

# **BROCHURE Swine Brucellosis**

## **Texas Animal Health Commission**

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### **Swine Brucellosis**

**Brucellosis in swine is caused by *Brucella suis*, a bacteria that is different, but related to, the one that causes brucellosis in cattle.**

Swine infected by the disease can develop a number of signs, or they may appear healthy, making laboratory tests 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 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.

Historically, most of Texas' infected swine herds have been in wastefood-feeding complexes in the Dallas/Fort Worth area. Although complexes traditionally involve many owners, from a disease and regulatory standpoint, the entire complex is considered as ONE herd.

### **National Swine Brucellosis Program**

The U. S. Department of Agriculture's (USDA) national swine brucellosis

eradication program has three stages. Texas is in Stage 2, meaning infection has been detected within the past two years. To achieve Stage 3, a state can find no more than one brucellosis-infected herd during a two-year period. As of early 1999, Texas continues to detect infected herds, and surveillance remains active.

### **Infection Detection**

In Texas, a "surveillance program" is used to help find infection. At the

slaughter plant, blood samples for disease testing are collected from mature sows and boars that can be traced back to their herd of origin.

**To bring the Texas surveillance effort into compliance with national program standards, livestock market**

**surveillance was initiated on October 1, 1998, for swine six months of age and older that are used, or intended to be used for breeding purposes.**

During the cooler months--October through April--a market veterinarian or a TAHC field staff representative draws a blood sample that is forwarded to the state-federal laboratory for swine brucellosis and pseudorabies tests.

After sample collection, cull breeding swine may be moved to slaughter. Non-slaughter breeding swine are permitted to their new premise under a TAHC-issued hold order.



Restrictions are released as soon as negative test results are known.

**To prevent undue heat stress on the breeding swine, sampling at the livestock markets is optional during the warmer months, May through September.**

Untested breeding swine are to be moved to their new premise only under a hold order issued by the TAHC. Within 15 days after their arrival at the new site, the owner must arrange to have an accredited private practitioner draw blood samples from the animals for testing. The hold order is released when the negative test results are known.

## Infection Eradication

When infection is detected, TAHC field staff collects blood samples from the herd of origin and quarantines the herd, if additional infection is found. Owners of infected herds will have a state or federal veterinarian assigned to work with them to develop a "herd plan" for getting rid of the disease.

**USDA funds have been made available for depopulation, making it easier for an owner to sell out the infected herd and start fresh with healthy stock. A state or federal veterinarian can explain the depopulation opportunity in detail.**

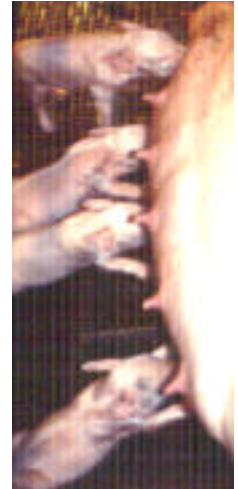
### Swine: Validated Brucellosis-Free

A number of producers don't depend on luck to keep their herds healthy. Their stock undergoes regular testing and is validated disease-free by the TAHC.



### Validation offers several advantages:

- animals can be moved with fewer regulatory restrictions,
- the stock is often considered to be more valuable,
- concerns about disease in breeding animals are greatly reduced.



To begin the herd validation process, a producer signs an agreement with the TAHC. (Record keeping and agreements are provided by the TAHC at no cost.)

To obtain an agreement for review, make a free call to your TAHC area office or to the Austin headquarters at 1-800-550-8242.

**The collection of blood samples for validation testing is at owner's cost and must be conducted by an accredited private practitioner. To achieve or renew the validation all test results must be negative. The owner can select from one of three testing schedules.**

**1.** Every 10 to 12 months, test **all** sexually intact swine six months of age or older in the herd. For re-validation, 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-months testing period.

## **Brucellosis Can Affect Humans, Too!**

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" and this was a fairly common ailment years ago. 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**

If your swine herd has brucellosis, you may contract the disease by handling the newborn offspring or aborted fetuses of infected sows. When an infected sow delivers or aborts, the piglets are covered with millions of the brucellosis bacteria. Wear plastic or rubber gloves when handling piglets or fetuses to prevent bacteria from entering your skin through a scratch or cut.

The bacteria can also be present in the blood or abscesses of infected swine. Protect yourself when slaughtering and processing swine. Cover your mouth and



nose with a simple dust mask to protect against breathing airborne blood particles. Safety goggles will keep fluids out of your eyes, and gloves will protect any cuts or scratches on your hands.

When you've finished a chore, disinfect the



gloves or throw them away. The same goes for face masks and goggles or glasses, too.

If a sow aborts, destroy fetuses by burning or burial. This will kill bacteria and prevent it from spreading to the other swine in the complex--or to you.

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!

### **Diagnosing and treating "undulant fever"**

Laboratory tests can be run on blood samples collected from persons who may have caught the disease. The tests are similar to those used to diagnose infection in cattle and swine!

If you or your family suffer symptoms that may be suggestive of brucellosis, or "undulant fever," tell your doctor if you've been handling livestock. The earlier the infection is diagnosed, the easier recovery can be achieved through proper medication and rest.

Doctors usually prescribe a series of specific antibiotics for several weeks to fight off the brucellosis bacteria.

**Never treat yourself if you suspect you've been infected! Physician care is crucial to prevent long-term health problems!**