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Service

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# **Bovine Tuberculosis Eradication**

## **Uniform Methods and Rules, Effective January 22, 1999**

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## **Introduction**

These Uniform Methods and Rules (UMR) are the minimum standards adopted and approved by the Deputy Administrator, Veterinary Services (VS), Animal and Plant Health Inspection Service (APHIS), on January 21, 1999. They were established for the maintenance of tuberculosis-free accredited herds of cattle, captive cervids, bison, and goats, and the maintenance of State status in the U.S. Department of Agriculture's tuberculosis eradication program.

These minimum standards do not preclude the adoption of more stringent standards by any State, status zone within a State, or region containing multiple States.

## Part I—Definitions

<b>Accredited herd (cattle, bison, or goats)</b>	An accredited herd is one that has passed at least two consecutive annual caudal-fold tuberculin tests, has no other evidence of bovine tuberculosis, and meets the standards of these UMR. Status is maintained through annual herd testing around the anniversary date.
<b>Accredited herd (captive cervid)</b>	A herd that has passed at least three consecutive official tuberculosis tests of all eligible animals conducted at 9- to 15-month intervals, has no evidence of bovine tuberculosis, and meets the standards of these UMR. Status is maintained through biennial herd testing around the anniversary date.
<b>Accredited veterinarian</b>	A veterinarian approved by the Administrator of VS, APHIS, U.S. Department of Agriculture (USDA), to perform functions required by cooperative State–Federal animal disease-control and eradication programs.
<b>Affected herd</b>	A herd of livestock in which there is strong and substantial evidence that <i>Mycobacterium bovis</i> may exist. This evidence should include, but is not limited to, any of the following: epidemiologic evidence, histopathology, bacterial isolation or detection, clinical signs, testing data, or association with known sources of infection.
<b>Anniversary date</b>	The anniversary date of the third consecutive test in captive cervids or second consecutive test in cattle and bison with no evidence of tuberculosis disclosed (that is, the test on which the herd was recognized as accredited, or the accrediting test). Each time the herd is tested for reaccreditation, it must be tested between 10 and 14 months for cattle and bison or between 21 and 27 months for captive cervids from the anniversary date of the accrediting test, not from the last date of reaccreditation.
<b>Annual tests</b>	Yearly blood tests for all eligible cattle or bison or captive cervids to determine their tuberculosis status. For cattle or bison, tests are conducted at intervals of no less than 10 months nor more than 14 months. For captive cervids, tests are conducted within 21 to 27 months from the anniversary date of the third consecutive test.
<b>Approved laboratory</b>	A State or Federal veterinary diagnostic laboratory. The primary laboratory for tuberculosis histopathology and bacteriology culture shall be the National Veterinary Services Laboratories (NVSL), Ames, IA. Food Safety and Inspection Service field service laboratories may be utilized for histopathology.
<b>Area Veterinarian-in-Charge</b>	The veterinary official of VS, APHIS, USDA, who is assigned by the Deputy Administrator to supervise and perform official APHIS animal health work.
<b>Auction</b>	A public sale of cattle, captive cervids, or goats to the highest bidder.
<b>Auctioneer</b>	A person who sells or makes a business of selling cattle, captive cervids, bison, or goats at auction.

