

**FACT SHEET**  
**OKLAHOMA STATE DEPARTMENT OF HEALTH**  
**TB DIVISION**

**TB/HIV**

**What is TB?**

TB (tuberculosis) is an infectious disease caused by a bacteria (*Mycobacterium tuberculosis*) which usually affects the lungs. The TB germ can be spread by very small droplets which gel into the air when a person with TB disease in the lung coughs, sneezes, laughs or sings. The TB germ floats in the air and can be breathed in by anyone who is around the person with TB disease.

**What is the difference between “TB Infection” and “TB Disease”?**

People with TB infection (without disease) have TB germs living in their body but they are **not** made sick by the germs. These people cannot spread **TB to** others, but can develop TB disease in the future. In general, only one out of 10 TB infected persons will get TB disease during his/her lifetime; the other nine persons will never get TB.

People with TB disease usually have symptoms of TB and are sick. Persons with **TB of the lung can spread TB to other people**. After the first few weeks of taking TB medication most people with TB can no longer cause other people to catch the TB germ. However, to get well they must continue to take TB medications for 6-9 months and occasionally longer.

**How does someone find out they are infected with the TB germ?**

The TB skin test is used to detect TB infection. A person with a “positive” skin test has TB germs living in his/her body. A chest x-ray is done to check for TB disease in the lung. If the x-ray is abnormal or you have a cough, sputum you cough up from your lung may be collected for culture to look for the TB germ. All HIV-infected individuals should have a TB skin test done as soon as is possible after the HIV infection is diagnosed to check for TB infection.

**What are the symptoms of TB disease (“active” TB)?**

The most common symptoms are a cough lasting more than three weeks, low-grade fever, chills, night sweats, loss of appetite, weight loss, and occasionally coughing up blood.

**How do I protect myself when someone has “active” TB?**

TB is more easily spread in rooms where air flow is poor. Risk is increased when you are with the person who has TB for a long period of time and the person is coughing. You can reduce your risk of catching TB infection by:

- 1) asking people to cover their mouth and nose when coughing or sneezing and
- 2) increasing air flow when you are with the person who has TB (for example, being outside in the fresh air or putting a fan in an open window with the fan blowing room air out of the window).

### **What happens when a person has both TB and HIV?**

When a person's immune system is damaged, TB infection may become "active" and cause disease. Tuberculosis disease is an AIDS-defining illness for HIV-infected persons.

Like many other infections, TB is more serious in someone with HIV:

- When healthy people get a TB infection, only one out of 10 (10%) will get TB disease in his/her lifetime.
- When HIV-infected persons get infected with the TB germ, one out of three persons will get TB disease within one year. After the first year one person in 10 will get TB disease each year thereafter.

The TB skin test may be falsely negative when a person has both TB and HIV infection. This is because the immune system is damaged by HIV. A person who has HIV should have a TB skin test, possibly other skin tests and a chest x-ray to check for TB as soon as possible after HIV infection is diagnosed.

To insure effective therapy, people who have both HIV and TB infection will need to get TB preventive treatment for a longer period of time (12 months). A person with HIV is more likely to have TB disease in parts of the body outside the lung. Tuberculosis disease may greatly increase the HIV viral load in patients with TB disease and AIDS. With successful treatment of TB disease the viral load goes down.

### **Should I be concerned about getting TB from someone who is HIV infected?**

A person with TB disease can spread TB infection to others, whether they have HIV or not. The person with TB and AIDS cannot spread TB infection more easily than someone with TB disease alone. However, HIV-infected persons are more likely to develop TB disease if they become infected with TB.

### **What is MDR-TB?**

MDR-TB stands for multi-drug resistant TB. Drug resistance develops when people do not take their TB medicine as ordered by the doctor. When an MDR-TB germ is present the strongest and best drugs for TB treatment will not work, requiring treatment with less effective drugs for a longer period of time. TB due to drug resistant germs is more difficult to treat. It may be impossible to cure MDR-TB in some persons.

### **What are "atypical TB germs"?**

Atypical TB germs are germs similar to the TB germ but infection with them cannot be spread from person to person. These germs are acquired from dust, water, food, milk or from certain animals by breathing in particles or ingesting germs or by contaminating a cut in the skin. These germs do cause disease in people with HIV infection/AIDS.

If you have more questions about TB, call your county health department and ask to speak to the TB nurse.