

Tularemia Fact Sheet

Tularemia

- Caused by the bacterium *Francisella tularensis*.
- Transmitted to humans by *Dermacentor variabilis* (the dog tick), *Dermacentor andersoni* (the wood tick), and *Amblyomma americanum* (the lone star tick).
- Other forms of transmission include deer fly bites, skin contact with infected animals, inhaling contaminated dusts or aerosols, drinking contaminated water, or laboratory exposure.

Recognize the symptoms

- Depending on how the bacterium enters the body, illness ranges from mild to life-threatening.
- Most infections can be treated successfully with antibiotics. Treatment usually lasts 10 to 21 days depending on the stage of illness and the medication used.
- All forms of tularemia illness are accompanied by fever which can be as high as 104 °F.
 - Ulceroglandular - most common form, usually occurs following a tick or deer fly bite or after handling an infected animal. A skin ulcer appears at the site where the organism entered the body and is accompanied by swelling of the regional lymph glands.
 - Glandular - acquired through the bite of an infected tick or deer fly or from handling sick or dead animals.
 - Oculoglandular - occurs when the bacteria enter through the eye. This can occur when a person is butchering an infected animal and touches his or her eyes. Symptoms include irritation and inflammation of eye and swelling of lymph glands in front of the ear.
 - Oropharyngeal - results from eating or drinking contaminated food or water. Patients may have sore throat, mouth ulcers, tonsillitis, and swelling of lymph glands in the neck.
 - Pneumonic - most serious form, symptoms include coughing, chest pain, and difficulty breathing. This form results from breathing dusts or aerosols containing the organism, or when other forms are left untreated.
 - Typhoidal – any combination of the general symptoms, without the localizing symptoms of other forms
- Tularemia is a rare disease, and symptoms can be mistaken for other more common illnesses.
- It is important to share any likely exposures with your health care provider.
- Blood tests and cultures can help confirm the diagnosis.

Keep ticks off

- Ticks are most active from late spring through early fall.
- Insect repellent containing 20–30% DEET is recommended to prevent tick bites
- Repellents with up to 30% DEET can safely be used on children over 2 months of age.
- Treat clothes with permethrin (don't use permethrin directly on skin).
- Long pants and long sleeves help keep ticks off of skin, and tucking pant legs into socks and shirts into pants keeps ticks on outside of clothing.
- Light colored clothing lets you spot ticks more easily.
- Talk to your veterinarian about tick control products for your pets.
- When enjoying the outdoors, avoid wooded or brushy areas with tall grass and leaf litter and walk in the center of trails.
- Check yourself, your kids and your pets daily for ticks when spending time in tick habitat.
- Bathe or shower as soon as possible after coming indoors (within 2 hours) to wash off ticks.

To remove ticks

- Use fine-tipped tweezers.
- Grab the tick close to the skin; do not twist or jerk the tick.
- Gently pull straight up until all parts of the ticks are removed.

- Wash your hands with soap and water or an alcohol-based rub.
- Clean the site of the tick bite with soap and water or an antiseptic.
- Do not use petroleum jelly, a hot match, nail polish, or other products to remove ticks.

If you hunt, trap or skin animals

- Use gloves when handling animals, especially rabbits, muskrats, prairie dogs, and other rodents.
- Cook game meat thoroughly before eating

For more information, visit:

<https://www.cdc.gov/tularemia/index.html>