<b>Bison</b>	Bovids (genus <i>Bison</i> ) commonly referred to as American buffalo or buffalo.
<b>Blood tuberculosis (BTB) test</b>	The BTB test is a supplemental test for bovine tuberculosis in captive cervids. The BTB test may be used at non-Federal expense as a supplemental test to establish the disease status of a herd. Samples for this test shall be collected only by State, Federal, or accredited veterinarians.
<b>Bovine tuberculosis</b>	A disease in cattle, captive cervids, bison, and goats caused by <i>Mycobacterium bovis</i> .
<b>Captive cervids</b>	All species of deer, elk, moose, and all other members of the family Cervidae raised or maintained in captivity for the production of meat and other agricultural products, for sport, or for exhibition. A captive cervid that escapes will continue to be considered a captive cervid as long as it bears an official eartag or other identification approved by the Administrator as unique and traceable with which to trace the animal back to its herd of origin.
<b>Cattle</b>	All domestic bovine (genus <i>Bos</i> ) animals of all ages.
<b>Caudal-fold tuberculin (CFT) test</b>	The intradermal injection of 0.1 mL of USDA bovine purified protein derivative (PPD) tuberculin (1 mg/mL PPD) into either side of the caudal fold with reading by visual observation and palpation 72 hours (plus or minus 6 hours) following injection. Cattle, bison, or goats will not be subjected to CFT retest at intervals of less than 60 days.
<b>Certificate</b>	An official document issued by a VS or State representative or an accredited veterinarian at the point of origin of a shipment of livestock. It shall include the following: <ol style="list-style-type: none"> <li>1. The official eartag number of each animal;</li> <li>2. The number of animals covered by the document;</li> <li>3. The purpose for which the animals are to be moved;</li> <li>4. The points of origin and destination;</li> <li>5. The consignor; and</li> <li>6. The consignee.</li> </ol>
<b>Cervical tuberculin (CT) test</b>	The intradermal injection of 0.1 mL of USDA bovine cervical PPD tuberculin (2 mg/mL PPD) in the cervical region with reading by visual observation and palpation 72 hours (plus or minus 6 hours) following injection. Results of the CT test can only be classified as reactor or negative.
<b>Commission firm</b>	A person, partnership, or corporation that buys and sells livestock as a third party and reports details of the transaction to the seller, the buyer, or both. This includes any such person or group regardless of whether a fee is charged for the services.
<b>Commission sales</b>	Those sales that are conducted by a third party who reports details of the transactions to the seller, the buyer, or both.

**Comparative cervical tuberculin (CCT) test**

The intradermal injection of biologically balanced USDA bovine PPD tuberculin and avian PPD tuberculin at separate sites in the midcervical area to determine the probable presence of bovine tuberculosis (*M. bovis*) by comparing the response of the two tuberculins at 72 hours (plus or minus 6 hours) following injection. This test shall be administered only by an approved State or Federal veterinarian.

**Dealer**

Any person engaged in the business of buying or selling cattle, captive cervids, bison, or goats in commerce either on his or her own account or as the employee or agent of the vendor, purchaser, or both, or any person engaged in the business of buying or selling cattle, captive cervids, bison, or goats in commerce on a commission basis. The term shall not include a person who (1) buys or sells cattle, bison, captive cervids, or goats as part of his or her own bona fide breeding, feeding, or dairy or beef operation; (2) is not engaged in the business of buying, selling, trading, or negotiating the transfer of cattle, bison, or goats; or (3) receives cattle, captive cervids, bison, or goats exclusively for immediate slaughter on his or her own premises.

**Designated accredited veterinarian**

An accredited veterinarian trained and approved to conduct tuberculosis program activities.

**Designated Tuberculosis Epidemiologist (DTE)**

A State or Federal epidemiologist designated by APHIS to make decisions concerning the use and interpretation of diagnostic tests and the management of affected herds under this subpart who has demonstrated the knowledge and ability to perform the functions specified by the Bovine Tuberculosis Eradication UMR. The DTE must be selected jointly by the cooperating State animal health official, the Area Veterinarian-in-Charge, and the Regional Epidemiologist. The National Animal Health Programs Staff of VS must concur in the appointment.

The DTE has the responsibility to determine the scope of epidemiologic investigations, determine the status of herds, assist in development of individual herd plans, and coordinate disease surveillance and eradication programs within his or her geographic responsibility. The DTE has authority to make independent decisions concerning the use and interpretation of diagnostic tests and management of affected herds when those actions are supported by sound disease eradication principles.

**Direct shipment to slaughter**

The shipment of tuberculosis reactors, tuberculosis suspects, and tuberculosis-exposed cattle, captive cervids, bison, goats, or exposed swine from the premises of origin, by permit without stopping or unloading, directly to a slaughter establishment under State or Federal inspection and without diversion to assembly points, such as auctions, dealers, or commission firm premises, public stockyards, or feedlots. Captive cervids being moved directly may be unloaded from the means of conveyance while en route only if they are isolated so that they cannot mingle with any livestock other than those with which they are being shipped.

