



## BASIC INFORMATION

### DESCRIPTION

A chronic disorder with recurrent attacks of wheezing and shortness of breath. It 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 than men.

### FREQUENT SIGNS AND SYMPTOMS

- Chest tightness and shortness of breath.
- Wheezing upon breathing out.
- Coughing, especially at night, occasionally with thick, clear or yellow sputum.
- Rapid, shallow breathing that is easier with sitting up.
- Breathing difficulty.
- Neck muscles tighten.

Severe symptoms of acute attack:

- Bluish skin.
- Exhaustion.
- Grunting respiration.
- Inability to speak.
- Mental changes, including restlessness or confusion.

### CAUSES

Inflammation and resulting spasm of air passages (bronchi and bronchioles), followed by swelling of the passages and thickening of lung secretions (sputum). This decreases or closes off air to the lungs. These changes are caused by:

- Allergens, such as pollen, dust, animal dander, molds and some foods.
- Lung infections such as bronchitis.
- Air irritants, such as smoke and odors.
- Exposure to occupational chemicals or other materials.

### RISK INCREASES WITH

- Other allergic conditions, such as eczema or hay fever.
- Family history of asthma or allergies.
- Exposure to air pollutants.
- Smoking.
- Use of some drugs such as aspirin.
- Stresses (viral infection, exercise, emotional upset, noxious odors and tobacco smoke).

### PREVENTIVE MEASURES

- Avoid known allergens and air pollutants.
- Take prescribed preventive medicines regularly; don't omit them when you feel well.
- Avoid aspirin.
- Investigate and avoid triggering factors.
- Do relaxation and airway clearing exercises.

### EXPECTED OUTCOMES

- Symptoms can be controlled with treatment and strict adherence to prevention measures.
- Half the children will outgrow asthma.
- Without treatment, severe attacks can be fatal.

### POSSIBLE COMPLICATIONS

- Respiratory failure.
- Pneumothorax.
- Lung infection and chronic lung problems from recurrent attacks.



## TREATMENT

### GENERAL MEASURES

- Diagnostic tests may include laboratory blood studies, pulmonary-function tests and allergy testing, usually with skin tests.
- Emergency-room care and hospitalization for severe attacks.
- Psychotherapy or counseling, if asthma is stress-related.
- Eliminate allergens and irritants at home and at work, if possible. Treatment for desensitizing to specific allergens.
- Keep regular medications with you at all times.
- Sit upright during attacks.
- Stay indoors as much as possible during high allergen times.
- Additional information available from the Asthma & Allergy Foundation of America, 1717 Massachusetts Ave., Suite 305, Washington, DC 20036. Telephone (800) 7-ASTHMA.

### MEDICATIONS

- Expectorants to loosen sputum.
- Bronchodilators to open air passages.
- Intravenous cortisone drugs (emergencies only) to decrease the body's allergic response.
- Cortisone drugs by nebulizer, which have fewer adverse reactions than oral forms.
- Antihistamines (cromolyn sodium or nedocromil) by nebulizer. These are preventive drugs.

### ACTIVITY

- Stay active, but avoid sudden bursts of exercise. If an attack follows heavy exercise, sit and rest. Sip warm water.
- Treatment with bronchodilators often prevents exercise-caused asthma.
- Swimming is perhaps the best exercise for asthma patients.

### DIET

- No special diet, but avoid foods to which you are sensitive.
- Drink at least 3 quarts of liquid daily to keep secretions loose.



## NOTIFY OUR OFFICE IF

- You or a family member has symptoms of asthma.
- You have an asthma attack that doesn't respond to treatment. This is an emergency!
- New, unexplained symptoms develop. Drugs used in treatment may produce side effects.