

What is tularemia?

Tularemia, or rabbit fever, is a bacterial disease associated with both animals and humans. Although many wild and domestic animals can be infected, the rabbit is most often involved in disease outbreaks. Tularemia is relatively rare in Illinois; five or fewer cases are reported each year.

Who gets tularemia?

The disease occurs throughout the United States in all months of the year. The incidence, however, is higher for adults in early winter during rabbit hunting season and for children during the summer when ticks and deer flies are abundant.

How is tularemia spread?

Many routes of human exposure to the tularemia bacteria are known to exist. The common routes include inoculation of the skin or mucous membranes with blood or tissue while handling infected animals, the bite of an infected tick, contact with fluids from infected deer flies or ticks, or handling or eating insufficiently cooked rabbit meat. Less common means of spread are drinking contaminated water, inhaling dust from contaminated soil or handling contaminated pelts or paws of animals. Tularemia is not spread from person to person.

What are the symptoms of tularemia?

Symptoms vary, depending on the route of introduction. In those cases where a person becomes infected from handling an animal carcass, symptoms can include a slow-growing ulcer at the site where the bacteria entered the skin (usually on the hand) and swollen lymph nodes. If the bacteria is inhaled, a pneumonia-like illness can follow. Those who ingest the bacteria may report a sore throat, abdominal pain, diarrhea and vomiting.

How soon do symptoms appear?

Symptoms can appear between one and 14 days after exposure, but usually do so after three to five days.

What is the treatment for tularemia?

The drug of choice for treating tularemia is streptomycin or gentamicin, although other antibiotics also are effective.

Does past infection with tularemia make a person immune?

Long-term immunity usually follows recovery from tularemia. However, reinfection has been reported.

What can be done to prevent the spread of tularemia?

Several precautions can protect individuals from tularemia.

- Avoid drinking, bathing, swimming or working in untreated water where infection may be common among wild animals.
- Use impervious gloves when skinning or handling animals, especially rabbits.
- Cook the meat of wild rabbits and rodents thoroughly.
- Avoid being bitten by deer flies and ticks. The following suggestions may help:
 1. Check your clothing often for ticks climbing toward open skin. Wear white or light-colored long-sleeved shirts and long pants so the tiny ticks are easier to see. Tuck long pants into your socks and boots. Wear a head covering or hat for added protection.
 2. For those who may not tolerate wearing all of these clothes in hot, muggy weather, apply insect repellent containing DEET (30 percent or less) to exposed skin (except the face). Be sure to wash treated skin after coming indoors. If you do cover up, use repellents containing permethrin to treat clothes (especially pants, socks and shoes) while in locations where ticks may be common. Follow label directions; do not misuse or overuse repellents. Always supervise children in the use of repellents.
 3. Walk in the center of trails so weeds do not brush against you.
 4. Check yourself, children and other family members every two to three hours for ticks. Most ticks seldom attach quickly and rarely transmit tickborne disease until they have been attached for four or more hours.
 5. If you let your pets outdoors, check them often for ticks. Infected ticks also can transmit some tickborne diseases to them. (Check with your veterinarian about preventive measures against tickborne diseases.) You are at risk from ticks that "hitch a ride" on your pets but fall off in your home before they feed.
 6. Make sure the property around your home is unattractive to ticks. Keep your grass mowed and keep weeds cut.

How should an attached tick be removed?

Remove any tick promptly. Do not try to burn the tick with a match or cover it with petroleum jelly or nail polish. Do not use bare hands. The best way to remove a tick is to grasp it with fine-point tweezers as close to the skin as possible and gently, but firmly, pull it straight out. Do not twist or jerk the tick. If tweezers are not available, grasp the tick with a piece of cloth or whatever can be used as a barrier between your fingers and the tick. You may want to put the tick in a jar of rubbing alcohol labeled with the date and location of the bite in case you seek medical attention and your physician wishes to have the tick identified.

The mouthparts of a tick are shaped like tiny barbs and may remain embedded and lead to infection at the bite site if not removed properly. Be sure to wash the bite area and your hands thoroughly with soap and water, and apply an antiseptic to the bite site.

Why is there concern about tularemia as a bioweapon?

Tularemia, in aerosol form, is considered a possible bioterrorist agent. Persons who inhale an infectious aerosol would likely experience severe respiratory illness. Any suspected cases of tularemia inhalation should be immediately reported to local and state health departments.