**Eradication**

Eradication is the complete elimination of bovine tuberculosis from cattle, captive cervids, bison, and goats in a State so that the disease does not appear unless introduced from another species or from outside the State.



<b>Exposed animals</b>	Any cattle, bison, captive cervids, goats, swine, or other livestock that have been exposed to bovine tuberculosis by reason of associating with other livestock from which <i>M. bovis</i> has been isolated.
<b>Feedlot</b>	A confined drylot area for finish feeding of animals, with no facilities for pasturing or grazing.
<b>Geographic separation</b>	<p>Geographic separation means a minimum of 30 feet of separation, no common or shared handling facilities and equipment, no common watering or feeding equipment, and no common feed vehicles that enter the premises of herds of different status. Also, if the herds are fed by the same personnel, workers must wear different outerwear (e.g., boots and coveralls) for each herd.</p> <p>Adjacent herds existing before the effective date of these requirements for separation that do not meet the minimum 30-foot separation may be defined as separate herds at the discretion of cooperating State and Federal animal health officials and with the concurrence of the Designated Tuberculosis Epidemiologist.</p>
<b>Goats (genus <i>Capra</i>)</b>	Domestic caprids (genus <i>Capra</i> ) kept for the purpose of producing milk or meat for human consumption or for exhibition.
<b>Herd</b>	Any group of livestock maintained on common ground or two or more groups of livestock under common ownership or supervision that are geographically separated from other herds but can have an interchange or movement without regard to health status, as determined by the APHIS Administrator. A group means one or more animals.
<b>Herd depopulation</b>	The destruction of all livestock exposed to bovine tuberculosis in a herd by slaughter or by death otherwise before any restocking of the premises with cattle, captive cervids, bison, or goats.
<b>Individual herd plan</b>	A written disease-management plan that is designed by the herd owner, other herd representative, or both, and a State or Federal veterinarian to eradicate tuberculosis from an affected herd while reducing human exposure to the disease. The herd plan will include appropriate herd test frequencies, tests to be employed, and any additional disease-management or herd-management practices deemed necessary to eradicate tuberculosis from the herd in an efficient and effective manner. The plan must be approved by the State animal health official and the Area Veterinarian-in-Charge and have the concurrence of the Regional or Designated Tuberculosis Epidemiologist.
<b>Livestock</b>	Cattle, bison, cervids, swine, dairy goats, and other hoofed animals (such as llamas, alpacas, and antelope) raised or maintained in captivity for the production of meat and other products, for sport, or for exhibition.

<b>Monitored herd (captive cervid)</b>	A herd on which identification records are maintained for animals 1 year of age and older that are slaughtered and inspected for tuberculosis at an approved State or Federal slaughter facility or an approved diagnostic laboratory, and animals classified negative to an official tuberculin test. The initial qualifying total herd size is the annual average of animals 1 year of age and older during the initial test period, which period shall not exceed 3 years. The animals slaughtered must be identified as belonging to the herd. The combined number of slaughtered and tested animals in the sample must be evenly distributed over a 3-year period, and no less than 20 percent of the qualifying animals must be slaughter inspected. The rate to detect infection at a 2-percent prevalence level with 95-percent confidence would require a maximum number of 178 animals. (See appendix 1.)
<b>Natural additions</b>	Animals born and raised in a herd.
<b>Negative animals</b>	Any cattle, bison, captive cervids, or goats that show no response to the tuberculin test, are classified by the testing laboratory as “avian” or “negative” on the BTB test, or are classified negative for tuberculosis by the testing veterinarian based upon history, supplemental tests, examination of the carcass, and histopathology and culture of selected tissues.
<b>No Gross Lesion (NGL)</b>	Any animal that does not reveal a lesion(s) of bovine tuberculosis detected upon necropsy or slaughter inspection. (An animal with skin lesions alone will be considered in the same category as an NGL animal.)
<b>Official eartag</b>	An eartag approved by the APHIS Administrator as providing unique identification for each individual bovine, bison, and captive cervid by conforming to the alphanumeric National Uniform Eartagging System.
<b>Official tuberculin test</b>	A test for bovine tuberculosis, approved by APHIS, applied and reported by approved personnel in accordance with these UMR. The official tuberculin tests for cattle, bison, and goats are the caudal-fold test, the comparative cervical test, and the cervical test.
<b>Official tuberculosis test (captive cervid)</b>	A test for bovine tuberculosis applied and reported by approved personnel in accordance with these UMR. The official tests for captive cervids are the single cervical test, the comparative cervical test, and the blood tuberculosis test.
<b>Passed herd</b>	A herd in which no animals were classified as reactors or suspects as a result of a herd test of all animals eligible for testing.

