

Questions and Answers: Bovine Tuberculosis Eradication, Herd Indemnity, and Trade Issues

Bovine Tuberculosis Eradication

Q. How is bovine tuberculosis (TB) most effectively eradicated?

A. When bovine TB is detected, the best way to eradicate the disease is to eliminate all animals in the herd. Current TB testing methods have biological limitations. For example, early infection is not always detectable, and animals that do not have an immune response to the TB organism are not detectable without necropsy.

Based on these limitations, herd depopulation remains the most assured and effective way to prevent further TB infection within a herd and to stop its possible spread to others.

Q. How long does it take to eradicate TB from a herd?

A. The amount of time needed to eradicate TB varies depending on the outbreak. It can depend on factors such as herd size, the number of animals bought or sold, and the potential need to retest animals. It also depends greatly on the availability of herd records, the animal identification system used by the herd owner, and the overall traceability of the herd's animals.

Q. What is the government doing to eradicate TB?

A. The most efficient way for animal health officials to find the disease is through nationwide slaughter plant surveillance activities. If a case of TB is found and confirmed through laboratory testing, animal health officials conduct an exhaustive search and attempt to trace the infected animal back to its herd of origin. Officials test the herd of origin and depopulate it if it is diagnosed with TB. Animal health officials also carry out additional animal tracing activities and attempt to locate where the disease came from and prevent its potential spread.

Q. Why are some affected herds quarantined rather than depopulated?

A. Depopulation of an entire herd is voluntary. The U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) encourages producers to depopulate entire herds and offers indemnity payments at fair-market value (up to \$3,000 per animal). Due to the biological limitations of TB tests, total herd depopulation is the only method guaranteed to remove 100 percent of the infected animals; it is the preferred method of TB control for the eradication program.

Should a producer choose not to depopulate an affected herd, the entire herd must be quarantined indefinitely.

Q. Why are whole herds depopulated when only a few animals are positive for the disease?

A. The disease is difficult to detect, and false negative test results do occur. If an entire herd is not depopulated, there is a chance that an animal with a false negative test result may be missed. Also, signs and symptoms of TB can take time to become apparent in an animal.

If such an animal remains in a herd, the TB infection can continue to spread. By depopulating the entire herd, animal health officials can ensure that the disease is not spread by an undetected TB-positive animal.

Q. Who depopulates infected herds?

A. Regulatory animal health officials lead depopulation efforts. Other participants typically include State or Federal animal health officials. While not required, producers also sometimes assist in the handling and loading of animals.

Q. Who pays for the depopulation?

A. The salaries for participating regulatory personnel are paid by their respective employing agencies. APHIS pays the haulage costs and fees. Producers and their employees who choose to participate in the depopulation are not compensated for their time.

APHIS is authorized to pay owners of TB-affected herds indemnity in an amount that, together with net salvage paid to the herd owner, does not exceed the appraised fair-market value of the individual animals or \$ 3,000 per animal—whichever is highest.

Q. How do you find the source of an outbreak?

A. Veterinary epidemiologists attempt to determine when a herd was likely infected. Then, they attempt to trace all cattle moved in and out of the herd, looking for where the disease may have originated and where it may have spread. If producers participate in an animal identification program like USDA's National Animal Identification System (NAIS), it takes animal health officials much less time to determine where affected animals may have moved. NAIS means that officials eradicate the disease more quickly and stop its spread.

Q. Why is it difficult to determine the source of infection?

A. It is often difficult to tell which animals moved into and out of a herd and when. Animals may lose identification or have it changed in the case of management identifications. It is also a challenge to determine whether or not wildlife could have spread the disease to cattle in those areas known to have TB in wildlife.

Q. What is the source of recent outbreaks?

A. Tracing of animals have linked the three herds in California together; however, DNA analysis of the isolates retrieved through the investigation show that there are two separate strains that California is dealing with. This means that there are two different sources of infection.

DNA analysis matched the current outbreaks to cases previously discovered in 1997 (California), 2003 (Texas), 2006 (Mexico), 2007 (Mexico), and 2008 (New Mexico). Officials have determined that the current situation in California is not related to the State's 2002 outbreak of TB. This demonstrates that the strategies used in these outbreak situations work for cleaning up the infection.

Q. Can you vaccinate for TB?

A. No vaccine is currently available in the United States for bovine TB. Researchers at USDA's Agricultural Research Service are working on vaccines and vaccination options that could potentially be used in the future, but these options are still years away from routine use.

Q. How are TB positive animals disposed of?

A. After a herd is identified as affected with TB, all animals that have exhibited a response to a TB test in the past are taken for diagnostic necropsy. They do not enter the food chain.

