



**ASTHMA**

**A**sthma is a chronic respiratory disease characterized by inflammation of the airways, and increased responsiveness to various stimuli commonly known as asthma triggers. More than 14.6 million Americans suffer from asthma, which is the sixth-ranking chronic condition in the United States. Between 1982 and 1994, the rate per thousand persons who had asthma rose from 34.8 to 56.1, an increase of 61.2 percent.



**SEVERE ASTHMA ATTACKS**

An asthma attack may become so severe that the person becomes breathless. As the attack continues, the victim becomes less and less able to breathe, and may have difficulty speaking in full sentences. The muscles in the chest and neck may become tight. Lips and fingernails may have a grayish or blue color. If this occurs, the following steps should be followed:

- Asthma medicine should be **taken immediately**
- 911 should be **called for emergency** medical help

*And Remember:*

- **Delay in accessing medical care may result in death!** It is also very important to follow up with appropriate medical care, take medications as directed, drink plenty of water, and avoid any precipitating factors.



FIRE & HEALTH SAFETY  
BEGINS IN THE HOME

- ✓ Watch Children Carefully
- ✓ Know What To Do In An Emergency

To Notify the Fire Department  
About a Fire or Medical Emergency  
Dial 911



**SIGNIFICANT FACTS ABOUT ASTHMA**

- The number of asthma-related deaths has increased by 117 percent, from 2,598 in 1979 to 5,637 in 1995.
- 511,000 Americans were hospitalized for asthma in 1995, a 284 percent increase from 1979.
- Over 3 millions days of work are lost annually because of asthma.
- The annual health care costs directly related to asthma is over \$7.5 billion; indirect costs such as lost productivity add an additional \$3.8 billion dollars, for a total cost of \$11.3 billion dollars.
- Only about 25% of children with asthma become free of symptoms when their airways reach adult size.
- Asthma usually occurs in episodes, but the underlying pathology is chronic. Asthmatic episodes are a series of events which result from the narrowing of a person's airways. This narrowing is due to:
  - Swelling of the lining of the airway
  - Tightening of the airway muscle
  - Increased mucus secretion in the airway
- Each of these changes contributes to a narrowing of the airway tube resulting in a "wheeze" often heard in people having an asthma attack.
- Two classes of medications are used to treat asthma:
  - Anti-inflammatory agents, which interrupt the development of bronchial inflammation and have a preventive action
  - Bronchodilators, which help to widen or dilate the constricted airway during an acute attack
- Asthma is characterized by excessive sensitivity of the lungs to various stimuli. These triggers include:
  - Colds and respiratory infections
  - Cigarette smoke
  - Allergic reactions to pollen, mold, animal dander, feathers, dust, food
  - Indoor and outdoor air pollutants, including ozone
  - Strenuous activity
  - Exposure to cold air or sudden changes in temperature
  - Stress

DIAL 911 ONLY FOR EMERGENCIES

CPR SAVES LIVES

DIAL 911 ONLY FOR EMERGENCIES

A Public Fire & Health Safety Message From The New York City Fire Department

**FD  
NY** **YOUR SAFETY  
IS OUR ONLY CONCERN**  
VISIT OUR WEBSITE: [www.ci.nyc.ny.us/html/fdny](http://www.ci.nyc.ny.us/html/fdny)

Rudolph W. Giuliani, Mayor  
Thomas Von Essen, Fire Commissioner

