

# Health Advisory: Increase in Tularemia in Minnesota

Minnesota Department of Health, Thu, July 24, 11:00 CDT 2025

## Action Steps

**Local and tribal health department:** Please forward to hospitals, clinics, urgent care centers, emergency departments, and convenience clinics in your jurisdiction.

**Hospitals, clinics and other facilities:** Please forward to infection preventionists, infectious disease physicians, emergency department staff, hospitalists, and primary care clinicians.

**Health care providers:**

- Test for tularemia in febrile patients with a history of tick or deerfly bites, dog or cat bites or scratches, contact with ill animals, or mowing over a rabbit or rodent carcass or nest.
  - Collect clinical specimens for testing if you suspect tularemia:
  - Culture blood or other relevant specimens (e.g. wound swab or lymph node aspirate)
  - Send specimens from highly suspect cases to the MDH PHL for RT-PCR testing
- Otherwise, send serum collected at least 2 weeks after symptom onset to a reference laboratory for *F. tularensis* serology
- Alert laboratory personnel to suspected tularemia diagnosis and advise them to observe appropriate laboratory safety precautions when collecting or testing specimens. Tularemia is easily laboratory-acquired.
- Treat tularemia with doxycycline, ciprofloxacin, or gentamicin for at least 10 days. Consult an Infectious Disease specialist.
- Report suspicions of or confirmation of tularemia to MDH by phone immediately (651-201-5414 or 877-676-5414): [MDH Reporting Tularemia \(www.health.state.mn.us/diseases/tularemia/report.html\)](https://www.health.state.mn.us/diseases/tularemia/report.html)

## Background

Tularemia has been increasingly recognized in Minnesota, especially the Minneapolis-St. Paul metropolitan area, since 2023. In 2024, five human cases were reported, including four people who developed pneumonic tularemia after mowing over an infected animal and one person who was infected through a cat bite. To date in the 2025 season, five Minnesotans have been confirmed with tularemia. One person developed ulceroglandular tularemia after a tick bite, one developed oropharyngeal tularemia after a possible tick bite, one developed glandular tularemia after a cat bite, one developed pneumonic tularemia likely after mowing over a sick animal, and one case is still under investigation. The cases had illness onsets from the end of April to the beginning of July 2025.

*Francisella tularensis*, the causative agent of tularemia is found naturally throughout the United States. Humans are usually infected through the bites of ticks or deer flies, contact with

infected animals (especially cats), or inhalation of contaminated material. Mowing over a sick or dead animal can lead to exposure. Tularemia is not spread from person to person. Symptoms vary based on the route of exposure and are most commonly characterized by fever and localized lymphadenopathy with or without a skin ulcer near the site of exposure. Pneumonic tularemia, the most serious form of the disease, can occur as primary pneumonia following direct inhalation of the organism, or as secondary pneumonic disease as a complication of any of the other major forms of tularemia. Pneumonic tularemia can present similarly to other respiratory pathogens with fever, cough, chest pain, and shortness of breath, and may have similar radiographic findings as other types of pneumonia, such as infiltrates, hilar lymphadenopathy, or pleural effusions. The incubation period of tularemia is typically 3–5 days but can range from 1–21 days. Treatment typically consists of doxycycline or ciprofloxacin for mild cases or gentamicin for more severe cases, with duration varying depending on the severity of illness. Consultation with an infectious disease specialist is recommended, particularly in patients with severe illness.

To test for tularemia, culture should be performed on blood or other relevant specimens (such as lymph node aspirate or biopsies, skin lesion swabs or biopsies, pleural fluid, respiratory specimens, and pharyngeal or ocular swabs). Because laboratory staff are at risk of being exposed due to the ease of aerosolization and low infectious dose of *F. tularensis*, it is critical to inform the laboratory prior to submission when tularemia is suspected so that lab personnel can use appropriate practices. The MDH Public Health Laboratory (PHL) can also do PCR testing on clinical specimens of high suspicion (blood, lymph node aspirates, tissue, etc.). Serological testing for *Francisella* can be ordered through clinical reference laboratories as well, but elevated titers are not considered confirmatory testing. *Francisella* IgG and IgM antibodies rise at the same time 2-3 weeks after symptom onset. *Francisella* serologic tests can also have false positives due to cross-reaction with other antibodies, especially those to *Brucella* species.

## For More Information

- [CDC: Tularemia \(www.cdc.gov/tularemia/about/index.html\)](http://www.cdc.gov/tularemia/about/index.html)
- [MDH: Tularemia \(www.health.state.mn.us/diseases/tularemia/index.html\)](http://www.health.state.mn.us/diseases/tularemia/index.html)
- [Clinical Laboratory Preparedness and Response Guide, Association of Public Health Labs and American Society for Microbiology. \(https://www.aphl.org/aboutAPHL/publications/Documents/WORK\\_BlueBook.pdf\)](https://www.aphl.org/aboutAPHL/publications/Documents/WORK_BlueBook.pdf)
- [Sentinel Laboratory Testing Guidelines \(PDF\) \(https://asm.org/asm/media/policy-and-advocacy/Irn/sentinel%20files/tularemia.pdf\)](https://asm.org/asm/media/policy-and-advocacy/Irn/sentinel%20files/tularemia.pdf)

A copy of this HAN is available at: [MDH Health Alert Network \(www.health.state.mn.us/communities/ep/han/\)](http://www.health.state.mn.us/communities/ep/han/)

The content of this message is intended for public health and health care personnel and response partners who have a need to know the information to perform their duties.