



Understanding What Causes Asthma

What is Asthma?

Asthma is a disease that causes temporary narrowing of the airways in your lungs (See figure below). During these “asthma attacks,” you may feel short of breath, wheeze, cough or have tightness in your chest. Fortunately, the narrowing of your airways usually lessens with prompt treatment.

In between asthma attacks, the disease is still there – even when you have no symptoms. Many children seem to “outgrow” their asthma, but teenagers and adults may have asthma for the rest of their lives.

What happens during an Asthma Attack?

If you have asthma, your airways are “twitchy” – they're very irritable and sensitive to certain “triggers”. When you come in contact with one or more of these triggers (see list below), your asthma may flare up.

When asthma flares up, the lining of your airways becomes inflamed and swollen, a large amount of mucus is produced, and the muscles surrounding the airways may tighten. This reduces normal airflow into and out of your lungs, makes breathing difficult, and leads to wheezing and coughing. Such an acute attack may last up to a few hours.

Sometimes a second, or “late-phase”, attack occurs after the first attack has resolved – especially if the first attack was caused by something to which you are allergic. The late-phase attack usually happens 4-12 hours after the first attack and may last up to a few days.

Late-phase attacks occur in about half of those who have asthma – more often in people with severe asthma. Not everyone who experiences an acute attack of asthma has a late-phase attack. Those who do experience a late-phase attack find that their airways become sensitive and “ready” to respond to an irritant or other asthma trigger. Attacks that occur during the night or early hours of the morning may be especially serious and require medical attention.

Asthma Triggers:

- Viral respiratory infections (such as colds, flu)
- Allergens
- Housedust mites
- Molds

- Animal danders
- Pollens
- Irritants
- Tobacco smoke
- Strong odors
- Air pollutants
- Cold air
- Emotional distress, especially with crying or shouting
- Aspirin
- Food additives, such as sulfite preservatives

What you can do

Because the possibility of an asthma attack always exists – even years after the last attack – you must be prepared to handle an attack at any time. See your doctor regularly – not just when severe attacks occur.

Your doctor can help you identify and avoid asthma triggers and prevent flare-ups. You will probably use one or more medicines either occasionally or on a daily basis. Some asthma drugs, called bronchodilators, open up your airways; others, such as corticosteroids or cromolyn, prevent or combat the inflammation that leads to narrowing of the airways.

Be sure to let your doctor know about any questions or difficulties you have with your treatment plan. But don't stop taking your medicines or change the amount you take simply because you're feeling better. Seek your doctor's advice first.

Most important, you should be comfortable with your treatment plan. Since early treatment prevents asthma attacks from becoming worse, be prepared to react to one quickly and confidently.

Remember, you should control your asthma instead of letting it control you!