



Tularemia Testing in Domestic Animals

Tularemia is a naturally occurring disease of wildlife, particularly rabbits, squirrels, and other rodents. It is a disease that both people and animals can get through tick and fly bites or contact with infected animals. Tularemia is rare in Minnesota; between zero and three cases are identified in people and zero to five cases are identified in animals annually.

Cats are the most commonly affected domestic animal in Minnesota; outdoor cats that hunt rabbits are at highest risk. Infected cats often have a high fever, mouth ulcers, depression, and loss of appetite. Dogs rarely show signs, but can have a skin abscess at the site of infection, loss of appetite, and fever.

The University of Minnesota Veterinary Diagnostic Laboratory is able to perform cultures on diagnostic specimens in order to identify the bacteria *Francisella tularensis*, the causative agent of Tularemia.

If the animal has died

- Performing a necropsy to obtain tissues for diagnosis is not recommended outside of a biosafety cabinet.
- Submitting the animal to the VDL for a necropsy is the best option. Be sure to mark the submission form as a Tularemia suspect.

If the animal is alive

- Samples for culture can be submitted.
 - Submit a swab from a lesion (i.e oral ulcer) or draining lymph node
 - Or a biopsy or aspirate from a lesion or lymph node.
- Submit the sample in a culturette or sterile container and keep it cool.
- Submit to the lab as soon as possible.
- Please keep in mind that Tularemia is a zoonotic disease and use appropriate personal protective equipment such as gloves and eye protection, and also respiratory protection if there is a risk of generating aerosols when collecting samples.
- Tests are run M-F and the turnaround time is 3 -6 business days.
- The test is charged per sample as an aerobic culture. Please see [Services and Fees](#).

Francisella tularensis is considered a Select Agent and any positive test result at the VDL would be sent to the Minnesota Department of Health for confirmation. See their [website](#) for more information.

There are serological tests that are available at other veterinary diagnostic laboratories, such as the laboratories in Wyoming and Utah. A four-fold rise in titer would indicate a recent infection. In addition there is a PCR test available at North Dakota State University VDL. Please call the VDL for more information.