<b>Permit</b>	An official document issued by a representative of APHIS–VS, a State representative, or an accredited veterinarian that is required to accompany any reactor, suspect, or exposed cattle, captive cervids, bison, goats, or exposed swine to slaughter. The permit will list the reactor tag number or official eartag number in the case of reactor, suspect, or exposed cattle, bison, goats, or swine as well as the owner’s name and address, origin and destination locations; number of animals covered; and the purpose of the movement. If a change in destination becomes necessary, a new permit must be issued by authorized personnel. No diversion from the destination on the permit is allowed.
<b>Qualified herd</b>	A captive cervid herd that has undergone at least one complete official negative test of all eligible animals within the past 12 months, has no evidence of bovine tuberculosis, and meets the standards of these UMR.
<b>Quarantined feedlot</b>	A feedlot under the direct supervision and control of a State livestock official who shall establish procedures for the accounting of all animals entering or leaving the area. The quarantined feedlot shall be maintained for finish feeding of animals in drylot with no provision for pasturing and grazing. Animals leaving such a feedlot must move directly to slaughter in accordance with established procedures for handling quarantined animals.
<b>Reactor</b>	Any bovid (genus <i>Bos</i> ), captive cervid, bison, or goat that shows a response to an official tuberculosis test and is classified a reactor by the testing veterinarian or DTE, or any suspect animal that is classified a reactor upon slaughter inspection or necropsy after histopathology and/or culture of selected tissues by the USDA or State veterinarian performing or supervising the slaughter inspection or necropsy.
<b>Routine testing</b>	Caudal-fold tuberculin tests (CFT’s) or single cervical tuberculin tests (SCT’s) in captive cervids conducted as part of a State or zone eradication program in which responding animals are reported as suspects or without classification to the appropriate animal health official.
<b>Single cervical tuberculin (SCT) test (captive cervid)</b>	The intradermal injection of 0.1 mL of USDA bovine PPD tuberculin (1 mg/mL PPD) in the midcervical region with reading by visual observation and palpation 72 hours (plus or minus 6 hours) following injection. This test shall be administered only by a State, Federal, or designated accredited veterinarian. Captive cervids will not be subjected to CFT retest at intervals of less than 90 days.
<b>Split status zone</b>	A geographic area within a State designated by APHIS and the State as having a tuberculosis status different from the remainder of the State. Split status zones must meet annual performance measures outlined in a zoning agreement to maintain split status.

**Suspect**

1. Any cattle, bison, or goat that shows a response to the caudal-fold tuberculin test and is not classified a reactor; or cattle, bison, or goats that have been classified suspects by a comparative cervical test.
2. Any captive cervid that is not negative to the SCT test or the CCT test, or that is classified by the testing laboratory as equivocal in response to the BTB test, and that is not classified as a reactor by the testing veterinarian.

**Tuberculin**

A product that is approved by, and produced under, USDA license for injection into livestock for the purpose of detecting bovine tuberculosis.

## **Part II—General Procedures (Minimum Requirements)**

### **A. Authority to require test**

State laws and/or regulations shall provide authority to apply a tuberculin test to any animal or herd at such times as may be deemed necessary by the cooperating State or Federal officials. These officials reserve the right to supervise any test conducted by an accredited veterinarian.

