



BOVINE VIRAL DIARRHEA

FACT SHEET

WHAT IS BOVINE VIRAL DIARRHEA?

Bovine viral diarrhea (BVD) is caused by the bovine viral diarrhea virus (BVDV). BVD affects cattle and other ruminants. BVD is not a human health concern.

BVD is endemic in most cattle-producing countries and in some countries is considered the single most important viral infection of cattle. While cattle of all ages are susceptible to BVD, most cases of disease are seen in cattle between six months and two years old. The major reservoir responsible for disease spread geographically is the persistent infection syndrome (BVDV-PI) seen in calves.

SIGNS & SYMPTOMS

In adult cattle, clinical signs of BVD are highly variable. Signs of acute infection include:

- fever
- drowsiness
- loss of appetite
- discharge from the eyes and nose
- oral lesions
- diarrhea
- decreased milk production

In calves, infection is evidenced by:

- birth defects
- abortion
- congenital malformations
- lack of coordination
- shaking
- wide stance
- failure to nurse

TRANSMISSION

Based on the age of the cow when BVDV is introduced, the animal will either become persistently infected or transiently infected.

Persistent infection occurs when BVD is transmitted to a calf from an infected mother during pregnancy, specifically between 40 and 120 days in the uterus. Persistently infected animals shed very high quantities of the virus for life and expose pen mates and adjacent cattle to the virus.

Transient infection occurs when an animal becomes infected after birth. The animal is infected temporarily, and during this time is capable of shedding the virus and transmitting it to other herd or pen mates.

BVD may also be spread by biting insects, fomites, semen, biologic products, and other animals including swine, sheep, goats, camelids and possibly wild ruminants.

DIAGNOSIS

There are many diagnostic tests available to detect both transiently and persistently infected cattle, such as virus isolation, antigen detection, and nucleic acid detection.

Cattle producers are encouraged to consult with their veterinarian on how to best utilize BVDV diagnostic tests and testing strategies for their herd health plan.

REPORTING

Though BVD is not a reportable disease to the TAHC, there are rules in place to mitigate the risk of disease spread. Contact your private veterinarian if you suspect BVD in your herd.

BOVINE VIRAL DIARRHEA CONTROL PROGRAM

In order to protect Texas cattle from BVD, the TAHC established a control program that requires the seller of a BVDV-PI animal to disclose the status in writing to the buyer prior to or at the time of sale. For more information on the program, visit: <https://bit.ly/2uGu50Q>

PREVENTION

A BVD control program on farm would aid in preventing fetal infections, eliminating reproductive loss and production loss due to transient infections.

A simple and quick testing strategy is to test all cattle on a premises in a narrow time frame. All positive cattle should be isolated and then retested in 2-3 weeks. Animals that retest positive are considered to be persistently infected and should be isolated from the cattle until they leave the herd.

To complete herd screening, calves born over the next year should also be tested. A calf that tests positive on an initial and retest is an indication that the dam, or mother, may also be persistently infected. In this case the dam should also be tested using the farm protocol.