FACT SHEET

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).

Does tularemia occur naturally in the United States?
Yes. 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?
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 and can have trouble breathing and even sometimes 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 3 to 5 days after exposure to the bacteria, but can take as long as 14 days.

What should I do if I think I have tularemia?
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.

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.

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 types of antibiotics have been effective in treating tularemia infections. The tetracycline class (such as doxycycline) or fluoroquinolone class (such as ciprofloxacin) of antibiotics are taken orally. Streptomycin or gentamicin are also effective against tularemia, and are given by injection into a muscle or vein. Health officials will test the bacteria in the early stages of the response to determine which antibiotics will be most effective.

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
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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 is 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 nation-wide program where states share information about tularemia;
• Creating new education tools and programs for health professionals, the public, and the media.

Additional information can be found at:

• U.S. Centers for Disease Control
  http://www.bt.cdc.gov/agent/tularemia/

• Occupational Safety and Health Administration

• National Institute of Allergy and Infectious Diseases

Adapted from U.S. Centers for Disease Control http://www.cdc.gov/