Drug-Resistant Tuberculosis Fact Sheet

Tuberculosis Infection

Tuberculosis (TB) germs enter the air when a person with TB disease of the lungs or throat coughs, sneezes, speaks, or sings. These germs can float in the air for several hours, depending on the environment. People who breathe the air containing these germs can become infected. The risk of acquiring any type of tuberculosis appears to depend on several factors, such as extent of disease in the source patient, duration of exposure, and ventilation. People who become infected usually have been exposed for several hours (or days) in poorly ventilated or crowded environments.

The symptoms of TB disease in the lungs can include a bad cough lasting longer than three weeks, pain in the chest, coughing up blood or sputum, weakness or feeling very tired, weight loss, lack of appetite, chills, fever and night sweats. If exposed, it is important that the person attend regular follow-up medical examinations and that they see their doctor right away if they experience any symptoms of TB disease.

Drug Resistance

Drug-resistant tuberculosis occurs when the bacteria do not respond to common treatment for the disease. When a person with TB does not take his/her antibiotic medication properly, the bacteria may become resistant to the drugs. The person usually gets sick again, and may spread the drug-resistant TB bacteria to others. Both regular and drug-resistant tuberculosis are spread the same way.

Drug-resistant TB can occur more often in people who:

- have been infected by someone with drug-resistant TB disease

- do not complete the full treatment of antibiotic medication

- develop TB disease again, after past treatment

- were born in or lived in areas where drug-resistant TB is common.

There are two known types of drug resistant TB:

Multidrug-resistant TB

Tuberculosis that is resistant to the two most common antibiotics used to fight TB is called multidrug-resistant TB or MDR-TB. This is a serious problem that must be treated by a doctor who specializes in TB. A person with MDR-TB disease needs special antibiotics, must take drugs for a longer time, and the drugs usually have more side effects.

Extensively drug-resistant TB

Extensively drug-resistant tuberculosis (XDR-TB) is an uncommon type of MDR-TB that is not only resistant to the two most important drugs to fight TB, but is also resistant to two or more of the second-line drugs used to fight TB. This leaves fewer medications that can be used to treat persons with XDR-TB disease. XDR-TB is of special concern for persons with HIV infection or other conditions that can weaken the immune system. As with non drug-resistant TB, these persons are more likely to develop the disease once they are infected, and also have a higher risk of death if they develop the disease.