

# Tularemia

(Rabbit fever, Deer fly fever)

## Disease Fact Sheet

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### **What is tularemia?**

Tularemia, a disease that can affect both animals and humans, is caused by a bacterium, *Francisella tularensis*. Although many wild animals are infected (hares, rabbits, muskrats, beaver), some domestic animals can be infected (sheep, and cats). Rabbits are most often involved in human disease. The bacteria can also be found in ticks and deer flies.

### **Who gets tularemia?**

Hunters, trappers, hikers, campers, and others who spend a great deal of time outdoors, are exposed to tick and deer fly bites, and handle wild animals are at risk of exposure to tularemia.

### **How is tularemia spread?**

Many routes of human exposure to the tularemia bacteria are known. The common routes include: inoculation of the skin or mucous membranes with blood or tissue while handling, dressing or skinning infected animals; bites of infected deer flies or ticks; or handling or eating insufficiently cooked rabbit or hare meat. Less common means of spread are: drinking contaminated water; inhaling dust from contaminated soil; or handling contaminated pelts or paws of animals. Tularemia cannot be spread from one person to another. Rabbit meat can remain infective even after being frozen for several years.

### **What are the symptoms of tularemia?**

Tularemia is usually recognized by the presence of a skin lesion and swollen glands. Ingestion of the organism may produce a throat infection, intestinal pain, diarrhea, and vomiting. Inhalation of the organism may produce a fever alone or combined with pneumonia-like illness.

### **How soon do symptoms appear?**

Symptoms generally appear between two and 10 days after exposure, but usually after three days.

### **What is the treatment for tularemia?**

The antibiotic gentamycin is extremely effective in treating tularemia. Others such as tetracycline (which ordinarily should not be given to children younger than eight years or to pregnant women) and chloramphenicol are also effective.

### **Does past infection with tularemia make a person immune?**

Long term immunity follows recovery from tularemia, however, reinfection has been reported.

### **What can be done to prevent tularemia?**

Rubber gloves should be worn when skinning or handling animals, especially rabbits. Wild rabbit and rodent meat should be cooked thoroughly before eating. Avoid bites of flies and ticks and avoid bathing, swimming, or working in untreated water where infection might prevail among wild animals.