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Q & A: Bovine Tuberculosis in South Dakota
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What is bovine tuberculosis (TB)?

Bovine TB is a respiratory disease of cattle caused by *Mycobacterium bovis* (*M. bovis*). TB is a chronic, slowly progressive disease that does not spread easily. Infected animals may be capable of transmitting an infection to other animals even if they appear healthy. Bovine TB primarily affects cattle, but can be transmitted to any warm-blooded animal, including people.

Clinical signs associated with bovine TB are uncommon; affected animals rarely demonstrate symptoms unless infection is advanced. Signs would include those associated with chronic respiratory disease and systemic wasting.

How was TB found in SD?

In February 2017, three adult cows slaughtered at two Nebraska slaughter plants were found to be positive for bovine TB. Official animal identification records and auction market records indicated that the three animals originated from one Harding County ranch. The entire herd of origin was TB tested. Some of the reactors to the TB skin test were necropsied and a majority of those had lesions consistent with bovine tuberculosis. Samples were collected and submitted to the National Veterinary Services Laboratory in Ames IA.

Where is the affected herd?

The affected herd is located in Harding County in northwest South Dakota. The herd is under quarantine, and state animal health officials are working with the owner for an appropriate disposition. Adjacent herds have also been quarantined and will be released as determined appropriate following herd testing. Herds considered epidemiologically linked to the TB affected herd remain under quarantine until herd testing and investigation have been completed.

Where did TB come from?

The source of infection is unknown at this time and is under investigation. Epidemiologic and laboratory information are being gathered to help answer this question. It is possible that the ultimate source of the infection may never be definitively identified.

How will South Dakota's TB Free status be affected?

The US has nearly eliminated bovine TB due to a cooperative eradication campaign. South Dakota has officially been recognized as free of the disease since 1982. There is no immediate affect to our state status. The last affected herd in South Dakota was identified in Hutchinson County in November 2011. Thorough investigation of this outbreak will help us maintain our free status with USDA.

How will this affect the movement of livestock?

An investigation into adjacent, source, and recipient herds is ongoing. Involved herds are being quarantined and tested as appropriate. Routine movement of livestock through markets, by private treaty sale, and in normal ranch operations should continue as usual. Certificates of veterinary inspection are required for animals moving across state lines, and destination state animal health agencies should be contacted to ensure animal health requirements are met.

Is there a test for TB?

The primary test is the Caudal-Fold Tuberculin test (CFT). This requires an injection of tuberculin in the caudal fold, with the injection site evaluation 72 hours later. Responders are then subjected to a secondary test - the Comparative Cervical Tuberculin test (CCT) also evaluated 72 hours later to confirm infection. Additional testing may be done on responders. Only licensed and accredited veterinarians approved by the AIB may conduct TB testing in cattle. State and federal regulatory veterinarians are testing herds associated with the infected herd to determine the extent of the outbreak.

Is there a vaccine for Bovine TB?

No – There is no commercially available licensed vaccine against bovine TB in the US.

Is there a food safety risk?

No. Animals that are identified as being suspicious of having TB do not enter the food chain. Animals from affected herds that test negative are inspected by inspectors at slaughter. If any signs or symptoms are present at slaughter the animal is condemned. However, if there are no signs or symptoms of disease, the carcass is allowed to enter the food chain.