

# ASTHMA

## BASIC INFORMATION

### DESCRIPTION

Asthma involves blockage of normal airflow into and out of the lungs. The blockage develops when certain allergens or irritants are inhaled and cause a reaction in the airways. They become swollen (inflamed), produce excess mucus, and the airway muscles tighten. This leads to the wheezing and other symptoms. Asthma affects all ages but 50% of the cases are in children under age 10. Boys with asthma outnumber girls. In adult-onset asthma, women are more often affected.

### FREQUENT SIGNS & SYMPTOMS

Chest tightness. Wheezing upon breathing in or out.

Coughing, especially at night, may have thick, clear or yellow sputum.

Rapid, shallow breathing that is easier with sitting up.

Breathing difficulty that gradually gets worse.

Neck and chest may be sucked in with each breath.

Severe symptoms of an asthma attack may include:

Cough that sounds tight and dry.

Rapid heart-beat and abnormal rapid rate of breathing that becomes more labored.

Can speak only a few words in one breath.

Sweating, and much anxiety and distress.

### CAUSES

The exact cause remains unclear. Genetic factors, airway sensitivity, and environmental factors appear to play a role. Asthma attacks are due to triggers (e.g., smoke, polluted air, molds, dust, aspirin, cold air, lung infections, and others).

### RISK INCREASES WITH

Other allergies, such as eczema or hay fever.

Family history of asthma or allergies.

Exposure to air pollutants.

Obesity.

Smoking and exposure to second-hand smoke.

For adults, exposure to occupational irritants (fumes, gases, latex products, metals, and others).

Low birth weight.

### PREVENTIVE MEASURES

No specific preventive measures for original disease. Avoiding risk factors where possible may help.

### EXPECTED OUTCOMES

Symptoms can be controlled with treatment.

Half the children will outgrow asthma.

### POSSIBLE COMPLICATIONS

Missed workdays or school absenteeism.

Problems of stress, depression, or anxiety.

Pneumonia, pneumothorax, or respiratory failure.

Status asthmaticus (an attack that cannot be relieved).

Poorly controlled asthma and chronic symptoms.

## DIAGNOSIS & TREATMENT

### GENERAL MEASURES

Your health care provider will do a physical exam and ask questions about your symptoms. Medical tests may include x-rays, pulmonary-function tests, an exercise tolerance test, and allergy tests (usually skin testing).

Treatment will depend on the severity of the symptoms. It may include daily drug therapy, drug therapy for attacks, avoiding triggers, lifestyle changes, self-care, and education. A written treatment plan is usually provided. It should be followed carefully.

Identify and avoid your particular triggering factors.

Counseling may help, if asthma is stress-related.

A peak flow meter may be used at home. It is a small device that measures how well air flows into and out of the airways. You will be instructed on its use.

Treatment (allergy shots) to desensitize the immune system to specific allergens may be recommended.

Hospital care may be required for severe attacks.

To learn more: Asthma & Allergy Foundation of America, 1233 20th St., Suite 402, Washington, DC 20036; (800) 727-8462; website: [www.aafa.org](http://www.aafa.org).

## **MEDICATIONS**

Asthma drugs are generally divided into 2 categories:

Quick relief. These drugs are prescribed for relief of asthma exacerbations and to prevent exercised-induced asthma (EIA) symptoms.

Long-term control. These drugs are prescribed for use on a daily basis to prevent symptoms.

## **ACTIVITY**

Stay active. Avoid sudden bursts of activity. Sit and rest if an attack follows exercise. Sip warm water.

Swimming is a good exercise for asthma patients.

## **DIET**

No special diet. Avoid foods that are asthma triggers.

Drink plenty of liquids daily.

## **NOTIFY OUR OFFICE IF**

You or a family member has symptoms of asthma.

Symptoms don't improve, despite treatment.

Peak flow is in a zone that causes you concern.