



Swine Brucellosis

Swine brucellosis is caused by the bacteria *Brucella suis*, and is closely related to *Brucella abortus* which causes brucellosis in cattle.

Swine affected by the disease may develop a number of clinical signs or they may appear healthy, making laboratory testing an important diagnostic tool. Infection may move through the herd quickly, so it's important to handle swine brucellosis as a "herd disease".

Boars can shed the bacteria in their semen, so it's possible for disease to be transmitted during sexual service. Infected swine of both sexes may experience short-term or permanent sterility. Infected sows may abort or give birth to weak piglets. In some cases, infection may cause lameness.

Texas is currently considered Swine Brucellosis free for large "commercial" herds, although infection continues to be found at times in smaller backyard herds. In these instances, infection is usually the result of exposure to feral swine. Swine Brucellosis is known to be prevalent in Texas' feral swine population. For this reason, TAHC rules require that all sexually intact domestic swine, 6 months of age and older, have a negative Brucellosis and Pseudorabies test within 30 days of change of ownership. Feral swine are not allowed to be sold or moved alive except to terminal locations such as slaughter plants, feral swine holding facilities, or approved hunting facilities.

Infection Detection

In Texas, a statewide "surveillance program" is used to help find infection. At the slaughter plant, blood samples for disease testing are collected from mature sows and boars which can be traced back to their herd of origin. All sexually intact swine, 6 months of age and older, are also tested at livestock markets. A TAHC inspector draws a blood sample at the market which is then forwarded to the Texas State-Federal Laboratory for Swine Brucellosis and Pseudorabies testing.

After sample collection, culled breeding swine may be moved to slaughter. Non-slaughter breeding swine are allowed to move to their new premise under a TAHC-issued "Hold order", and are to remain there until the test results are complete. The Hold Order restrictions on the tested swine are released as soon as negative results are known.

Infection Eradication

When infection is detected, owners of infected herds will be contacted by a state or federal veterinarian to develop a "herd plan" for getting rid of the disease. This plan will usually include a testing schedule for the remainder of the herd. All source

herds

where hogs have been purchased from, or sold to, will also be investigated.

Swine: Validated Brucellosis-Free

A number of producers don't depend on luck to keep their herds

healthy. Their swine undergo regular testing by a veterinary practitioner to attain validated disease-free status by the TAHC.

Validation offers several advantages:

- Animals can be moved with fewer regulatory restrictions
- Better marketability for the animals
- Concerns about disease in breeding animals are greatly reduced

To begin the herd validation process, a producer must sign an agreement with the TAHC and find a veterinary practitioner to perform the service. To obtain an agreement, call your TAHC Region office or Austin headquarters at 1-800-550-8242 and contact your personal veterinarian.

To achieve or renew the validation all test results must be negative. The owner can select from one of three testing schedules.

1. Testing All Swine: Every 10 to 12 months, test all sexually intact swine six months of age or older in the herd. For revalidation, retest eligible animals every 10 to 12 months.
2. Incremental testing: Every 80 to 105 days, test 25 percent of the herd's sexually intact swine that are six months of age or older. During the 12-month validation period, all eligible animals must be tested.
3. Incremental testing: Every 25 to 35 days, test 10 percent of herd's sexually intact swine ages six months or older.

Each eligible animal in the herd must be tested once during the 10-month testing period.

Protect Swine from Brucellosis

Keep feral swine OUT by maintaining good fences. If feral swine exposure occurs in your herd, contact your private veterinarian or the TAHC to discuss diagnostic options.

- Purchase only tested animals or those from validated free herds.
- Isolate newly acquired stock for 30 days and consider having them retested.
- Don't share a boar, or have the animal tested prior to using it for breeding purposes

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Brucellosis Can Affect Humans

Brucellosis bacteria can affect humans, causing serious illness. That's why it's so important to take precautions and to recognize the signs of human infection.

In humans, brucellosis is called "undulant fever". The name "undulant fever" comes from the chills and fever that come and go, or undulate, throughout a 24-hour period. Other typical symptoms include fatigue, body aches, headaches, weight loss or flu-like malaise.

Disease Transmission to Humans

People contract brucellosis by coming in contact with fluids or blood from infected animals. When an infected sow delivers or aborts, the piglets may be covered with millions of the brucellosis bacteria. The bacteria can also be present in the blood of infected swine.

The following biosecurity measures are recommended:

1. Wear protective gloves when handling piglets or fetuses to prevent bacteria from entering your skin through a scratch or cut.
2. Protect yourself when processing swine by always wearing disposable gloves and other protective clothing. Hunters should take the same precautions to help preventing contraction of swine brucellosis while field dressing infected feral hogs.

3. Wear safety goggles when possible to keep fluids out of your eyes. When you've finished the chore, disinfect the goggles and gloves or throw them away.
4. If a sow aborts, handle the fetus carefully and dispose of it by burning or burial. This will kill bacteria and prevent it from spreading to the other swine in the herd--or to you. Disinfect any equipment used to handle the fetus.
5. Practice good hygiene after working with your herd. Wash your hands with an antibacterial soap and change and wash soiled clothing. This will help stop the spread of the brucellosis bacteria--or any other "germs" your swine may have!

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

Information provided by the
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