional stress

## How can asthma be treated?

First, you should work with your health care provider to determine the factors that may be contributing to the severity of your asthma. Then, learn how to reduce or eliminate as many allergens as you can from your home, as well as how to avoid common triggers.

Some doctors recommend that certain patients use a peak flow meter. A peak flow meter measures how much air you are able to blow out of your lungs. First, you'll establish your "personal best" air flow rate. Your doctor may then ask you to measure your air flow every day, comparing it with your personal best. Changes recognized through use of a peak flow meter may provide an indication as to how well your asthma is being controlled.

When it comes to medications, you and your health care provider will have two goals—preventing attacks from happening and treating attacks that do happen. The most effective medications for the prevention of asthma attacks work to decrease or eliminate inflammation and help reduce mucus in the lungs. These anti-inflammatory drugs are called steroids, but they are very different from the illegal and harmful anabolic steroids taken by some athletes. The steroids used to treat asthma are corticosteroids and are considered safe.

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Other medications your health care provider may prescribe for long-term control are:

- Cromolyn sodium or nedocromil, which are considered anti-allergic medications.
- A long-acting bronchodilator to bring you relief for up to 12 hours—these can take up to 30 minutes to work.
- Theophylline, a type of bronchodilator often prescribed in a long-acting formulation.
- A leukotriene modifier to block the effect of leukotrienes or stop the body from making them. Leukotrienes are a natural substance in your body that contribute to the narrowing of the airways, mucus production, and inflammation associated with asthma.

Medications providing long-term control work slowly to reduce asthma symptoms and should be taken even if you are feeling fine.

The second type of medication your doctor will prescribe should be used to give you quick relief and to stop an asthma attack that has already started. Two kinds of medications are available:

- Short-acting bronchodilators to relax the muscles that have tightened around the airways.
- Oral corticosteroids to speed up recovery from moderate and severe attacks and to prevent episodes from returning.

Finally, your health care provider will talk to you about being in partnership with him or her and with your pharmacist to monitor and treat your asthma. Good communication is very important in this three-way partnership. You must give your partners complete and accurate information about your symptoms, and you must make sure you understand everything they explain to you about asthma and its treatment.

## What should I know about my medications?

Follow these 10 simple rules to make certain you are taking the right medication at the right time to keep your asthma in check:

1. Know the name of each of your medications.
2. Know what each medication is supposed to do for you.
3. Label the medications—or ask your pharmacist to label them—so you'll know which is used to control your asthma and which is used for quick relief when an attack has begun. A bright-colored sticker on the lid of your quick-relief medication, for example, will help you make sure you reach for the right inhaler during an attack.
4. Ask your doctor or pharmacist for written instructions about how to take each medication. Follow the instructions closely.
5. Ask your doctor or pharmacist to check your technique for using an inhaler. When your prescription is filled, ask your pharmacist how many inhalations are in the inhaler, and keep track.
6. Know what side effects to look for with each medication.
7. Ask your doctor what to do if you experience any side effects.
8. Carry your quick-relief medication with you at all times.
9. Ask your doctor what you should do if your quick-relief medication doesn't stop an attack.
10. Keep your regular doctor appointments. Your doctor will want to know how your medications are working.