TB is a disease that can cause a serious illness and can damage a person's organs. Every year more than 25,000 people in the U.S. are diagnosed with TB disease. That's only a fraction of the amount of people who carry the Mycobacterium tuberculosis. Mycobacterium tuberculosis is a rod-shaped bacterium. TB is spread through the air by carriers of the germ. People who breathe the same air can become infected with the TB germ. People who do work around or with people with the TB disease should take medicine. TB infection means that the person has the TB germs but they are in an inactive state. When TB germs enter the body, the immune system builds a wall around them. While TB germs are inactive, they cannot cause any damage. These germs can stay alive for many years in these walls and eventually break out. At this time TB is active then it becomes TB disease. It can now affect the system's organs. A person can have TB disease shortly after being infected with TB germs if the person's immune system is weak.

TB can attack any part of the system. The lungs are the most common area of attack. People with the TB disease have one or more of the following symptoms: a cough that hangs on, fevers, weight loss, night sweats, constant fatigue, and loss of appetite. A person with the TB disease in the late stages will cough up blood streaked sputum. People who have Active TB disease usually only have mild symptoms. There are three tests to diagnose TB disease. One is the Tuberculin Mantoux PPD skin test; two is a Chest X-ray which is given after the Skin test is positive; three Sputum Test reveals if TB germs are in thick liquid a person coughs up. The Tuberculin Mantoux PPD skin test is given by placing a substance called PPD Tuberculin under the top layer of the skin with a very small needle and syringe. The doctor will inject the needle into the skin which will only feel like a slight pen prick. A few days later the skin test reaction will be read by a trained health worker. If the skin around the prick is raised and it is bigger or the same size as a pencil eraser then the person is likely to have been infected with TB germs. This does not mean he or she has TB disease. You should always retest yourself even if the first test was negative for a few reasons. If your immune system has been weakened, then your immune system may not react to the skin test. The test also might have been taken too early after infection because the blood has not been infected.

Inactive and Active TB can be treated by various ways. If you work or are around people with Active TB you should take medicine. Just because you are infected with TB germs doesn't mean you have TB disease. Having inactive TB will not hurt you now but you could develop TB disease later in life with out taking appropriate medicine. By taking medicine now you can wipe out the germs before they become active. People who have other illnesses that weaken their immune system should especially take medicine to prevent TB disease. The most common medicine to take is called Isoniazid or INH. Almost everybody can take INH. Some physicians will not give it to people over the age of thirty-five or to people with health problems that might be affected by INH. You must take INH for six months to completely wipe out TB germs. People who have other serious infections like HIV usually need to take for a longer period of time. INH is a very safe drug but can cause side-effects to some people. Changes you should look out for are yellowish skin, dark urine, vomiting, loss of appetite, nausea, changes in eyesight, unexplained fever, unexplained fatigue, and stomach cramps. There are other medicines as well for example rifampin. There is also an unproven vaccination called the BCG Vaccination. People that have had a BCG that have not had a skin test usually have to take the skin test when applying for work or school related environments.

Bibliography

Compton's Interactive Encyclopedia 96
Topic Search-Tuberculosis

Internet
Stanford University - Tuberculosis
http://molepi.stanford.edu/
Tuberculosis Resources
http://www.cpmc.comlumbia.edu/

World book
1997, Volume 19, Pages 389-391

The Merck Manual
1987, Fifteenth Edition, Pages 113-126