



## What is Asthma?

Asthma is a chronic lung disease that lasts a long time. It cannot be cured – only controlled.

- Airways are inflamed. That is, airway linings are swollen.
- Airways narrow and breathing becomes hard to do. This narrowing gets better (but not all the way in some patients), sometimes by itself, sometimes with treatment.
- Airways are super sensitive. They react to many things, such as cigarette smoke, pollen, or cold air. Coughing, wheezing, tight chest, difficult breathing, or an asthma episode may result. A more complete list of things that can cause some people's airways to react is given later. (see, "What Causes Asthma Episodes").

### What Are the Symptoms of Asthma?

The main symptoms of asthma are:

- Shortness of breath
- Wheezing
- Tightness in the chest
- Cough lasting more than a week

Not all people with asthma wheeze. For some, coughing may be the only symptom of asthma. Coughing often occurs during the night or after exercise.

It's important to know that treatment can reverse asthma symptoms. And it's important to treat even mild symptoms of asthma so that you can keep the symptoms from getting worse.

### Normal Breathing

When you breathe in, air is taken in through the nose and mouth. It goes down your windpipe, through your airways, and into the air sacs. When you breathe out, stale air leaves the lungs in the reverse order.

### What Happens During an Episode of Asthma?

Asthma affects the airways in your lungs. During an episode of asthma:

- The lining of the airways becomes swollen (inflamed).
- The airways produce a thick mucus.

- The muscles around the airways tighten and make the airways narrower.

These changes in the airways block the flow of air, making it hard to breathe.

You need to know the ways that asthma affects the airways so you can understand why it often takes more than one medicine to treat the disease. Very simply, some medicines relax the airways and others reduce (and even prevent) the swelling and mucus.

### **What Causes Asthma?**

The basic cause of asthma is not yet known. What we do know is that asthma is not caused by emotional factors such as a troubled parent-child relationship. In short, asthma is not “all in one’s head.” It is instead a chronic lung disease.

### **What Causes Asthma Episodes?**

People with asthma have airways that are super sensitive to things that do not bother people who do not have asthma. These things are called triggers because when you are near or come in contact with them, they may start an asthma episode. Your airways may become swollen, produce too much mucus, and tighten up. Common triggers for asthma episodes include the following:

- Dander (or flakes) from the skin, hair, or feathers of all warm-blooded pets (including dogs, cats, birds, and small rodents)
- House dust mites
- Cockroaches
- Pollens from grass and trees and mold
- Molds (indoor and outdoor)
- Cigarette smoke; wood smoke; scented products such as hair spray, cosmetics, and cleaning products; strong odors from fresh paint or cooking; automobile fumes; and air pollution
- Infections in the upper airway, such as colds (a common trigger for both children and adults)
- Exercise
- Showing strong feelings (crying, laughing)
- Changes in weather and temperature

### **Is There a Cure for Asthma?**

Asthma cannot be cured, but it can be controlled. You should expect nothing less.

### **How Can Asthma Episodes Be Prevented?**

To prevent asthma episodes you will have to work closely with your doctor to:

- Develop a medicine plan that keeps you from getting symptoms.
- Plan ways to avoid or reduce contact with your triggers.

## How Are Asthma Episodes Controlled?

To control asthma episodes when they occur, you will have to work out a medicine plan with your doctor that includes:

- Treating symptoms early.
- Doing the right things for any changes in symptoms.
- Knowing when a doctor's help is needed and seeking help right away.

## What Can a Patient with Asthma Expect From Treatment?

With proper treatment most people with asthma will be able to:

- **Be active without having asthma symptoms. This includes participating in exercise and sports.**
- **Sleep through the night without having asthma symptoms.**
- **Prevent asthma episodes (attacks).**
- **Have the best possible peak flow number – lungs that work well.**
- **Avoid side effects from asthma medicines.**

