



Hawaii State Department of Health

Disease Investigation Branch

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Tularemia

(Rabbit fever, Deerfly fever)

What is Tularemia?

Tularemia is a bacterial disease of humans and animals caused by the bacteria *Francisella tularensis*. Although many types of household, farm, and wild animals (especially rabbits, hares, muskrats, and beavers) can be infected, tularemia is most often spread to people from infected wild rabbits. Tularemia is not known to be present in Hawaii. The bacteria occurs naturally worldwide and could also be used as a bioterrorist weapon.

How do you get it?

People can become infected with tularemia by direct contact (through mucous membranes of the eyes, nose, and mouth, or cuts in the skin) with infected animals, inhaling the bacteria from contaminated environments, eating or drinking contaminated food or water, or by the bite from an infected insect, such as a tick or deerfly. Tularemia is not spread from person to person, so people with tularemia do not need to be isolated.

The bacteria can live for weeks to months in soil, water and vegetation.

What are the symptoms of tularemia?

The symptoms of tularemia vary by the route of infection. Initial signs are often flu-like, including fever, chills, nausea, headache, and joint pain. When tularemia is spread through a scratch or bite, a sore may appear at the site where the bacteria entered the body, and lymph nodes near the site may be swollen and painful. Swallowing the bacteria in food or water may cause sore throat, stomach pain, diarrhea, and vomiting. Inhaling the bacteria can produce fever, coughing, chest pain, shortness of breath, and a pneumonia-like illness.

When do symptoms start?

Signs of illness usually begin 3-5 days after exposure to the bacteria, but the onset may vary from 2-14 days.

What is the treatment for tularemia?

People should be treated as soon as possible at the first sign of illness with the right antibiotics prescribed by physicians, or it can be fatal. Tell the physician if you have had contact with wildlife or the environment in an area where tularemia has been diagnosed. Also tell the doctor if you are pregnant or have a weakened immune system.

How can you keep from getting it?

- Avoid contact with wildlife, especially if they appear ill. If you must handle wildlife, wear gloves and wash your hands after touching any animal.
- Wear protective gear (rubber gloves, goggles) when skinning or handling wild animals, such as rabbits, in areas where tularemia is found.
- Thoroughly cook wild game meats before eating.
- Wash fruits and vegetables before eating.
- Wear insect repellents and protective clothing to prevent bites of flies, ticks and mosquitoes in areas where tularemia is reported.
- Only drink from, and swim at, safe water sources.

For more information:

Centers for Disease Control and Prevention:

<https://www.cdc.gov/Tularemia/>

Iowa State University Center for Food Security and Public Health:

<http://www.cfsph.iastate.edu/DiseaseInfo/diseases.php?name=tularemia&lang=en>