

# Tularemia

## Frequently Asked Questions

### What is tularemia?

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.

People can get tularemia several different ways:

- being bitten by an infected tick, deerfly or other insect
- handling infected, sick or dead animals
- eating or drinking contaminated food or water
- breathing in dust from soil, grass, grain, hay or other material contaminated with the bacterium *F. tularensis*.

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.

### What are the symptoms of tularemia?

The symptoms depend on how they are exposed to tularemia. Possible symptoms include:

- skin ulcers
- swollen and painful lymph glands
- inflamed eyes
- sore throat
- mouth sores
- diarrhea
- 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 mucus from the lungs, and respiratory failure.

Tularemia can be fatal if the person is not treated with appropriate antibiotics.

### Can tularemia be used as a biological weapon?

According to the Centers for Disease and Prevention (CDC), *F. tularensis* could be used as a biological weapon. If *F. tularensis* were released intentionally, it could result in sickness and death.

## **Can someone become infected with the tularemia bacteria from another person?**

People have not been known to transmit the infection to others, so infected persons do not need to be isolated.

## **How quickly would someone become sick if he or she were exposed to tularemia bacteria?**

Someone exposed to *F. tularensis* would usually become ill within three to five days. But it can also take from one to 14 days for someone to become sick.

## **What should someone do if he or she suspects exposure to tularemia bacteria?**

If you suspect you were exposed to tularemia bacteria, consult your healthcare provider at the first sign of illness.

The symptoms of tularemia are similar to other illnesses. Tell your healthcare provider if you have been exposed to an animal or bitten by a tick. Also tell your healthcare provider about other activities such as grass or hay mowing. Tell your healthcare provider if you are pregnant or have a weakened immune system.

Treatment with antibiotics for a period of 10-14 days or more after exposure may be recommended. If you are given antibiotics, it is important to take them according to the instructions. Make sure to finish all of the antibiotics.

The DHSS and local health departments should be notified immediately, so an investigation and infection control activities can begin.

## **How is tularemia diagnosed?**

When tularemia is suspected, the healthcare provider collects specimens, such as blood or mucus from the lungs, for testing in a laboratory.

## **Can tularemia be effectively treated with antibiotics?**

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 kinds of antibiotics can cure tularemia. Some antibiotics come in pill form. Some must be injected or given intravenously.

Health officials will test the bacteria in the early stages of the response to determine which antibiotics will be most effective.

## **How long can *F. tularensis* exist in the environment?**

*F. tularensis* can remain alive for weeks in water and soil.

## **How can someone reduce the risk of being infected with *F. tularensis*?**

Tularemia occurs naturally in many parts of the U.S. Use insect repellent containing DEET on your skin, or treat clothing with repellent containing permethrin, to prevent insect bites. Wash your hands after handling any animal. Wear gloves when handling sick or dead animals. Be sure to cook your food thoroughly. Make sure your water comes 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.

### **Is there a vaccine available for tularemia?**

A vaccine for tularemia is not currently available in the U.S.

### **How serious is tularemia?**

The Centers for Disease Control and Prevention (CDC) classifies agents with recognized bioterrorism potential into three categories: A, B and C. Tularemia is a Category A agent. Category A agents

- pose the greatest possible threat to the public's health
- may spread across a large area
- require advance planning to protect the public's health.

### **What is the public health system in New Jersey doing to prepare for a possible biological attack?**

New Jersey and the CDC are working together to prepare for all potential health hazards, including bioterrorism.

Activities include:

- Developing plans and procedures to respond to biological attacks
- Training and equipping emergency response teams, gathering samples and performing tests to help state and local governments control infection
- Educating healthcare providers, the media, and the general public about what to do in the event of an attack
- Working closely with local health departments, veterinarians and laboratorians to watch for suspected cases of bioterrorism
- Working with hospitals, laboratories, emergency response teams, and healthcare providers to make sure they have the supplies they need in case of an attack.

### **Where can I get more information?**

- Your healthcare provider
- Your local department of health
- The New Jersey Department of Health
  - Website – [www.nj.gov/health](http://www.nj.gov/health)
  - Communicable Disease Service at (609) 826-5964
- CDC
  - [www.cdc.gov/tularemia](http://www.cdc.gov/tularemia)
  - 1-800-CDC-INFO (4636) for assistance in English and Spanish –
  - TTY 1-888- 232-6348
  - E-mail: [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov)

This information is intended for educational purposes only and is not intended to replace consultation with a healthcare professional. Adapted from the Centers for Disease Control and Prevention.