Q. Does APHIS determine where TB-affected animals are slaughtered?

A. APHIS works closely with the affected State and producers to determine the slaughter facility.

Q. How are slaughter facilities chosen?

A. There are several factors considered in choosing a facility. They include: logistics; proximity; whether a facility can meet the requirements for special handling, cleaning and disinfection; and, whether a facility will take animals that are TB-exposed but which have tested negative for the disease.

Q. What happens to the TB-negative slaughtered herdmates of positive animals?

A. Animals from an affected herd that have tested negative are sent for slaughter under the inspection of USDA's Food Safety and Inspection Service (FSIS). The animals are subject to FSIS inspection during processing, and any indication of disease results in the carcass being condemned.

Q. What are the Uniform Methods and Rules (UM&R)?

A. The UM&R is a document that supplements the regulations in the Code of Federal Regulations (CFR) for the National Bovine Tuberculosis Eradication program. The document contains descriptions of how certain regulations are to be carried out. The rules and methods within the UM&R are developed in consultations with State animal health officials.

Q. What UM&R is currently being used?

A. The 2005 UM&R is the primary reference for bison and cattle.

Indemnity

Q. Are producers compensated for their lost herds?

A. Yes. Indemnity monies are available for producers who depopulate their herds. Indemnity values are based upon a fair-market value appraisal of each animal. The maximum value for an individual animal is \$3,000.

Q. What is an appraisal and how is it done?

A. An appraiser is a person who has special knowledge of the value of the animals involved. The appraiser makes a site visit, evaluates animals in the herd, and places a fair-market value on each animal. Producers can assist in the appraisal process by providing supporting documentation such as purchase receipts, sales receipts, production records, or appraisal reports from other appraisers.

Q. Who appraises my herd?

A. For whole herd depopulations, APHIS uses contracted private appraisers.

Q. Can I appeal an appraisal?

A. Yes. Herd owners may appeal APHIS-coordinated appraisals. Staff with APHIS' Veterinary Services program and Centers for Epidemiology and Animal Health review appraisal appeals. When appealing an appraisal, it is important for herd owners—or the appraisers they hire independently—to submit supporting documentation for all claims of higher value.

Q. What kind of information should an appraisal appeal include?

A. APHIS requires a comprehensive and self-contained appraisal report to justify different values. Supporting documentation and information are very important. Summary appraisals, which are commonly done for banks by appraisers, are typically insufficient to justify an appraisal appeal.

If a private appraiser uses a sales comparable approach to determine value, the appraisal report must include prices of comparables and an explanation concerning how the comparables were adjusted for the subject animals. Reports submitted without an explanation concerning adjustments and the quality differences between the comparable and subject animals may be rejected.

If a private appraiser uses an income approach or cost of production approach to determine value, the appraisal report must include enterprise budgets, cash flow statements, depreciation schedules, and other documentation used to determine revenue and costs.

Q. How can I be sure to get a fair value for my animals?

A. APHIS is authorized to indemnify the fair-market value, as defined by the Code of Federal Regulations (9 CFR 50.9) for animals destroyed because of TB.

Producers can take steps to ensure that their animals are valued fairly at the time of appraisal. For indemnity purposes, APHIS considers breeding value as well as dairy or meat value. Because pregnant cattle and castrated bulls are more financially valuable, these animals will be appraised at a higher rate if they are identified as such at the time of appraisal. Herd owners may want to consider having pregnancy testing or castrations performed on animals before the date of appraisal.

Q. How long do appraisal, depopulation, and cleaning and disinfection take?

A. The resources and schedules for APHIS officials, State animal health authorities, herd owners, as well as weather, are all factors in determining the best times for completing herd appraisal, depopulation, and cleaning and disinfection activities.

APHIS regulations set 15-day timeframes for various steps in the process.

However, area-veterinarians-in-charge and APHIS' Administrator are authorized to extend these timeframes to 30 days and beyond in certain circumstances. Herd owners may request an extension because of circumstances beyond their control. Additionally, APHIS may implement an extension while identifying and securing funding to cover indemnity costs. In the latter case, APHIS works as quickly as possible to secure funding before extending an indemnity offer.

Q. What costs or expenses does APHIS reimburse?

A. APHIS is authorized to pay owners of TB-affected herds indemnity in an amount that, together with net salvage paid to the herd owner, does not exceed the appraised fair-market value of the individual animals or \$3,000 per animal—whichever is highest. APHIS is also authorized to pay half the expenses for transporting and disposing of infected, exposed, and suspect animals. However, the regulations specifically prohibit APHIS from reimbursing owners for expenses related to holding livestock on the farm pending slaughter, or for trucking by the owners.

Q. Is there an average indemnity payment?

A. Each herd is unique, and therefore each herd is appraised separately. The quality of the animals involved affects each appraisal.

