

Questions and Answers: Bovine Tuberculosis

Signs and Symptoms

Q. What is bovine tuberculosis (TB)?

A. Bovine TB is a contagious, chronic bacterial disease caused by *Mycobacterium bovis*. The infection commonly involves the lungs, but it may spread to other organs. Animals often don't show signs until the infection has reached an advanced stage.

Q. What animals can it affect?

A. Bovine TB primarily affects cattle, but it can be transmitted to any warmblooded animal, including people.

Q. What are the symptoms of bovine TB?

A. Bovine TB is difficult to diagnose with clinical signs alone. In the early stages of TB, clinical signs are not visible. In later stages, clinical signs may include: emaciation, lethargy, weakness, anorexia, low-grade fever, and pneumonia with a chronic, moist cough. Lymph nodes may also be enlarged.

Q. What should I do if my animals show these symptoms?

A. If you suspect TB in your herd, you should isolate the animal immediately and then call your veterinarian for a proper diagnosis.

How Bovine TB Can Spread

Q. How does TB get into cattle herds?

A. TB can be introduced into a herd by infected animals or people. In the United States, the two most common methods of introduction are:

- 1) Purchase of or exposure to infected cattle, or
- 2) Exposure to infected free-ranging wildlife.

The bacteria that causes bovine TB is found in the saliva of infected animals and spread through airborne particles from the respiratory tract. The bacteria can also spread through feed or watering sites contaminated with saliva and other bodily discharges (urine, manure) or by drinking raw, unpasteurized milk from infected animals. The risk of exposure is greatest in enclosed areas, such as barns with poor ventilation.

Q. How can I reduce the risk of my cattle herd being infected with TB?

- A. Following these best practices will help keep TB out of your herd:
- Have your livestock tested for TB and, if possible, keep a closed herd and raise your own replacement stock.
 - Buy your animals from an accredited TB-free herd, test the new animals prior to purchase, and finally, isolate them for 60 days and retest before commingling them with your herd.
 - Restrict or eliminate all contact between your herd and other herds.
 - Clean with a disinfectant any trailers or facilities that have housed newly purchased animals or animals that did not originate from your herd.
 - Keep on-farm visitors away from your herd whenever possible. This includes milk haulers, feed delivery personnel, and anyone who may have contact with other herds.
 - Make sure your fences are in good condition to separate your herd from wildlife. If the wildlife in your area is affected by TB, contact the U.S. Department of Agriculture (USDA) Wildlife Services office in your State for advice on reducing wildlife contact with your herd. You can reach Wildlife Services staff by calling 1-866-4USDA-WS (1-866-487-3297).

Q. Are dairies more susceptible to bovine TB?

A. The layout and activities of a dairy operation offer a greater chance for exposure to bovine TB than those of a beef operation. Dairy cows spend more time in enclosed areas or in crowded conditions, where there is a higher risk of exposure. Unpasteurized milk and unpasteurized colostrum, which are two main sources of nourishment for calves, can also spread the disease.

Bovine TB Testing

Q. How does USDA test for bovine TB?

A. USDA uses two methods to test for bovine TB. The main method of testing is a tuberculin skin test, where the animal receives an injection of tuberculin in the skin and is checked for a reaction 72 hours later. There is also a nationwide surveillance program in slaughter plants. If lesions consistent with bovine TB appear on a carcass, a sample is sent to USDA's National Veterinary Services Laboratories for confirmation.

Q. How many animals in the United States are tested for bovine TB each year?

A. Each year, more than 1 million animals receive a skin test, and approximately 11,000 cattle are sampled during slaughter surveillance.

Q. Typically, when are animals tested for bovine TB?

A. Animals are tested if they are:

- Suspected of having bovine TB;
- Part of an epidemiological investigation, such as a TB trace from an affected herd;
- Required to for participation in a show or exhibition;
- Required to for a change of ownership;
- Preparing for interstate movement; or
- Part of surveillance activities at slaughter.

Wildlife and TB

Q. Does wildlife spread TB to commercial cattle?

A. Wildlife and cattle with TB can pass the infection to each other.

Q. What is the risk of TB transmission from local wildlife?

A. In areas where free-ranging deer are known to be infected with TB, deer that have direct contact with cattle could pose a risk of transmitting the disease. While the risk of transmitting TB is greatest in enclosed areas, such as barns, livestock can become infected if they share common watering or feeding places contaminated with saliva and other bodily discharges from infected wildlife.

Q. How can I find out if the wildlife in my area has TB?

A. Contact your State's game and fish commission or department of natural resources. You can find specific contact information for State and local government agencies on the U.S. Government's official Web portal at www.usa.gov.

Q. What steps can I take to keep my cattle safe from TB in wildlife?

A. Always practice good biosecurity and avoid keeping livestock in the same enclosure as wildlife. Try to keep wildlife away from outdoor feeding and watering containers, such as troughs and pools. Additionally, store your animal feed in areas that wildlife cannot access. Should wildlife get into stored feed, discard that feed immediately, and do not give it to your cattle.

Learn More

For more information on bovine TB, please visit USDA's Animal and Plant Health Inspection Service Web site at www.aphis.usda.gov. Click on "Animal Health," then "Animal Disease Information," and then "Tuberculosis."

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