

TULAREMIA Fact Sheet



The Disease

Tularemia, also known as “rabbit fever,” is a disease caused by the bacterium **Francisella tularensis**. Tularemia is typically found in animals, especially rodents, rabbits, and hares. Tularemia is usually a rural disease and has been reported in all U.S. states except Hawaii.

Tularemia is a widespread disease in animals. About 200 human cases of tularemia are reported each year in the United States. Most cases occur in the south-central and western states. Nearly all cases occur in rural areas, and are caused by the bites of ticks and biting flies or from handling infected rodents, rabbits, or hares. Cases also resulted from inhaling airborne bacteria and from laboratory accidents.

Why We Are Concerned About Tularemia As A Biological Weapon:

Francisella tularensis is highly infectious. A small number of bacteria (10-50 organisms) can cause disease. If ***Francisella tularensis*** were used as a bioweapon, the bacteria would likely be made airborne so they could be inhaled. People who inhale the bacteria can experience severe respiratory illness, including life-threatening pneumonia and systemic infection, if they are not treated.

Transmission

Typically, people become infected through the bite of infected insects (most commonly, ticks and deerflies), by handling infected sick or dead animals, by eating or drinking contaminated food or water, or by inhaling airborne bacteria. People have not been known to transmit the infection to others, so infected persons do not need to be isolated.

Symptoms

The signs and symptoms people develop depend on how they are exposed to tularemia. Possible symptoms include skin ulcers, swollen and painful lymph glands, puffy eyes, sore throat, mouth sores, diarrhea or pneumonia. If the bacteria are inhaled, symptoms can include sudden onset of fever, chills, headache, muscle aches, joint pain, dry cough, and progressive weakness. People with pneumonia can develop chest pain, difficulty breathing, bloody saliva, and respiratory failure. Tularemia can be fatal if the person is not treated with appropriate antibiotics. The incubation period (the time from being exposed to becoming ill) for tularemia is typically 3 to 5 days, but can range from 1 to 14 days.

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Treatment

Early antibiotic treatment is recommended whenever it is likely a person was exposed to tularemia or has been diagnosed as being infected with tularemia. Several types of antibiotics have been effective in treating tularemia infections. Health officials will test the bacteria in the early stages of the response to determine which antibiotics will be most effective.

A vaccine for tularemia is under review by the Food and Drug Administration and is not currently available in the United States.

Prevention

Tularemia occurs naturally in many parts of the United States. Use insect repellent containing DEET on your skin, or treat clothing with repellent containing permethrin, to prevent insect bites. Wash your hands often, using soap and warm water, especially after handling animal carcasses. Be sure to cook your food thoroughly and that your water is from a safe source.

Note any change in the behavior of your pets (especially rodents, rabbits, and hares) or livestock, and consult a veterinarian if they develop unusual symptoms.