

ALLEGAN COUNTY HEALTH DEPARTMENT

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Office Administration

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Bioterrorism Preparedness

673-5411

Personal Health

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Communicable Disease

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Environmental Health

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Resource Recovery

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Tuberculosis (TB)

What is Tuberculosis (TB) disease?

Tuberculosis (TB) is caused by a bacterium called *Mycobacterium tuberculosis*. The bacteria usually attack the lungs, but TB bacteria can attack any part of the body, such as the kidney, spine, and brain. TB in the lungs (pulmonary TB) may cause a persistent cough that lasts longer than 2 weeks, pain in the chest, coughing up blood or sputum, weakness, feeling very tired, weight loss, decreased appetite, chills, fever, and night sweats. Some people may not have obvious symptoms. TB disease can be treated by taking several drugs for 6 to 12 months. It is very important that people who have TB disease finish the medicine, and take them exactly as prescribed. If not treated properly, TB can be fatal. A person with TB disease may remain contagious until he/she has been on appropriate treatment for several weeks.

How is it spread?

Tuberculosis is spread through the air when a person with untreated pulmonary TB coughs or sneezes. Prolonged exposure to a person with untreated TB usually is necessary for infection to occur.

What is latent TB infection (LTBI)?

A person with LTBI has inhaled bacteria into his/her lungs. The immune system captures the TB bacteria, preventing illness or disease. The person has LTBI. A person with LTBI does not feel sick and cannot spread TB bacteria to others. However, LTBI may progress to TB disease in the future, especially if the person's immune system weakens. To prevent progression of LTBI to TB disease, every effort should be made to begin appropriate treatment and ensure completion of entire course of treatment for LTBI.

Why does LTBI progress to TB disease?

Certain groups of people with weakened immune systems (serious illness, diabetes, poor eating habits, heavy drinking) are at high risk of developing TB disease once infected with TB bacteria. The highest risk of developing TB disease is within the first 2 years of becoming infected with TB bacteria. After the first 2 years, there is about a 10% chance of developing TB disease in a person's lifetime. People with both LTBI and HIV infection have a much greater risk of developing TB disease.

What is the treatment for tuberculosis?

People with latent TB infection should be evaluated for a course of preventive therapy, which usually includes taking antituberculosis medication for several months. Treatment for LTBI will help your immune system fight the TB bacteria and reduce the risk of active TB disease by more than 90%. Because there are fewer bacteria in a person with LTBI, treatment is easier and usually requires one drug. It is important that the medication is taken as prescribed.

People with active TB disease must complete a course of treatment for six months or more. Initial treatment includes at least four anti-TB drugs, and medications may be altered based on laboratory test results. The exact medication plan must be determined by a physician. Directly observed therapy (DOT) programs are recommended for all TB patients to help them complete their therapy.

How do I know if I have LTBI or TB disease?

There are 2 kinds of tests that are used to determine if a person has been infected with TB bacteria:

- The TB skin test (also called the Mantoux tuberculin skin test) is performed by injecting tuberculin fluid under the skin in the lower part of the arm. A person given a skin test must return within 48-72 hours to have a trained health care professional look for a reaction on the arm
- TB blood tests (also called interferon gamma release assays or IGRASs) measure how the immune system reacts to the bacteria that cause TB.

If a person has a positive (abnormal) TB skin test or TB blood test result, this means their body is infected with TB bacteria. Additional tests (chest x-ray, sputum exam, and medical examination) are necessary to determine if the person has LTBI or TB disease.

What can be done to prevent the spread of tuberculosis?

The most important way to stop the spread of tuberculosis is for TB patients to cover the mouth and nose when coughing, and to take all the TB medicine exactly as prescribed by the physician.

Is TB treatment safe?

Most people complete treatment without problems, but sometimes these drugs may cause inflammation of the liver. Your health care provider can order blood tests to monitor.

More information is available at www.cdc.gov/tb or www.michigan.gov/tb.

This fact sheet is not intended to replace the advice of your physician. Please contact your healthcare provider if you have concerns regarding your health. If you have general questions, you may contact an Allegan County Public Health Nurse at 269-673-5411