TB Elimination *Tuberculosis Information for Employers in Non-Healthcare Settings*

What is tuberculosis (TB)?

Tuberculosis (TB) is a disease caused by bacteria called *Mycobacterium tuberculosis* that are spread from person to person through the air. TB usually affects the lungs, but it can also affect other parts of the body, such as the brain, the kidneys, or the spine. Not everyone infected with TB bacteria becomes sick. As a result, two TB-related conditions exist: latent TB infection and TB disease.

What is latent TB infection?

Persons with latent TB infection (LTBI) do not feel sick and do not have any symptoms, but usually have a positive reaction to the tuberculin skin test or TB blood test. They are infected with TB bacteria, but do not have TB disease. Persons with LTBI are not infectious and cannot spread TB infection to others.

What is TB disease?

In some people, TB bacteria overcome the defenses of the immune system and begin to multiply, resulting in the progression from latent TB infection to TB disease. Some people develop TB disease soon after infection, while others never develop TB disease or develop it later in life when their immune system becomes weak. Persons with TB disease usually have symptoms, are considered infectious, and may spread TB bacteria to others.

What are the symptoms of TB?

The general symptoms of TB disease include feelings of sickness or weakness, weight loss, fever, and night sweats. The symptoms of TB disease of the lungs may also include coughing, chest pain, and the coughing up of blood. Symptoms of TB disease in other parts of the body depend on the area affected.

| A person with latent TB infection (LTBI) | A person with TB disease |
|---|--|
| Usually has a TB skin test or blood test result indicating TB infection | Usually has a TB skin test or blood test result indicating TB infection |
| Has a normal chest x-ray and a negative sputum test | May have an abnormal chest x-ray, or positive sputum smear or culture |
| Has TB bacteria in his/ her body that are alive, but inactive | Has active TB bacteria in his/her body |
| Does not feel sick | Usually feels sick and may have symptoms such as coughing, fever, and weight loss |
| Cannot spread TB bacteria to others | May spread TB bacteria to others |
| Needs treatment for latent TB infection to prevent TB disease | Needs treatment for TB disease |

How is TB spread?

TB bacteria are released into the air when a person with TB disease of the lungs or throat coughs, sneezes, speaks, or sings. These bacteria can stay in the air for several hours, depending on the environment. Persons who breathe in the air containing these TB bacteria can become infected; this is called latent TB infection. A person with latent TB infection cannot spread TB to others. Persons with TB disease are most likely to spread the bacteria to other people they spend time with every day, such as family members or coworkers. Anyone who has been around someone who has TB disease should go to the doctor or local health department for TB tests.

TB is not spread through eating utensils, countertops, chairs, doorknobs, or other surfaces where a TB patient has been.

What should I do if an employee reports having a positive TB test or that he or she has been in contact with someone who has TB?

It is important to remember that only a person with TB disease can transmit TB bacteria to others. If an individual has been around someone with TB disease, he or she can get TB infection. However, not everyone infected with TB germs becomes sick. A person with latent TB infection cannot spread germs to other people, but can develop TB disease in the future.

For additional information, contact your local or state <u>TB control program</u>. They can advise you about what should be done.

What will happen after I contact my local or state TB control program for assistance?

The TB control program will determine if the employee has latent TB infection or TB disease. Since people with latent TB infection cannot spread TB to others, nothing further will need to be done in the workplace. However, if the employee has TB disease, the TB control program may start a contact investigation. The investigation will help them find out how the employee may have been exposed to TB and to determine who else might be at risk. During the investigation, the health department will ask the employee about his or her job, such as the work hours, working conditions, and people who work closely with him or her. The TB control program may set up an appointment to talk with you and to tour your workplace. They may also want to talk to people who regularly visit your workplace. Throughout the investigation, they will work with you to make sure that the employee's identity is kept confidential.

Additional Information

- 1. CDC. Questions and Answers About TB. <u>http://www.cdc.gov/tb/publications/faqs/</u> <u>default.htm</u>
- 2. CDC. Tuberculosis: General Information. http://www.cdc.gov/tb/publications/ factsheets/general/tb.htm
- 3. CDC. The Difference Between Latent TB Infection and TB Disease. <u>http://www.cdc.gov/tb/publications/</u> <u>factsheets/general/LTBIandActiveTB.htm</u>
- 4. Interferon-Gamma Release Assays (IGRAs)-Blood Tests for TB Infection. <u>http://www.cdc.gov/tb/publications/</u> <u>factsheets/testing/IGRA.htm</u>
- 5. CDC. Tuberculin Skin Testing. http://www.cdc.gov/tb/publications/ factsheets/testing/skintesting.htm
- CDC. Protect Your Family and Friends from TB: The TB Contact Investigation. <u>http://www.cdc.gov/tb/publications/</u> <u>pamphlets/TB_contact_investigation.pdf</u>
- 7. TB Control Programs. http://www.cdc.gov/tb/links/tboffices.htm

http://www.cdc.gov/tb

January 2012