Malignant Catarrhal Fever

Striking domestic and wild herds across the globe.

Texas A&M TVMDL Veterinary Medical Diagnostic Laboratory

An infectious systemic disease, Malignant Catarrhal Fever (MCF) affects ruminants, from domestic cattle and goats to farmed hoofstock, like deer. Both the Texas livestock industry and exotic animal producers should be aware of MCF, its clinical signs and methods for diagnosing the disease.

The Texas A&M Veterinary Medical Diagnostic Laboratory (TVMDL) diagnoses cases of MCF virus using histopathology and a qPCR test. When necessary, additional testing is performed as needed. During necropsy, if MCF-suspect lesions are identified, they are confirmed with one of the previously mentioned tests.

Worldwide, cases of MCF have been diagnosed in white-tailed deer, sheep, goats and other antelope species, and exotic hoofstock. Clinical signs of MCF include fever, nasal discharge, ocular discharge, edema or corneal opacity, diarrhea, dermatitis, oral erosions, among other signs.

Diagnostic testing, specifically qPCR, can definitively identify which strain of the MCF herpesvirus is affecting an animal. The following virus strains are associated with MCF:

- Alcephaline herpesvirus-1 in wildebeest
- Ovine herpesvirus-2 in sheep
- Caprine Herpesvirus-2 is endemic in domestic goats
- MCF-WTD (white tailed deer)
- MCF-Ibex – associated with Nubian Ibex

Diagnosing MCF is key to reducing the risk of further cases. TVMDL's qPCR test can distinguish between the ovine, Ibex, white-tailed deer, caprine and alcelaphine herpesvirus-1 strains of MCF.

Malignant Catarrhal Fever (qPCR)
SPECIMEN: One or more of the following: 1.0g fresh tissue (lymph node, liver, spleen, kidney, lung), 1-2mL whole blood
SPECIES: Bovine, Caprine, Cervid, Exotic, Ovine
PRICE: $40.00
TURNAROUND: Performed in Amarillo Monday-Friday, with results within 1-4 days; performed in College Station Tuesday-Friday, with results within 1-4 days.

If MCF is suspected in an animal's sudden death, a qPCR test should be performed and the Histopathology Section can identify MCF lesions in gross necropsy. Prices vary for each species in necropsy but a full list of necropsy services is available on tvmdl.tamu.edu.

Amarillo: 1.888.646.5624 tvmdl.tamu.edu College Station: 1.888.646.5623