

## ASTHMA TRIGGERS

Most asthma symptoms start when your airways are bothered by something. These things are called triggers. Your symptoms will be reduced when you stay away from or control your triggers. These triggers vary from person to person, but common ones include cold air; exercise; allergens (things that cause allergies) such as dust mites, mold, pollen, animal dander or cockroach debris; and some types of viral infections.

When you breathe in, air travels through your nose and/or mouth through a tube called the trachea (sometimes referred to as the "windpipe"). From the trachea, it enters a series of smaller tubes that branch off from the trachea. These branched tubes are the bronchi, and they divide further into smaller tubes called the bronchioles. It is in the bronchi and bronchioles that asthma has its main effects.

Here's how the process occurs. When the airways come into contact with an asthma trigger, the tissue inside the bronchi and bronchioles becomes inflamed. At the same time, the muscles on the outside of the airways tighten up (constriction), causing them to narrow. A thick fluid (mucus) enters the airways, which become swollen. The breathing passages are narrowed still more, and breathing is hampered.

This process can be normal, up to a point. Everyone's airways constrict somewhat in response to irritating substances like dust and mold. But in a person with asthma, the airways are hyperreactive. This means that their airways overreact to things that would just be minor irritants in people without asthma.

It is important to be aware of the things in your environment that tend to make asthma worse. These factors vary from person to person. Some of the more common factors or triggers are:

- **Allergens** - In many people with asthma, the same substances that cause allergy symptoms can also trigger an asthma episode. These allergens may be things that you inhale, such as pollen or dust, or things that you eat, such as shellfish. It is best to avoid or limit your exposure to known allergens in order to prevent asthma symptoms.
- **Tobacco smoke** - Today most people are aware that smoking can lead to cancer and heart disease. What you may not be aware of, though, is that smoking is a risk factor for asthma in children, and a common trigger of asthma symptoms for all ages. There is a clear link between secondhand smoke and asthma, especially in young people. Passive smoking worsens asthma in children and teens and may cause up to 26,000 new cases of asthma each year.
- **Exercise** - Exercise - especially in cold air - is a frequent asthma trigger. A form of asthma called exercise-induced asthma is triggered by physical activity. Symptoms of this kind of asthma may not appear until after several minutes of sustained exercise. The kind of physical activities that can bring on asthma symptoms include not only exercise, but also laughing, crying, holding one's breath, and hyperventilating (rapid, shallow breathing).

- **Other factors** - Cold air, wind, rain, and sudden changes in the weather can sometimes bring on an asthma episode. Medications like aspirin can be related to episodes in adults who are sensitive to aspirin. Irritants in the environment, like paint fumes, smog, aerosol sprays and perfume can also bring on an asthma episode.

People with asthma react in various ways to these factors. Some react to only a few, others to many. Some people get asthma symptoms only when they are exposed to more than one factor or trigger at the same time. Others have more severe episodes in response to multiple factors or triggers. Each case of asthma is unique. If you have asthma, it is important to keep track of the factors or triggers that you know provoke asthma episodes. Because the symptoms do not always occur right after exposure, this may take a bit of detective work.

Because each case of asthma is different, treatment needs to be tailored for each person. Asthma is a chronic disease. It can be controlled with proper, long-term treatment. But it cannot be cured. One general rule that does apply, though, is removing the things in your environment that you know are factors that make your asthma worse. When these measures are not enough, it may be time to talk to your doctor about the many medications that are available to control symptoms.

***Asthma doesn't have to put major limits on your life. There are many things that you can do to take control of your asthma and minimize its impact on your activities.***