Tuberculosis disease

*Mycobacterium tuberculosis* is a bacterium that causes tuberculosis (TB) disease. TB disease is uncommon in Oregon. TB disease is curable but can be deadly if not treated. To avoid passing TB to others, people with infectious TB sometimes need to be isolated from other persons at home or in the hospital. Treating TB disease requires taking multiple pills for several months. The pills are usually given by a health care worker who observes the pills being taken (directly observed therapy) in order to ensure that drug resistance does not develop.

Spread of tuberculosis

*Mycobacterium tuberculosis* infection spreads when someone with TB disease in their lungs coughs or sneezes tiny particles into the air and the particles are inhaled by another person. For some people, exposure to these tiny particles will lead to TB infection (called latent TB infection, or LTBI). Although most people with LTBI will not get sick with TB disease, some will. TB disease can occur weeks to years after a person is first infected. Because of this, testing is recommended for contacts of TB disease cases to determine if they have developed TB infection or TB disease.

Latent TB infection and prevention of TB

Tuberculosis skin tests and newer blood tests can help identify people who have developed latent TB infection. People with positive TB skin tests or blood tests and no symptoms of TB usually do not have TB disease, and are not contagious to others. Compared to TB disease, LTBI is common in Oregon. It is estimated that about 5 percent of people have a positive skin test or blood test for tuberculosis. To prevent development of TB disease later on, people with LTBI are usually advised to take preventive medication.

Tuberculosis disease

The rate of TB disease in Oregon has declined steadily from 1985 to 2005. Since 2005, there have been an average of 1.9 cases per 100,000 Oregon residents each year. In 2015, 76 cases were reported, this was similar to the 74 reported cases in 2013 and 77 reported cases in 2014.

From 2010 through 2014, there were 461 cases of TB disease in Oregon: 4,456 contacts were identified for these cases; 3,457 (78%) were fully evaluated. Evaluation usually consists of skin or blood tests for TB infection (LTBI), and sometimes chest X-rays or other
tests to check for evidence of TB Disease. Of those evaluated, 20 were sick with TB disease, and 554 (16%) were diagnosed with LTBI. Of the 554 contacts with LTBI, 453 (82%) started preventive treatment, and 348 (77%) completed treatment.

The national tuberculosis goal is to eliminate TB in the United States (defined as <1 case per million). Nationally and in Oregon, the numbers of TB cases have been dramatically reduced compared to 20 years ago. In order to ensure this trend continues, the Oregon Public Health Division’s Tuberculosis Program focuses its efforts on preventing new cases of *Mycobacterium tuberculosis* infection and disease by finding and curing all persons with TB disease.

**Tuberculosis Program core activities**

1. Provide technical assistance and education to local health departments, health care facilities, correctional facilities, private medical providers and others on TB screening and the medical management of tuberculosis disease and infection.

2. Collect, report and analyze data on TB. Ensure statewide policy and administrative rules related to TB reflect the data’s findings.

3. Provide local health departments (LHDs) with the support needed to ensure TB infection and disease are detected early, treated appropriately and that persons with TB are treated equitably and ethically. To this end, the TB Prevention and Control Program provides LHDs with medications to treat TB, payments for chest X-rays, and funds (as available) for housing, food or transportation for patients to adhere to treatment regimens.

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