# SWINE BRUCELLOSIS

FACT SHEET

## WHAT IS SWINE BRUCELLOSIS?

Swine brucellosis is a reportable, contagious disease caused by the bacteria *Brucella suis (B. suis*).

The *B. suis* strain primarily affects swine, but has been known to affect cattle and bison. Brucellosis is a zoonotic disease, that can affect humans.

## SIGNS & SYMPTOMS

Swine affected by the disease may develop clinical signs or they may appear healthy making laboratory testing an important diagnostic tool. Signs include, but are not limited to:

- Both female and male swine may experience short-term or permanent sterility.
- Infected female swine, sows, may abort or give birth to weak piglets.
- Infection may cause lameness.

## TRANSMISSION

Swine brucellosis is commonly transmitted by direct contact with infected tissues, animals, or through contact with environments where contaminated discharges are present. Contaminated discharges such as fetuses, placental membranes, and fluids present after an infected animal has aborted or given birth are all highly contaminated with infectious Brucella bacteria. The disease can also be spread during mating when infected males or "boars" service uninfected females.

Large commercial herds in Texas are considered free of swine brucellosis but occasional outbreaks in smaller backyard herds can occur. These infrequent cases are most often a result of domestic swine coming in contact with infected feral swine. Infection can move through the herd quickly, so it's important to handle swine brucellosis as a "herd disease".

## DIAGNOSIS

Swine brucellosis is detected by laboratory testing of blood samples of sexually intact swine who are six months or older, and have gone through change of ownership.

The TAHC works in coordination with the Department of State Health Services to test breeding-aged animals at state-monitored slaughter facilities. Blood samples may also be collected at livestock markets and private premises.

## REPORTING SWINE BRUCELLOSIS

The TAHC should be notified of all suspected and confirmed cases of swine brucellosis within 24 hours of diagnosis. Reports can be made to any TAHC region office or to the TAHC Central Office at 1-800-550-8242.

## SWINE BRUCELLOSIS ERADICATION PROGRAM

In order to protect Texas animals from swine brucellosis, the USDA and TAHC have regulations in place to prevent the introduction and spread of brucellosis. Regulations outline the requirements for movement, testing, identification, record keeping, and surveillance. For more information about the TAHC brucellosis regulations, visit: https://bit.ly/3gdWPzY.

Swine producers may also participate in the TAHC swine brucellosis-free status program. Validation status can allow animals to be moved with fewer regulatory restrictions, increase marketability, and reduce concern of disease presence for herd breeding animals. For more information about the herd validation process contact the TAHC Program Records Department at 512-719-0777.

## PREVENTION

There are a variety of on-the-farm practices individuals can take to reduce the risk of exposure in their swine.

Preventing contact with feral swine is of the upmost importance, since the disease is prevalent in the Texas feral swine population. Producers should maintain good fences and surveillance of their property to decrease the risk of feral swine coming in contact with their animals.

Livestock owners should also implement efforts for keeping a "closed" herd - only purchasing swine from validated free herds and restricting use of breeding boars until after negative test results prove it is safe to do so. Owners should also isolate newly acquired stock for 30 days and consider testing prior to introducing animals into the herd.

## HUMAN HEALTH CONCERNS

Brucellosis can affect humans and infection is most commonly a result of exposure to infected fluids or blood from infected animals.

Ranchers, farmers, and animal managers should clean and disinfect areas likely to be contaminated with infected material. Thick rubber gloves and other personal protective equipment such as safety goggles should be worn when handling carcasses or tissues from infected animals, or when assisting with birthing or aborting animals.

Individuals processing or dressing commercial or feral swine should wear heavy-duty rubber gloves and other personal protective equipment such as safety goggles. After interacting with swine, wash your hands and disinfect all tools and equipment.

If you suspect you have been exposed to brucellosis through herd management practices, or have been in contact with feral swine, seek evaluation from your family practitioner.

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