Tuberculosis

What is tuberculosis?

Tuberculosis, or TB, is a disease caused by a germ, or bacterium, called *Mycobacterium tuberculosis*. The germ can attack any part of the body, but it usually attacks the lungs. TB was once the leading cause of death in the United States, and it is still a leading cause of death in the world.

What are the symptoms of TB?

Symptoms of tuberculosis depend on where in the body the TB germs are growing. TB germs usually grow in the lungs. TB in the lungs may cause:

- a bad cough that lasts longer than 2 weeks
- pain in the chest
- coughing up blood or sputum (phlegm from deep inside the lungs)
- weakness or fatigue
- weight loss
- no appetite
- chills
- fever
- sweating at night

How does someone get TB?

Tuberculosis is spread through the air from one person to another. The germs are coughed or sneezed into the air by a person who is sick with TB disease of the lungs or throat. People nearby may breathe these in and become infected. The germs can settle in the lungs and begin to grow. From there they can move through the blood to other parts of the body, such as the kidney, spine, and brain. TB in the lungs or throat can be infectious, i.e., the germs can be spread to other people. TB in other parts of the body usually cannot spread to others. People who can spread germs to others must stay at home: out of school, work, or other public places.

What is the difference between active TB and latent TB infection?

In most people who breathe in TB germs and become infected, the body is able to fight the bacteria to stop them from growing. The germs become inactive, but they remain alive in the body and can become active some time in the future. This is called latent TB infection.

A Person with Latent TB Infection (LTBI)	A Person with Active TB Disease
Has TB germs in his/her body, but the germs are inactive	Has active TB germs in his/her body
Does not feel sick and cannot spread the germs to others	Feels sick and experiences symptoms such as coughing, fever, and weight loss
Has the potential to one day get sick if the TB germs become active and multiply	Is capable of spreading the disease to others if the TB germs are active in the lungs or throat

Is there a test for TB?

A TB skin test is the only way to find out if you have latent TB infection. You can get a skin test at your doctor's office. A health care worker will inject a small amount of testing fluid (called tuberculin) just under the skin of the lower part of your arm. After 2 or 3 days, the health care worker

will measure your reaction to the test. You should get tested for TB if:

• you have spent time with a person with known or suspected TB disease

• you have HIV infection or another condition that puts you at high risk for TB

• you think you might have TB disease

• you are from a country where TB disease is very common (most countries in Latin America and the Caribbean, Africa, Asia, Eastern Europe)

• you live somewhere in the U.S. or in a setting where TB disease is more common (for example: some large cities, homeless shelters, migrant farm camps, correctional facilities, and some nursing homes).

Is there a vaccine for TB?

BCG is a vaccine for TB, but it is not used in the U.S. It is often given to infants and small children in countries where TB is common to prevent them from getting seriously ill with TB disease. BCG does not always protect people from getting sick with TB and it does not prevent latent TB infection. If you were vaccinated with BCG, you can still have a TB skin test to determine if you are infected with TB germs.

Are there certain risk factors for TB?

Anyone can be infected with tuberculosis. The germs can become active if the body's ability to fight disease (the immune system) cannot stop them from growing. The active germs begin to multiply in the body and cause TB disease. Some people develop TB disease soon after becoming infected, before their body can fight the TB bacteria. Other people may get sick later, when their immune system becomes weak for some reason. Babies and young children often have weak immune systems. Other people can have weakened immune systems, too, especially people with any of these conditions:

• HIV, the virus that causes AIDS
• substance abuse
• silicosis
• cancer of the head and neck
• leukemia or Hodgkin's disease
• severe kidney disease

• low body weight/malnutrition
• certain medical treatments (such as cortico-steroid treatment or organ transplants)
• diabetes

Is there a cure for TB?

Yes, TB disease can almost always be cured with medicines taken for at least 6 months, but the medicine must be taken exactly as you are instructed and all the medicine must be finished. Several different drugs are used to treat someone with TB disease because there are many germs to be killed and several different drugs together do a better job of killing all the bacteria and preventing them from becoming resistant to the drugs. People with latent TB infection can usually take one medicine for 9 months to prevent them from getting sick with TB disease in the future.

What do I do if I have some of the symptoms of TB or think I might have been exposed to TB?

Contact your health care provider as soon as possible.

How did the New Hampshire Division of Public Health find out that I have TB or LTBI?

TB and LTBI are two of over 50 diseases required by New Hampshire law to be reported to the NH Division of Public Health. Public health staff members might contact you to discuss your diagnosis and treatment. It is their job to be sure you get better and don't spread disease to other people in your family or community.

For specific concerns about tuberculosis, call the New Hampshire Department of Health and Human Services, Communicable Disease Control Section at 1-603-271-4496 or 1-800-852-3345 x4496. For further information, refer to the Centers for Disease Control and Prevention website at www.cdc.gov or the New Hampshire Department of Health and Human Services website at www.dhhs.nh.gov.