Tuberculosis

Tuberculosis (TB) is a communicable disease caused by *Mycobacterium tuberculosis*. The most common site for active TB disease is the lung; however, TB can occur in any organ in the body. TB is spread when persons with active pulmonary or laryngeal TB cough the bacteria into the air, and other persons inhale the bacteria into their lungs.

TB is preventable, treatable and curable. TB can be prevented by diagnosing and treating persons with active TB disease. It can also be prevented by identifying and treating persons with latent TB infection who, if untreated, are likely to develop active TB disease. Reporting of TB ensures that cases are treated and that contacts are identified and offered preventive antibiotics. The standard initial treatment for active TB in Oregon includes four drugs: INH, rifampin, pyrazinamide, and ethambutol pending susceptibility testing. Multidrug-resistant tuberculosis (MDR TB) is resistant to two or more of the standard TB drugs and requires treatment with second-line drugs.

The incidence rate of TB has been declining over the past decade. In 2009, a total of 89 cases of active TB disease were verified in Oregon, for a rate of 2.3 cases per 100,000 residents. Though an increase from the rate of 2.0 per 100,000 residents in 2008, Oregon’s TB rate continues to meet the Healthy People 2000 goal of less than 3.5/100,000.

Tuberculosis by year: Oregon, 1988–2009

Incidence of tuberculosis by age and sex: Oregon, 2009
Tularemia

Tularemia, also known as rabbit or deer-fly fever, has recently gained notoriety as a possible “category A” agent of bioterrorism. Tularemia is caused by *Francisella tularensis*, a hardy organism found in rodents, rabbits and squirrels; in ticks, flies and mosquitoes; and in contaminated soil, water and animal carcasses. Biovar type A, the most common type in North America, is highly virulent; as few as 10–50 organisms can cause disease.

General symptoms of tularemia include fever, malaise, myalgias, headache, chills, rigors and sore throat. Tularemia has six clinical forms, depending on portal of entry. Ulceroglandular tularemia is the most common form of the disease, accounting for 75% to 85% of naturally occurring cases. Other clinical forms include: pneumonic (pulmonary symptoms); typhoidal (gastral-intestinal symptoms and sepsis); glandular (regional adenopathy without skin lesion); oculoglandular (painful, purulent conjunctivitis with adenopathy); and oropharyngeal (pharyngitis with adenopathy).

Tularemia occurs throughout the United States. Persons become infected primarily through handling contaminated animals; the bite of infective deer flies, mosquitoes or ticks; direct contact with or ingestion of contaminated food, water or soil; or inhalation of infective aerosols. From 2000 to 2009, 20 cases of tularemia were reported in Oregon. Cases occurred in residents of 12 counties and were evenly spread across age groups. In 2008, there were four cases, in 2009, a single case.