### **B. Personnel authorized to apply tuberculin tests**

Tuberculin tests shall be applied by a veterinarian employed in a full-time capacity by the State or USDA or by an accredited veterinarian. Technicians employed by State or Federal governments and approved by said governments may conduct routine screening tuberculin tests when directly supervised by State or Federal veterinarians.

### **C. Approved laboratories**

The primary laboratory for all tuberculosis diagnostic purposes shall be the National Veterinary Services Laboratories (NVSL), Ames, IA. Food Safety and Inspection Service (FSIS) laboratory results are acceptable for tissue examination of regular-kill slaughter cattle or bison in those cases where no submission was made to NVSL.

### **D. Presumptive diagnostic test**

The caudal-fold test (CFT) is the official tuberculin test for routine use in individual cattle, bison, or goats and herds of such animals where the tuberculosis status of the animals is unknown. The single cervical tuberculin (SCT) test is the official tuberculin test for routine use in individual captive cervids and herds of such animals whose tuberculosis status is unknown.

An affected herd is a herd in which tuberculosis has been disclosed in any cattle, bison, captive cervid, or goat by an official tuberculin test or by postmortem examination. Currently, histopathology, diagnostic bacteriology, and polymerase chain reaction (PCR) analysis of formalin-fixed tissue are all supplemental diagnostic procedures approved for use in the program. These procedures should be used in conjunction with tuberculin test results and necropsy or slaughter data to assign herd status.

### **E. Supplemental diagnostic test**

The comparative cervical test (CCT) is the official tuberculin test for retesting of suspects. It shall be applied only by a full-time State or Federal regulatory veterinarian and shall not be used in known-infected herds without the prior written consent of cooperating State–Federal officials. The CCT test shall not be used as a primary test for animals of unknown status. The CCT or the blood tuberculosis (BTB) test will be used for retesting captive cervid suspects.

#### **F. Primary diagnostic test**

1. The cervical tuberculin (CT) test is the recommended test for use in herds affected with bovine tuberculosis and is required as the initial test for testing exposed cattle or bison from such herds. Only by a veterinarian employed in full-time capacity by the State or Federal Government shall apply the CT.
2. The caudal-fold (CFT) test is a primary diagnostic test in cattle, bison, or goat herds when used in lieu of the CT test in herds affected with bovine tuberculosis. Responses shall warrant the reactor classification. Only by a veterinarian employed in full-time capacity by the State or Federal Government shall apply the CFT.
3. The single cervical tuberculin (SCT) test is the primary test for use in captive cervid herds affected with bovine tuberculosis. In such herds, the SCT test shall be applied only by a veterinarian employed by the State or Federal Government.

#### **G. Tuberculin test interpretation**

1. Decisions will be based upon the professional judgment of the testing veterinarian in accordance with the policy established by the cooperating State and Federal officials and the test requirements discussed in these UMR under Part III, section A, or Part IV, section A, Classification.
2. The injection site on each animal shall be palpated. Observation without palpation is not acceptable and shall constitute cause for removal of veterinary accreditation.

#### **H. Cleaning and disinfection of premises, conveyances, and materials**

All premises—including all structures, holding facilities, conveyances, and materials—that are determined by the appropriate cooperating State–Federal officials to constitute a health hazard to humans or animals because of tuberculosis shall be properly cleaned and disinfected. This shall be done in accordance with procedures approved by said officials within 15 days after the removal of tuberculosis-affected or -exposed cattle and bison. However, these officials, for reasons satisfactory to them, may extend the time limit for disinfection to 30 days when a request for such extension is received before the expiration date of the original 15-day period allowed.

#### **I. Determination of the State-of-origin of infection**

Tuberculosis found during slaughter inspection or otherwise in any livestock will be considered to have originated in the State where the animal was slaughtered or the disease was disclosed unless successful traceback procedures identify another State as the original source.

