Some people with HIV infection will have a negative test result even if they are infected with TB germs. This is because the immune system, which causes the reaction to the tests, is not working properly. People with HIV who have a negative TB test may need further medical evaluation, especially if they have symptoms of TB disease.

#### What if my TB test is positive?

A positive TB skin test or TB blood test usually means that you have been infected with the TB germs. It does not mean that you have TB disease. Other tests, such as a chest x-ray or sputum (phlegm) sample, are needed to see if you have developed TB disease.

# What should I do if I have latent TB infection or TB disease?

Even if you have HIV, both latent TB infection and TB disease can be treated with medication. If you have latent TB infection and HIV, you are at high risk for developing TB disease. You will need treatment for latent TB infection as soon as possible to prevent TB disease. If you have TB disease, you must take medicine to treat the disease. Without treatment, TB disease can cause you to get very sick or even die. It's important to get the required follow-up tests, follow your doctor's advice, and take the medicine as prescribed.

For more information on TB or to get a TB test, call your doctor or local health department www.cdc.gov/tb/links/tboffices.htm.

For further information on TB visit: CDC Division of Tuberculosis Elimination Website at **www.cdc.gov/tb.** 



### TUBERCULOSIS: THE CONNECTION BETWEEN TB AND HIV



U.S. Department of Health and Human Services Centers for Disease Control and Prevention People living with HIV are more likely than others to become sick with tuberculosis (TB). This is because HIV weakens the immune system, which makes it harder for the body to fight TB germs.

#### What is TB?

TB is a disease that usually affects the lungs. TB sometimes affects other parts of the body, such as the brain, the kidneys, or the spine. TB disease can cause death if it is not treated.

#### How is TB spread

TB germs are spread from person to person through the air. TB germs are put into the air when a person with TB disease of the lungs or throat coughs, sneezes, laughs, or sings. People nearby may breathe in the germs and become infected. TB is NOT spread by sharing silverware or cups, or sharing saliva when kissing someone.

# What is the difference between latent TB infection and TB disease?

#### Latent TB infection

Not everyone infected with TB gets sick. People who are infected, but are not sick, have what is called latent TB infection. People with latent TB infection have TB germs in their body, but they are not sick because the germs lie dormant (sleeping) in their body.

People with latent TB infection do not have symptoms and cannot spread the germs to

others. However, these people could develop TB disease in the future, especially if they have HIV. To prevent developing TB disease, people with latent TB infection can take medicine.

#### TB disease

People with TB disease are **sick** from the large number of TB germs that are active in their body. They usually have one or more of the symptoms of TB disease. People with TB disease often feel weak or sick, lose weight, have fever, and have night sweats. If TB disease is in their lungs, they may also cough and have chest pain, and they might cough up blood. Other symptoms depend on what part of the body is affected by the TB germs.

People with TB disease may spread TB germs to others. TB disease needs to be treated with medicine. If NOT treated, a person with TB disease can have serious health problems and die.

### Why is it important to know if I am infected with both TB and HIV?

If you have HIV, it is important to know if you have TB infection because HIV weakens the immune system. When a person's immune system is weak, latent TB infection can quickly progress to TB disease. If you have HIV, it is very important to get a TB test.

If you have latent TB infection or TB disease, and you do not know your HIV status, you should get an HIV test. This will help your physician know how to treat both your TB and HIV infections.

#### **Good News!**

The good news is that latent TB infection and TB disease can be treated. The first step is to find out if you are infected with the TB germs. You can do this by getting a TB skin test or TB blood test. You can get this TB test from your doctor or the local health department.

#### How are the TB tests given?

For a TB skin test, a health worker uses a small needle to put some fluid, called tuberculin, just under your skin. This is usually done on the lower inside part of your arm. After you get the test, you must return in 2 to 3 days to see if there is a reaction to the test. If there is a reaction, the size of the reaction is measured to determine if you have a positive result.

If you receive the TB blood test, a sample of your blood will be taken to do the test. Your health care worker will tell you how to get the results of your test.

### What if my TB test is negative?

A negative test usually means you are not infected with TB germs. However, the tests may be falsely negative if you have a weakened immune system or if you were infected recently. This is because it usually takes 2 to 8 weeks after exposure to a person with TB disease for your immune system to produce a response to the test. If you have a negative result and it has been less than 8 weeks since you were last exposed to TB disease, you may need to get a second test. Your health care worker will let you know if you need another test.