

ILLINOIS DEPARTMENT OF PUBLIC HEALTH



## TUBERCULOSIS

### **What is tuberculosis?**

Tuberculosis (TB) is a contagious and potentially life-threatening disease transmitted through the air. While it can affect any part of the body (such as the brain, the kidneys or the spine), TB usually affects the lungs. When first infected with the TB germ, people usually do not feel sick or have any symptoms. However, they may develop active TB disease in the future.

Although both preventable and curable, tuberculosis once was the leading cause of death in the United States. Today in Illinois, less than 30 deaths a year are attributed to tuberculosis and the number of cases in the state has fallen more than 40 percent in the past 10 years, reaching an all-time low of 633 in 2003.

### **What is the difference between TB infection and TB disease?**

People with TB infection have the TB germ in their bodies but are not sick because the germs are inactive and, therefore, cannot be spread to others. Because these people may develop the disease in the future, they often are given preventive treatment.

People with TB disease are sick from the germs that are active in their bodies. They exhibit symptoms of the disease and, if they have TB of the lungs or throat, can spread the disease to others. Physicians can prescribe drugs to cure TB.

### **Are some people at greater risk of getting TB?**

Although anyone may get TB, the following people are at higher risk:

- Persons who have been in close contact with an active TB case
- Persons who are infected with or at risk for human immunodeficiency virus (HIV)
- Foreign-born persons from countries where TB is common
- Persons with other medical conditions, such as diabetes, silicosis, end-stage renal disease and some forms of cancer, that increase the risk of TB once infection has occurred
- Persons 65 years of age or older
- Residents of long-term care facilities, such as nursing homes or prisons
- Persons who abuse alcohol or use intravenous drugs
- Persons in occupations that serve groups at high risk for TB
- Minority and other medically underserved populations

### **How serious is the problem among minorities?**

TB disproportionately affects racial and ethnic minority groups. This is particularly true among children. In the U.S., more than 80 percent of childhood cases of TB occur in minority groups. Overall, from 1985 through 1993, TB cases increased among non-Hispanic blacks by 18 percent, among Asians and Pacific Islanders by 48 percent and among Hispanics by 67 percent. In contrast, cases among non-Hispanic whites decreased by 18 percent.

### **What are the symptoms of TB disease?**

The general symptoms of TB disease include feeling sick or weak, weight loss, fever and night sweats. TB of the lungs causes the general symptoms plus coughing, sometimes producing blood, and chest pain. Other symptoms depend on the part of the body that is affected.

### **How is TB spread?**

TB is spread from person to person through the air. When people with TB disease of the lungs or throat cough or sneeze, they can put TB germs into the air. Then other people who breathe in the air containing these germs can become infected. People with TB disease are most likely to spread it to people with whom they spend time with every day, such as family members or coworkers. (Remember, though, a person must have active TB disease to spread it; persons who are infected but do not have the disease **cannot** spread TB to others.) If a person thinks he or she has been in close contact with someone with TB disease, it is important to go to a clinic or health department for a TB skin test.

### **How is a person tested for TB?**

The tuberculin skin test is used to find out whether a person is infected with the TB germ. It does not tell whether the person has TB disease. For the skin test, a small amount of fluid--called tuberculin--is injected under the skin in the lower part of the arm. Two or three days later, a health care worker checks the site of the injection to see if there has been a reaction.

### **What does a positive reaction mean?**

A positive reaction to the tuberculin skin test usually means that the person has been infected with the TB germ. It does not necessarily mean that the person has TB disease. Other tests, such as a chest X-ray and a sample of sputum, are needed to see whether the person has TB disease.

### **How is TB disease treated?**

TB disease can be cured by taking several drugs for six to nine months. It is very important that people who have TB disease take the drugs exactly as prescribed. If a person stops taking the drugs too soon or if the drugs are not taken correctly, the germs that are still alive may become resistant to the drugs. This makes the disease much harder to treat. Generally, after the first several weeks of drug therapy, most TB patients become non-infectious.

### **How is TB infection treated?**

The drug used to prevent TB infection from developing into TB disease is isoniazid. It must be taken for six to 12 months. The drug may cause liver problems in certain people, especially older individuals and people with liver disease. Therefore, people who are taking isoniazid should be monitored carefully for signs of adverse reactions.