Q. What do I have to do to receive indemnity payment?

A. In order to depopulate with indemnity, herd owners, State animal health authorities, and APHIS must agree on an indemnity amount and sign an agreement outlining their respective responsibilities. In these contracts, APHIS agrees to compensate the owner with indemnity, less salvage, and stipulates what other authorized expenses will be reimbursed. The owner agrees to clean and disinfect the premises under APHIS and/or State supervision, to follow certain requirements with regard to restocking the premises, and to meet other provisions that mitigate the likelihood of re-introducing the disease.

Q. If there's a delay in appraisal and depopulation, does APHIS assume some of the expenses—such as feeding and watering—for maintaining an affected herd?

A. No. APHIS reimburses affected owners for costs and expenses as authorized in the regulations. In addition to full indemnity, APHIS is authorized to pay half the expenses for transporting and disposing of infected, exposed, and suspect animals. Regulations specifically prohibit USDA from reimbursing owners for expenses related to holding livestock on the farm pending slaughter, or for trucking by the owners.

Animal Movements and Trade

Q. Does a TB find in my State affect my ability to move, buy, or sell cows, calves, and products?

A. It may. If your State is accredited-free and this finding is the first in the past 48 months and the herd is depopulated quickly, then your State may retain its accredited-free status, and there would be no immediate affect on your ability to move animals. Alternatively, a finding that causes a State or zone to drop in status would result in increased movement requirements which may affect your ability to move animals.

Q. If my herd is TB-free, but others in my State are not, what can I do to make sure that I can conduct business as normal?

A. If you have an accredited TB-free herd and maintain that accreditation, you will be less affected than others in your ability to move animals in the event that your State or zone is downgraded.

For accredited TB-free herds located in States or zones that are designated as “modified accredited advanced” or as “modified accredited,” animals may be moved provided that yearly reaccreditation testing has been performed. Testing must have been completed within the 12 months prior to movement; no further testing is required.

Q. If cattle in an operation test positive, how soon afterwards can a producer resume normal animal movement and sales?

A. If a herd is found to have TB, the herd should be depopulated. If the herd is depopulated and cleaning and disinfection is completed, normal cattle operations may resume shortly thereafter. If the herd is not depopulated, it will be held under quarantine and tested repeatedly until all evidence of infection is eliminated. There is no set timeframe for this, and it could take years to accomplish.

Q. If cattle in an operation test positive, how soon afterwards can a producer resume exporting to other countries?

A. This depends upon the other countries’ import requirements.

Q. Is the World Organization for Animal Health, or OIE, notified about TB outbreaks?

A. Yes. APHIS informs the OIE of any confirmed TB outbreak.

Q. How is trade affected by a TB outbreak?

A. International and domestic trade can be interrupted by a TB outbreak. Different countries and States may impose stricter requirements for animals originating in a State or zone where TB has been identified. Additionally, they may prohibit animal movement from these affected areas altogether.

Q. Are animals imported from Mexico tested for TB before they are commingled with other animals?

A. Mexican States or zones are regularly reviewed by APHIS for disease status classification purposes. Cattle to be imported into the United States must meet the same testing requirements concerning the status of their State- or zone-of-origin that U.S. cattle moving interstate must meet. For instance, cattle being offered for import into the United States from a modified accredited State or zone in Mexico must meet the same movement testing requirements as U.S. cattle moving interstate from a modified accredited State or zone in the United States.

Q. What are the requirements for animal movement from TB-affected herds in New Mexico or other States? Will these movement requirements change in the future?

A. Once a herd is identified as affected, animals may only leave the premises under permit and either go directly to slaughter while accompanied by regulatory personnel, or go directly to slaughter under seal. In some cases, feeder calves under 12 months of age may be permitted to move intrastate to approved feedlots.

Q. How should producers handle the movement of commuter herds? Are there restrictions in place?

A. Producers should contact their State veterinarian or APHIS area veterinarian-in-charge (AVIC) for information regarding the interstate movement of commuter herds. You can find your AVIC by going to the following Web site: http://www.aphis.usda.gov/animal_health/area_offices/.

Q. What animal movements present a higher risk of TB exposure?

A. Untested animals represent one of the highest risk movements. Additionally, animals from areas where TB is known to exist also represent a high risk.

Q. In the event of an outbreak in my area, do I need to document my animals’ movement?

A. There is no requirement to document your animals’ movements just because there is a TB outbreak in your area. However, it could be beneficial to do so. With this information, you can reassure future buyers that your animals were not exposed to the disease. And, if you become involved in an epidemiological investigation, documentation of animal movements into and out of your herd can demonstrate that your herd is not involved and greatly improve the quality of the investigation.

Q. How should I document animal movements?

A. If you choose to document your animal movements, you can add movement data to herd records. Or, you

may take advantage of the National Animal Identification System's (NAIS) Animal Tracking Databases if you are using NAIS-compliant identification.

Additional Information

For more information on bovine tuberculosis, please visit the APHIS Web site at www.aphis.usda.gov. Click on "Hot Issues" and then "Bovine Tuberculosis."

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