

Adult Asthma

Asthma is a common disease that involves **inflammation** (cellular injury) and narrowing of the airways leading to the lungs. Asthma occurs in children and adults. Childhood asthma may continue into adolescence and adulthood, but some adults who develop asthma did not have asthma when they were younger. Millions of people worldwide are affected by asthma, which has become more common in recent years. Asthma attacks cause significant disruptions to a person's life, and severe asthma attacks can be fatal. The July 21, 2004, issue of *JAMA* includes an article about adult asthma.

SYMPTOMS OF ASTHMA

- Wheezing
- Shortness of breath or difficulty breathing
- Cough
- Chest tightness

Wheezing is a whistling sound made by air partially blocked by narrowed airways. Sometimes the asthma attack is so severe that air cannot flow at all. This is a life-threatening emergency requiring immediate treatment. Asthma symptoms may be triggered by allergic reactions, exposure to cold temperatures, exercise, other lung problems, medications, and environmental factors, especially cigarette smoke. Chest tightness may be a sign that asthma is getting worse or progressing.

TESTING FOR ASTHMA

- Lung examination—the doctor will listen for wheezing, decreased breath sounds, and disturbed airflow. Sometimes persons with asthma will also have **pneumonia** (infection of a lung), a cold, bronchitis, or other lung problems that make their asthma symptoms worse.
- **Peak flow testing**—a device called a peak flow meter is used to measure the amount of air that can be expelled. This airflow is reduced in persons with asthma. Peak flow testing can help track the progress of a person's asthma treatment.

TREATMENTS FOR ASTHMA

Corticosteroids (medicines that decrease inflammation) may be prescribed in either inhaled, oral, or intravenous form. Inhaling the steroids helps decrease the dose required, delivers the corticosteroid directly to the airways, and helps reduce the risk of adverse effects associated with steroid medicines.

Other medications that help reduce inflammatory changes include **leukotriene modifiers**, such as **montelukast** and **zafirlukast**. These are long-term asthma control medicines and need to be taken regularly. They are not for treatment of an acute asthma attack. **Cromolyn** and **nedocromil** are also long-term anti-inflammatory medications.

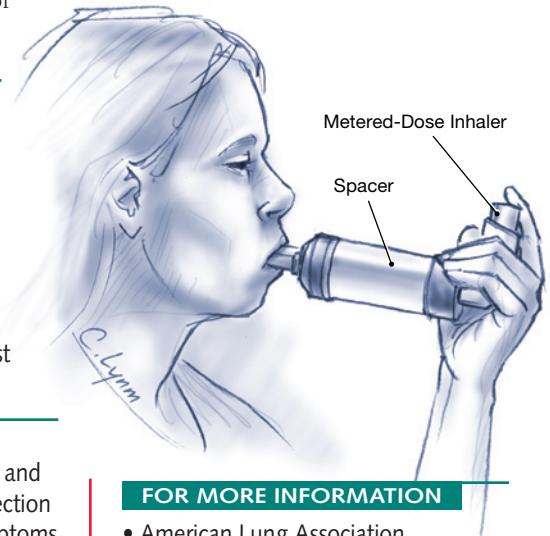
Bronchodilators are medications that relax the airways. These are usually inhaled using an inhaler or a **nebulizer**. These medicines can be used to treat acute asthma and are also helpful in the long-term management of asthma. A long-acting bronchodilator may be added for patients receiving corticosteroids who continue to have asthma symptoms. **Theophylline** is an oral bronchodilator that may also be used in the long-term treatment of asthma.

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- American Lung Association
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- National Heart, Lung, and Blood Institute
www.nhlbi.nih.gov
- National Institute of Allergy and Infectious Diseases
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To find this and previous JAMA Patient Pages, go to the Patient Page link on *JAMA*'s Web site at www.jama.com. Many are available in English and Spanish. A Patient Page on living with asthma was published in the June 9, 1999, issue.

Sources: American Lung Association; National Heart, Lung, and Blood Institute; National Institute of Allergy and Infectious Diseases

