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, deer 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.

Disease onset is usually sudden and symptoms are influenza-like; 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: pneumatic (pulmonary symptoms); typhoidal (gastrointestinal 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 2010, 23 cases of tularemia were reported in Oregon. Cases occurred in residents of 13 counties and were evenly spread across age groups. In 2009, there was one case, and in 2010, there were three cases.