



# 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 AND SYMPTOMS

- Chest tightness. Wheezing upon breathing 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 heartbeat and abnormal rapid rate of breathing that becomes more labored.

Unable to speak more than a few words without pausing for breath.

Sweating, and much anxiety and distress.

### CAUSES

The exact cause of asthma remains unclear. It may be due to a combination of genetic factors, certain factors that may sensitize the airways (such as animal dander and dust mites), and contributing factors (such as childhood respiratory infections).

### RISK INCREASES WITH

- Other allergies, such as eczema or hay fever.
- Family history of asthma or allergies.
- Exposure to air pollutants.
- Exposure to allergens (such as pets).
- Smoking and exposure to second-hand smoke.
- For adults, exposure to occupational irritants (fumes, gases, latex products, metals, and others).

## 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.
- Pneumonia, pneumothorax, or respiratory failure.
- Status asthmaticus (repeated attacks).
- 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 testing (usually with skin tests).
- 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 for desensitization 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 two categories:

**Quick relief.** These drugs are prescribed for relief of asthma exacerbations and to prevent exercise-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. If an attack follows exercise, sit and rest. Sip warm water.
- Swimming is a good exercise for asthma patients.

### DIET

- No special diet. Avoid foods to which you are sensitive.
- Drink plenty of liquids daily to keep secretions loose.



## **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 about which you are concerned.