



Proper testing can diagnose **leptospirosis** in cattle

At the Texas A&M Veterinary Medical Diagnostic Laboratory (TVMDL), our diagnosticians routinely test for and confirm leptospirosis in livestock. The disease is known to cause abortion, and when undetected can be costly for producers.

Spirochetes can be found almost anywhere there is water. It is not uncommon for veterinarians to see cases in both dry and wet weather conditions.

TVMDL provides a wealth of testing options for clients; however, cattle specimens should focus on our microscopic agglutination test (MAT) and molecular diagnostics quantitative polymerase chain reaction (qPCR) offering.

**Protecting animal and human health
through diagnostics**

tvmdl.tamu.edu

TVMDL Leptospirosis Testing Methods

Lepto Serology (6 Serovars):

- Run five days a week at TVMDL on 1mL serum; detects antibodies by MAT test.
- Identifies the following serovars:
L.pomona, *L.icterohaemorrhagiae*, *L.canicola*, *L.grippotyphosa*, *L.bratislava* & *L.hardjo*.
- MAT provides titers up to 1:12,800 (starting dilution 1:100), and titers as low as 1:800 indicate infection in the presence of compatible clinical signs.
- \$18.00; results in 1-3 days.

Leptospira Spp. qPCR:

- Run stand-alone or as an adjunct to the tried-and-true MAT.
- TVMDL's PCR has been validated against:
L.icterohaemorrhagiae, *L.pomona*, *L.bratislava*, *L.autumnalis*, *L.hardjo*, *L.sejroe*, *L.canicola* and *L.grippotyphosa* bacteria.
- Spirochetes shed in the urine may be detectable on PCR test before patient develops a full antibody response.
- Performed Tuesday-Friday on 1-2mL of semen, urine or 1g tissue from kidney, liver, placenta or fetal kidney.
- \$25.00; results in 1-4 days.

Questions on leptospirosis diagnostics?
Contact one of our two full-service labs:

College Station 888-646-5623

Amarillo 888-646-5624

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