

## TUBERCULOSIS

### **What is tuberculosis infection? How is it different than tuberculosis disease?**

Tuberculosis (TB) infection is caused by a bacterium called *Mycobacterium tuberculosis*. Tuberculosis infection occurs when TB germs are inhaled into the lungs. In most cases, the TB germs inhaled into the lungs remain inactive, and do not cause symptoms of illness. TB disease, however, is different than TB infection. TB disease occurs when inhaled germs become active, causing symptoms of illness. Risk of disease developing following TB infection is low. Early diagnosis of TB infection, followed promptly by preventative treatment, is key to stop development or spread of TB disease.

### **How is tuberculosis spread?**

Tuberculosis germs are spread to others through the air when a person with TB disease in the lungs coughs, sneezes or talks. People who have been in contact with/exposed to a case of TB disease, even those who become infected, cannot spread the disease to others unless they subsequently develop tuberculosis disease in their lungs.

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

Symptoms of TB disease in the lungs may include a cough productive of phlegm lasting more than three weeks, loss of appetite, loss of weight, tiredness, night sweats, fever, and blood in the sputum.

### **How is tuberculosis diagnosed?**

TB disease is diagnosed by medical history, review of symptoms, chest x-ray and testing of sputum.

### **What is a Tuberculin Skin Test?**

A tuberculin skin test (TST) shows if a person has been infected with the TB germ. A small amount of testing fluid is injected under the skin of the forearm. The test spot is checked 48 to 72 hours later by a nurse where the test was given. The size of the swelling (not redness) is measured. Depending on the amount of swelling and the medical history, the reaction is classified as significant or not. For significant TST reactions, a chest x-ray, sputum test, and review of symptoms may be done to confirm or rule out tuberculosis disease. Prior TB vaccination ("BCG") may affect TST results.

### **What is a TB blood test?**

The TB blood test – called QuantiFERON-TB Gold – assists with diagnosing *Mycobacterium tuberculosis* infection. QuantiFERON-TB Gold test results are not affected by prior BCG (Bacille Calmette-Guérin) vaccination. A positive blood test result is followed by further clinical evaluation (in conjunction with chest x-ray and sputum test) to confirm or rule out tuberculosis disease.

### **How is tuberculosis treated?**

TB is treated with a combination of TB medications taken regularly for six to nine months.

### **How can the spread of tuberculosis be prevented?**

Early diagnosis and treatment of TB disease is the key to stopping the spread of disease.

### **Is there a vaccine for tuberculosis?**

There is a vaccine called Bacille Calmette-Guerin (BCG) vaccine but this has not proved to be effective at preventing tuberculosis disease in North America. At present, it is not routinely used.