



Tularemia

What is tularemia?

Tularemia, once commonly known as “rabbit fever”, is a bacterial disease of both humans and animals caused by the bacteria *Francisella tularensis*. Nationally, Oklahoma is one of the states with the highest numbers of reported tularemia cases each year.

How is tularemia spread?

Humans typically become infected with the tularemia-causing bacteria following the bite of an infected tick, and less commonly from the deer fly. The ticks associated with tularemia in Oklahoma are the dog tick and the lone star tick. In addition, humans have also developed the disease following exposure to infected wild animals. Although many wild and domestic animals have been infected, the rabbit is the most often involved in disease outbreaks. Other less common means of spread are drinking contaminated water; inhaling contaminated dust; handling contaminated pelts or paws of animals; or laboratory exposure. Tularemia is not spread from person to person.

Who gets tularemia?

All persons are susceptible to tularemia, but persons who spend long amounts of time outdoors are more likely to have exposure to infected ticks, deer flies, infected animals, or an area where an infected animal has died. Persons skinning or handling wild animals (especially rabbits) are at risk of exposure to tularemia. Mowing over sick or dead animals can cause contaminated dust to be released and inhaled. Laboratory personnel can be exposed when working with *F. tularensis* cultures.

What are the symptoms of tularemia?

Following the bite from an infected tick or contamination of a skin wound, the symptoms of tularemia would include fever, a sore on the skin, and painful swollen lymph glands. Ingestion of the organism may produce a throat infection, abdominal pain, diarrhea, and vomiting. Inhalation of the organism may produce a fever alone or be combined with a pneumonia-like illness.

How soon do symptoms appear?

Symptoms appear between one and 14 days, but usually after three to five days after exposure to the bacteria. If a person experiences a fever, or extreme soreness near the site of a tick bite within two weeks of a tick exposure, it is important to contact your doctor as soon as possible and tell him/her about the tick bite.

What is the treatment for tularemia?

Specific antibiotics prescribed by a doctor are very effective at reducing the severity of the disease.

Does past infection with tularemia make a person immune?

Long term immunity will follow recovery from tularemia. However, reinfection has been reported.

What can be done to prevent the spread of tularemia?

Avoid tick exposure, tick bites, and tick-infested areas. Minimize any contact with pets that might have ticks as well. Rubber gloves should be worn when skinning or handling animals, especially rabbits. Wild rabbit and other game meat should be cooked thoroughly before eating. Avoid drinking untreated water. Don't mow over dead or sick animals and wear a dust mask while mowing. Lab personnel should take appropriate precautions.

How should a tick be removed?

Any tick should be removed as soon as possible. The best way is to use tweezers to grab the tick as close to the skin as possible and pull it straight out. Do not squeeze the tick's body when removing it. Do not handle ticks with bare hands.