

Tularemia

Your questions answered

What is tularemia?

Tularemia is a potentially serious illness that occurs naturally in the United States. It is caused by the bacterium *Francisella tularensis* found in animals (especially rodents, rabbits and hares).

What are the symptoms of tularemia?

Symptoms of tularemia could include:

- Sudden fever
- Chills
- Headaches
- Diarrhea
- Muscle aches
- Joint pain
- Dry cough
- Progressive weakness

People can also catch pneumonia and develop chest pain, bloody sputum, can have trouble breathing and sometimes even stop breathing.

Other symptoms of tularemia depend on how a person was exposed to the tularemia bacteria. These symptoms can include ulcers on the skin or mouth, swollen and painful lymph glands, swollen and painful eyes and a sore throat.

How does tularemia spread?

People can get tularemia many different ways:

- Being bitten by an infected tick, deerfly or other insect
- handling infected animal carcasses
- eating or drinking contaminated food or water
- breathing in the bacteria, *F. tularensis*

Tularemia is not known to be spread from person to person. People who have tularemia do not need to be isolated. People who have been exposed to the tularemia bacteria should be treated as soon as possible. The disease can be fatal if it is not treated with the right antibiotics.

How soon do infected people get sick?

Symptoms usually appear three to five days after exposure to the bacteria, but can take as long as 14 days.

What should I do if I think I am sick?

Consult your doctor at the first sign of illness. Be sure to let the doctor know if you are pregnant or have a weakened immune system.

What Can **YOU** Do?

How is tularemia treated?

Your doctor will most likely prescribe antibiotics, which must be taken according to the directions supplied with your prescription to ensure the best possible result. Let your doctor know if you have any allergy to antibiotics.

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

What can I do to prevent becoming infected with tularemia?

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.

Can tularemia be used as a weapon?

Francisella tularensis is very infectious. A small number (10-50 or so organisms) can cause disease. If *F. tularensis* were used as a weapon, the bacteria would likely be made airborne for exposure by inhalation. People who inhale an infectious aerosol would generally experience severe respiratory illness, including life-threatening pneumonia and systemic infection, if they are not treated. The bacteria that cause tularemia occur widely in nature and could be isolated and grown in quantity in a laboratory, although manufacturing an effective aerosol weapon would require considerable sophistication.

What are the Health Department and CDC doing about tularemia?

The CDC operates a national program for bioterrorism preparedness and response that incorporates a broad range of public health partnerships. Other things CDC is doing include:

- Stockpiling antibiotics to treat infected people
- Coordinating a nationwide program where states share information about tularemia
- Creating new education tools and programs for health professionals, the public and the media.

This fact sheet is for information only and is not intended for self-diagnosis or as a substitute for consultation. If you have any questions about the disease described above or think that you may have an infection, consult with your healthcare provider.

This fact sheet is based on the Centers for Disease Control and Prevention's Health and Safety topic fact sheets.



LEFT: Humans can become infected through diverse environmental exposures: bites by infected arthropods, such as ticks; handling infectious animal tissues or fluids; direct contact with or ingestion of contaminated food, water, or soil; and inhalation of infective aerosols.

William Nicholson

For more information on tularemia, call the Lawrence-Douglas County Health Department at (785) 843-0721 or visit us on the web at: www.ldchealth.org