

WHAT IF YOU ARE A CLOSE CONTACT TO A TUBERCULOSIS (TB) CASE?

This guidance is for people who are identified as a **Close Contact** to an individual diagnosed with Tuberculosis (TB) disease. You may have been exposed to TB if you spent time near someone with TB disease of the lungs or throat. Prolonged exposure is normally necessary for people to become infected with TB. People who are newly infected with TB usually are classified as having latent TB infection, or TB infection for short.

What is Tuberculosis (TB)?

Tuberculosis is a bacterial disease caused by *Mycobacterium tuberculosis*. TB usually affects the lungs, but it can also affect other parts of the body such as the brain, lymph nodes, kidneys, bones, joints, larynx, intestines, or eyes. TB symptoms may include cough that last 3 weeks or longer, pain in the chest, coughing up blood or sputum, weakness/fatigue, unintentional weight loss, chills, fever, and night sweats. When a person with infectious TB disease coughs or sneezes, droplet nuclei containing *M. tuberculosis* are expelled into the air. If another person inhales air containing these droplet nuclei, they may become infected. However, not everyone infected with TB bacteria becomes sick. As a result, two TB-related conditions exist: TB disease and TB infection.

People with **TB disease** are sick from TB bacteria that are active and replicating, meaning that they are multiplying and destroying tissue in their body. These people usually have symptoms of TB disease. People with TB disease of the lungs or throat are capable of spreading their illness to others. They are prescribed antibiotics that can treat TB disease.

People with **TB infection** get infected by breathing in TB bacteria that a person with TB disease coughs into the air. Those with TB infection have TB bacteria in their bodies, but they are not sick because the bacteria are not active. One cannot get TB from someone's clothes, drinking glass, eating utensils, handshake, toilet, or other surfaces where a TB patient has been. People with TB infection do not have symptoms of TB disease and they cannot spread the bacteria to others. However, they may develop TB disease in the future when their immune system becomes weak for another reason. The only way to find out if they have TB infection is through testing. People with TB infection are prescribed treatment to prevent them from developing TB disease.

Testing for TB Infection

Persons who are at high-risk for TB infection include people who have been in close contact with a person with TB disease. If you are identified as a close contact to a TB case, the first step is to have either a TB skin test (TST) or TB blood test to determine if you are infected with the TB bacteria.

TB Skin Test (TST) is placed when a healthcare worker injects a small amount of fluid under the skin on the forearm. The fluid will react with a person's immune system and will grow into a raised bump if reactive. To receive a result, the test must be assessed and measured by a healthcare worker within 48-72 hours.

TB Blood Test, which is also called an Interferon Gamma Release Assay (IGRA), tests to determine if the bacteria that cause TB infection or disease are within a person. People who are unable to have a test result read by a healthcare provider within 48-72 hours may benefit from the blood test.

A positive TB skin test or TB blood tests only tells that person has been infected with TB bacteria. Other tests are needed to determine if someone is only infected or has progressed to TB disease. People who are close contacts

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to someone with TB disease have the option to obtain free TB testing through the local health department or testing can be coordinated through visit with your primary care provider for testing at the patient's expense.

How many tests do I need?

People exposed to someone with TB disease will likely be recommended to be screened as soon as possible, and then at least 8-10 weeks after the last time they spent time with the person with TB disease. If both tests are negative, it is unlikely that the exposure(s) to the person with TB disease caused them to be infected with TB.

What if I test positive?

When a TST or blood test is positive, this means that a person likely is infected with TB bacteria. Further testing is necessary to determine if a person has TB infection or TB disease. A healthcare provider will perform a chest x-ray or a CT scan to look at a person's lungs and may submit a sputum sample to look for the TB bacteria in the laboratory. If there is no evidence of TB disease in a chest x-ray or CT scan, no TB bacteria present in sputum and/or no symptoms present of TB disease, a healthcare provider will likely determine that a person only has a TB infection. People with TB infection can cure their infection by taking antibiotics prescribed by a physician.

If the chest x-ray or CT scan show signs of TB disease and/or the sputum shows TB bacteria, a healthcare provider will likely determine a person has TB disease. People with TB disease will be placed in isolation and started on an antibiotic regimen to cure their TB disease.

Do I need to isolate/quarantine?

Close contacts to a TB case do not need to quarantine. Similarly, people with TB infection who have been cleared of a TB disease diagnosis can participate in all activities whether they are receiving treatment or not. As always, respiratory etiquette is recommended. However, if you are exhibiting TB-symptoms such as, cough that last 3 weeks or longer, pain in the chest, coughing up blood or sputum, weakness/fatigue, unintentional weight loss, chills, fever, and night sweats, please seek urgent medical care. People diagnosed with TB disease should be isolated from the public until they have started their antibiotic regimen and have been cleared by their physician.

What is the treatment for TB?

TB infection is usually treated with Isoniazid (INH), Rifampin (RIF) or Isoniazid and Rifampin (3HR). Regimen, dosage, and duration will be determined by a medical provider.

TB disease generally is treated with a combination of several medications for 6 to 12 months. It is important that people who have TB disease finish the medicine and take the drugs exactly as prescribed by their doctor. If they do not take the drugs correctly, the bacteria that are still alive may become resistant to those drugs. TB that is resistant to drugs is harder and more expensive to treat.

What if I was treated for TB Disease or TB Infection before?

People who have been treated for TB disease or TB infection in the past are able to become infected again.

For more information on TB, please visit www.health.nd.gov/TB or www.cdc.gov/TB