

What is tuberculosis?

Tuberculosis (TB) is a bacterial disease usually affecting the lungs (pulmonary TB), caused by *Mycobacterium tuberculosis* complex, which includes *M. tuberculosis*, *M. bovis*, and *M. africanum*. Other parts of the body (extrapulmonary TB) can also be affected, for example, brain, lymph nodes, kidneys, bones, joints, larynx, intestines, or eyes.

Who gets TB?

The bacteria that cause TB are spread through the air. When a person with TB, who is not taking appropriate medication, coughs or sneezes, the germs get into the air. Prolonged exposure to the TB bacteria is normally necessary for infection to occur. Certain populations are at high risk of getting TB disease such as: people who have spent time with someone who has TB disease, people from a country where TB disease is endemic, people who live or work in high-risk settings (for example: correctional facilities, long-term care facilities or nursing homes, and homeless shelters), people who have Latent TB Infection (LTBI) and have an immunosuppressive condition are at risk of developing TB disease.

What is the difference between TB infection and TB disease?

TB infection may result after close contact with a person who has TB disease. TB infection is diagnosed by a significant reaction to the Mantoux skin test or a positive blood assay for tuberculosis with no symptoms of TB and no TB bacteria found in the sputum. TB disease is characterized by the appearance of symptoms, a significant reaction to a Mantoux skin test or a positive blood assay for tuberculosis, abnormal chest radiograph, and TB bacteria found in the sputum.

To spread the TB bacteria, a person must have TB disease. Someone with TB infection cannot spread the bacteria. TB may last for a lifetime as an infection, never developing into disease. TB disease is most likely to develop during the first 2 years after acquiring the infection. Additionally, individuals with weakened immune systems, such as persons infected with HIV, are at high risk of developing TB disease if TB infection is left untreated.

What are the symptoms of TB?

The symptoms of TB include low-grade fever, night sweats, fatigue, weight loss, and persistent cough. Some people do not have obvious symptoms.

How soon do symptoms appear?

Evidence of infection (a positive skin test) usually occurs 4-12 weeks after exposure. The most common period for developing clinical disease is 1-2 years after infection. Infection can remain latent with disease occurring much later in life.

When and for how long is a person able to spread TB?

TB disease may remain contagious until the person has been on appropriate treatment for at least two weeks. It is important to note that a person with TB infection, but not disease, cannot spread the infection to others, since there are no TB bacteria in the sputum.

What is the treatment for TB?

People with active TB disease must complete the prescribed course of medicine, which usually involves taking medications for 6 to 12 months. TB infection is treated with a single drug or two drug combination; treatment of TB disease usually requires three or more drugs. The exact medication plan must be determined by a physician.

What can be the effect of not being treated for TB?

In addition to spreading the disease to others, an untreated person can become severely ill or die.

What can be done to prevent the spread of TB?

The most important way to stop the spread of tuberculosis is to cover the mouth and nose when coughing and to take prescribed medicine as directed. Persons with disease should have respiratory precautions until symptoms are improved and there is documentation of adequate response to therapy by three consecutive negative sputum smears collected on different days. All household and close contacts of a person with active TB disease should be screened, using the Mantoux skin test or blood test, for evidence of infection. All contacts with evidence of infection should be evaluated for treatment by a physician. All high-risk populations should be TB skin tested routinely.

For more information, please visit these websites:

- CDC Tuberculosis: www.cdc.gov/tb
- CDC Travelers' Health Tuberculosis: wwwnc.cdc.gov/travel/diseases/tuberculosis
- WHO Tuberculosis: www.who.int/health-topics/tuberculosis