

## Chapter 11

Use with Section 3

## ENRICHMENT

## ● Noncommunicable Diseases

**Asthma: A Chronic Disease**

Over 9 million Americans have asthma, and about a third to one-half of them are children. Asthma causes children to miss more days of school, have more hospital stays, and have more restriction in their activities than does any other disease.

It can be frightening to see someone having an asthma attack—wheezing, coughing, breathing rapidly, or even gasping for air. It is important to understand that although this disease is chronic, it can be controlled. Asthma is not contagious.

Anyone can develop asthma. In children, the symptoms usually appear before age three. Some children seem to outgrow the disease, but often it reappears. In most cases, people learn to prevent asthma attacks and how to treat them when they do occur. Asthma patients must learn what triggers their asthma attacks so that they can prevent them.

During an asthma attack, the muscles around the bronchial tubes tighten and go into a spasm. Extra mucus is produced and interferes with breathing. The lining of the bronchial tubes swells, making the airway

smaller. The person has trouble passing air in and out and begins to wheeze or cough.

Asthma attacks can be caused by many things. These causes are usually specific for each person and are often a combination of things. The following list includes most of the better-known “triggers” for asthma.

- allergies—to grasses, trees, weeds, pollens, mold, dust, animal fur, food, and drugs
- respiratory infections—colds, sore throats
- irritants—perfume, smoke, air pollution
- physical exercise
- sudden change in air temperature or humidity
- emotional stress

Several medications are available.

Bronchodilators relax the bronchial muscles in the lungs. Cortisone reduces the swelling. Antibiotics fight infections. Allergy shots can reduce the sensitivity to allergens. Newer medications help reduce the allergic response. Also, a person can avoid things he or she is allergic to. This may mean getting rid of pets or avoiding certain foods. It is also wise to stay away from cigarette smoke.

*Answer the following questions.*

1. Do you know anyone who has asthma? Find out how that person deals with his or her chronic disease. Is he or she able to participate in most activities? \_\_\_\_\_

2. Think about ways your school could make it easier for people with asthma to be just like everyone else. Keep in mind that many schools do not let children carry inhalers (for medicine) with them. Why do you think this is a good or bad policy? In addition, many classrooms have furry animals or birds. What options are there for children whose allergies to these animals could trigger an asthma attack? \_\_\_\_\_