

BOVINE BRUCELLOSIS

WHAT IS BOVINE BRUCELLOSIS?

Bovine brucellosis, sometimes referred to as "Bangs", is a reportable, contagious disease caused by the bacteria *Brucella abortus (B. abortus).*

B. abortus primarily affects cattle, bison, and cervids. Brucellosis is a zoonotic disease, that can affect humans.

SIGNS & SYMPTOMS

The most observable sign of infection is found in pregnant animals that abort or birth weak calves. Not all infected cows abort, but those that do usually abort between the fifth and seventh month of pregnancy. As a result, milk production may also be reduced.

Other potential signs of brucellosis include:

- lowered fertility in both sexes
- poor conception rates
- orchitis or testicular abscesses
- retained afterbirth
- enlarged, arthritic joints

TRANSMISSION

Bovine brucellosis is commonly transmitted by contact with infectious, contaminated discharges such as fetuses, placental membranes, and fluids present after an infected animal has aborted or calved. Cows may ingest the bacteria by licking reproductive discharges, reproductive organs of other cattle, or by consuming contaminated feed and water.

Brucellosis may be carried from one herd to another by infected or exposed animal(s). The disease may also be spread by exposure to infected wild animals. Feral swine are a potential source of infection for cattle with *Brucella suis*.

DIAGNOSIS

Producers who suspect animals to be infected with brucellosis, should immediately request testing from a veterinarian.

The TAHC and USDA conduct regular brucellosis surveillance in Texas by collecting samples of milk from dairy herds. Private accredited veterinarians can test animals for individual producers if needed.

If brucellosis is detected, further diagnostic tests are completed to identify all infected cattle or bison in the herd, determine if adjacent herds are affected, trace the infection back to a source herd, and to determine if the disease has spread. When discovered, all infected cattle are quarantined and movement is restricted to slaughter only.

REPORTING BRUCELLOSIS

The Texas Animal Health Commission (TAHC) should be notified of all suspected and confirmed cases of brucellosis within 24 hours of diagnosis. Reports can be made to any TAHC region office or to the TAHC headquarters at 1-800-550-8242.

BRUCELLOSIS ERADICATION PROGRAM

In order to protect Texas animals from bovine brucellosis, the TAHC and USDA have regulations in place to prevent the introduction and spread of brucellosis. State and federal regulations outline the requirements for movement, testing, identification, record keeping, surveillance, and Certified Brucellosis Free Herds.

For more information about TAHC brucellosis regulations, visit:<u>https://bit.ly/32VZXeH.</u>

PREVENTION

Infection can be avoided by using proper sanitation methods. Producers should follow proper herd management strategies to assist in keeping herds free of brucellosis. Examples include, but are not limited to, utilizing the vaccine available for cattle and bison, maintaining closed herds, recording accurate animal identification, keeping organized records, isolating and testing purchased additions to herds, isolating and testing cattle re-entering herds, and arranging diagnostic workups and necropsies for suspect animals.

HUMAN HEALTH CONCERNS

Brucellosis can affect humans and infection is most commonly a result of eating or drinking contaminated, unpasteurized milk products, or exposure while slaughtering or dressing infected animals. Consumers should avoid drinking raw milk or eating unpasteurized milk byproducts.

Ranchers, farmers, or animal managers should clean and disinfect calving areas and other places likely to be contaminated with infectious materials. Sturdy rubber gloves and other personal protective equipment should be worn when handling carcasses or tissues from infected animals, or when assisting with calving or aborting animals. If you suspect you have been exposed to brucellosis through herd management practices, seek evaluation from your family practitioner.

For more information on human health concerns, visit: <u>https://bit.ly/3b3MHYn</u>