

BETTER HEALTH 4 YOU

SMART LOCAL 36 BENEFIT FUND

ASTHMA, ALLERGIES & COPD

Asthma Causes and Triggers

No one really knows what causes asthma. What we do know is that asthma is a chronic inflammatory disease of the airways. The causes of asthma symptoms can vary for different people. Still, one thing is consistent with asthma: when airways come into contact with an asthma trigger, the airways become inflamed, narrow, and fill with mucus.

When you have an asthma attack, spasms of the muscles around the airways, inflammation and swelling of the mucosal membrane lining the airways, and excessive amounts of mucus contribute to airway narrowing. This makes airway resistance increase and the work of breathing more difficult, causing shortness of breath, cough, and wheezing. You may have coughing with asthma because of the irritation inside the airway and the body's attempt to clean out the accumulations of thick mucus.

So why do you have asthma and your friend doesn't? No one really knows for sure. We do know that allergies play a role in many people with asthma but not in all. As with allergy, you can blame your family history, as there is a strong genetic component for asthma.

If you or a loved one has asthma, it's important to understand the many asthma triggers. Once you identify and reduce exposure to the specific triggers or causes of asthma, you can take an active role in controlling your asthma and reducing the frequency of asthma attacks. For example, if you find that allergies are the cause of your

asthma, you may have allergic asthma. Being aware of environmental, food, and inhaled allergies and avoiding them can significantly help in asthma prevention by reducing the frequency or severity of asthma attacks. If environmental pollution seems to cause your asthma, it's important to stay indoors during periods of heavy air pollution. Try to find the specific triggers or causes of your asthma, and then plan to avoid these triggers and have better asthma control.

Here are the most common asthma triggers:

Allergies Can Cause Asthma

Allergies with asthma is a common problem. Eighty percent of people with asthma have allergies to airborne substances such as tree, grass, and weed pollens, mold, animal dander, dust mites, and cockroach particles. In one study, children who had high levels of cockroach droppings in their homes were four times more likely to have childhood asthma than children whose homes had low levels. Asthma exacerbation after dust exposure is usually due to dust mite allergy.

Food and Food Additives Trigger Asthma

Food allergies can cause mild to severe life-threatening reactions. The most common foods associated with allergic symptoms are:

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| Eggs | Cow's milk | Peanuts |
| Soy | Wheat | Fish |
| Shrimp | Shellfish | Salads |
| Fresh fruits | Food preservatives | |

Exercise-Induced Asthma

Strenuous exercise can cause a narrowing of the airways in about 80% of people with asthma. In some

Causes of Asthma

- Allergies
- Food and Food additives
- Exercise
- Heartburn
- Smoking
- Sinusitis or other upper respiratory infections
- Medications
- Weather
- Air pollutants or irritants

people, exercise is the main trigger for their asthma symptoms. If you have exercise-induced asthma, you will feel chest tightness, coughing, and difficulty breathing within the first five to eight minutes of an aerobic workout. These symptoms usually subside in the next 20 to 30 minutes of exercise, but up to 50% of those with exercise-induced asthma may have another asthma attack six to 10 hours later. It is important to warm up slowly and adequately prior to rigorous exercise. This may prevent an attack.

Heartburn and Asthma

Severe heartburn and asthma often go hand-in-hand. Recent studies show that up to 89% of those with asthma also suffer from severe heartburn, known as gastro esophageal reflux disease (GERD). GERD generally occurs at night when the sufferer is lying down. Normally a valve between the esophagus and stomach prevents stomach acids from backing up into the esophagus. In GERD, the valve

does not function properly. The stomach acids reflux, or back up, into the esophagus; if the acid reaches into the throat or airways the irritation and inflammation can trigger an asthma attack.

Certain clues that suggest reflux as the cause of asthma include the onset of asthma in adulthood, no family history of asthma, no history of allergies or bronchitis, difficult-to-control asthma, or coughing while lying down.

