FACT SHEET

Tuberculosis

Tuberculosis (TB) is a bacterial infection that can happen anywhere in the body. It is usually found in the lungs but it can travel through the blood to the lymph nodes, brain, bones, kidney and spine or any part of the body. If not treated TB can be fatal. It was once the leading cause of death in the United States.

http://www.cdc.gov/tb/publications/faqs/qa_introduction.htm#Intro1

**Cause:** TB is a disease caused by the bacteria called *Mycobacterium tuberculosis*.

**Symptoms:** TB in the lungs may cause a persistent cough that lasts longer than two weeks, coughing up blood and chest pain. Other symptoms of TB disease can be feeling tired and weak, weight loss, loss of appetite, chills and night sweats.

**Spread:** TB is spread through the air from one person to another. The bacteria are put into the air when a person with TB disease of the lungs or throat coughs or sneezes. People nearby may breathe in these bacteria and become infected.

When a person breathes in TB bacteria, the bacteria can settle in the lungs and begin to grow. From there, they move through the blood to other parts of the body, such as the kidney, spine, and brain.

TB in the lungs or throat can be infectious. This means that the bacteria can be spread to other people. TB in other parts of the body, such as the kidney or spine, is usually not infectious.

People with TB disease are most likely to spread it to people they spend time with every day. This includes family members, friends, and coworkers.

**TB Infection:** In most people who breathe in TB bacteria and become infected, the body is able to fight the bacteria to stop them from growing. The bacteria become inactive, but they remain alive in the body and can become active later. This is called TB infection. People with TB infection have no symptoms, don't feel sick, can't spread TB to others, and usually have a positive skin test reaction. They can develop TB disease later in life if they do not receive preventive therapy.

Many people who have TB infection never develop TB disease. In these people, the TB bacteria remain inactive for a lifetime without causing
disease. But in other people, especially people who have weak immune systems, the bacteria become active and cause TB disease.

**TB Disease**: TB bacteria become active if the immune system can't stop them from growing. The active bacteria begin to multiply in the body and cause TB disease. Some people develop TB disease soon after becoming infected, before their immune system can fight the TB bacteria. Other people may get sick later, when their immune system becomes weak for some reason.

Babies and young children often have weak immune systems. People infected with HIV, the virus that causes AIDS, have very weak immune systems. Other people can have weak immune systems, too, especially people with any of these conditions: substance abuse, diabetes mellitus, silicosis, cancer of the head, or neck, leukemia or Hodgkin's disease, severe kidney disease, low body weight, certain medical treatments (such as corticosteroid treatment or organ transplants).

**Incubation**: Once a person is exposed to TB it usually 2-8 weeks to infect the body.

**Contagious**: As long as TB bacteria are discharged in the sputum.

**Diagnosis and Treatment**: Finding the bacteria in the sputum and culture confirming the specimens establishes the diagnosis. The most common drugs used to fight TB are:

- isoniazid (INH)
- rifampin
- pyrazinamide
- ethambutol
- streptomycin

**Surveillance and Reporting**: Preventions and control efforts should include:

1. identify and treat all persons who have TB disease
2. find and evaluate those who have been in contact with TB patients to identify TB infection or disease, and treat accordingly
3. test high-risk groups for TB infection to determine if they are candidates for latent infection and to ensure the completion of treatment

Suspected or active cases of TB should be isolated until they meet criteria for non-infectiousness. Persons already living in the household may continue normal activities. Those who have not previously been exposed should refrain from entering the home until the patient is no longer infectious.