If your doctor suspects this problem, he or she may recommend specific tests to look for it, change your foods, or offer you medications.

Smoking and Asthma

People who smoke cigarettes are more likely to get asthma. If you smoke with asthma, it may make your symptoms such as coughing and wheezing worse. Women who smoke during pregnancy increase the risk of wheezing in their babies. Babies whose mothers smoked during pregnancy also have worse lung function than those whose mothers did not smoke. If you have asthma and you're a smoker, quitting is the most important step you can take to protect your lungs.

Sinusitis and Other Upper Respiratory Infections

Much like asthma causes inflammation in the lining of the airways, sinusitis causes inflammation in the mucous membranes that line the sinuses. This inflammation causes the mucous membranes in the sinuses to secrete more mucus -- also similar to asthma. When the sinuses get inflamed, the airways respond similarly in many people with asthma, leading to sinusitis with asthma. Prevention and prompt treatment of a sinus infection is often necessary to help relieve asthma symptoms.

Infections and Asthma

Cold, flu, bronchitis, and sinus infections can cause an asthma attack. These respiratory infections that trigger asthma can be viral or bacterial and are a common cause of asthma especially in children under age 10. This airway sensitivity that causes the airways to more easily narrow can last as long as two months after an upper respiratory infection. It's thought that anywhere from 20% to 70% of asthmatic adults have coexisting sinus disease. Conversely, 15% to 56% of those with allergic rhinitis (hay fever) or sinusitis have evidence of asthma.

Medications and Asthma

Many people with asthma have aspirin-sensitive asthma and it's possible they're sensitive to other medications such as anti-inflammatory drugs like ibuprofen (Advil, Motrin), naproxen (Aleve, Naprosyn), aspirin, and beta-blockers (used to treat heart disease, high blood pressure, and glaucoma). If you know you're sensitive to these drugs, make sure your doctor has the problem documented on your chart, and always talk to your pharmacist about this reaction before taking a new medication.

Other Causes of Asthma

Irritants. Many irritants, including tobacco smoke, smoke from wood-burning appliances or fireplaces, strong odors from perfumes, cleaning agents, etc., are all irritants that can trigger asthma. In addition, air pollution, occupational dust or vapors can also trigger an attack.

Weather. Cold air, changes in temperature, and humidity can cause asthma.

Strong emotions. Stress and asthma are often seen together. Anxiety, crying, yelling, stress, anger, or laughing hard can trigger an asthma attack.

How Do Triggers Make Asthma Worse?

In people with asthma, the airways are always inflamed and very sensitive, so they react to a variety of external factors, or "triggers." Coming into contact with these triggers is what causes the symptoms of asthma -- the airways tighten and become inflamed, mucus blocks the airways and results in a worsening of asthma symptoms. An asthma attack can begin immediately after exposure to a trigger or several days or even weeks later.

There are many causes of asthma. Reactions to the causes of asthma are different for each person and vary from time to time. Certain causes of asthma may be harmless to some people but contribute to inflammation in others. Some people have many causes of their asthma while others have no identifiable ones. Recognizing and avoiding the specific causes of asthma, when possible, is an important way to control asthma. Keep in mind, however, that the best way to control is with asthma treatment and asthma drugs.

How Can I Tell What Causes and Triggers My Asthma?

Determining what factors were present when your asthma symptoms started is the first step to identifying the causes of your asthma. Although there are many different asthma triggers, you may not react to all of them. Some people have only one cause or trigger, while others have many causes.

Many causes of asthma can be identified through a history of reaction and skin or blood testing. Your doctor may also recommend using a device called a peak flow meter. The peak flow meter measures how much and how quickly air is exhaled from the lungs. It can alert you to changes in your breathing and the onset of asthma symptoms.

Ask your asthma doctor if using a peak flow meter would be helpful to you as you narrow down the causes of your asthma.

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