## **J. Identification**

1. All cattle, bison, and goats tested shall be individually identified by official eartag, individual tattoo, or individual hot brand at the time of injection. Devices easily removed and transferred, such as neck chains, are not satisfactory. All captive cervids shall be individually identified at the time of an official test by a USDA official eartag or some other approved identification device or method (e.g., tattoo) that uniquely and permanently identifies each captive cervid.
2. Cattle, bison, and captive cervids moved in channels of trade within a State shall be identified and recorded as to origin and destination at the first concentration point (dealer, livestock auction, stockyard, etc.) as follows:
  - a. Cattle, bison, and captive cervids over 2 years of age that are returned to farms or ranches, including feeder cattle, shall be identified by official eartag or by an official brand. If identified by brand, the cattle and bison must be accompanied by an official brand release.
  - b. Cattle, bison, and captive cervids that are marketed for immediate slaughter shall be identified by eartag, sale tag, or official backtag. An official brand release will be acceptable identification for lots of animals having a single origin that are shipped directly to slaughter.
  - c. Cattle, bison, and captive cervids without individual identification may be moved directly to, and maintained in, a quarantined feedlot under control of the State livestock sanitary official, provided they are inspected in the feedlot and are moved to slaughter under permit at the end of the feeding period.

## **K. Dealer Registration and Recordkeeping**

Any dealer who purchases, deals in, or sells captive cervids, cattle or bison; or who acts as a commission representative or broker; or who operates and conducts an auction in which captive cervids, cattle, or bison are sold must be registered or licensed with the appropriate State agency and maintain required records that will facilitate traceback of affected, exposed, or reactor animals by State authorities to the herd of origin or other point of original infection.

1. Dealer registration—The State agency shall have authority, after due notice and opportunity for hearing to the individual or firm involved, to deny an application for registration and to suspend or cancel the registration when the agency is satisfied that one or more of the following conditions prevail.

A brand law or regulation that accomplishes the traceback purposes of this section will be considered an acceptable alternative. Acceptance of this alternative will be based on an overall review of the provisions and accomplishments of the State program in achieving the effective traceback of all animals to the herd of origin or other point of original infection.

- a. There is adequate evidence to establish intent to violate or circumvent recordkeeping requirements of this section, other animal health regulations, or both.
  - b. There is a demonstrated history of repeated inability to trace to the point of origin those affected, exposed, or reactor animals handled by the dealer.
2. Records required—Each registered or licensed person, firm, or corporation shall keep sufficient records, for a minimum of 2 years, of all animals purchased for resale to enable the State agency to trace such animals satisfactorily to their herd of origin.
  3. Violations, remedies—Provisions shall exist for State animal health officials to institute such action at law or in equity as may appear necessary to enforce compliance with any provision of the recommended procedures discussed here. This shall include the authority to subpoena persons and/or records in violation of these minimum standards as well as authority for the appropriate State officials to petition the local court having venue for an order to enforce such subpoenas.



## Part III—Bovine: Standard Procedures (Minimum Requirements)

### A. Classification of cattle and bison tested

1. Official caudal-fold tuberculin test—All responses shall be recorded and the animal classified as suspect unless, in the professional judgment of the testing veterinarian, the reactor classification is indicated.
2. Cervical test—All animals with a response shall be classified as reactors. Responses shall be measured and recorded in millimeters (estimated).
3. Comparative cervical test—Responses shall be recorded and plotted on the CCT scattergram (VS FORM 6–22d). Classification shall be according to the zone in which the animal is plotted on the scattergram (negative, suspect, or reactor).

Exceptions to the classification listed above may occur when animals plotting in the reactor zone or plotting in the suspect zone on two consecutive comparative cervical tests may be classified as suspect by the DTE or regional epidemiologist, provided that there has been no known association of the herd with *M. bovis*. Animals reclassified as suspect must be moved directly to slaughter under permit, the postmortem examination shall be witnessed by an animal health veterinarian, and specimens must be submitted for laboratory examination. If these reclassified suspects fail to disclose gross or microscopic evidence of bovine tuberculosis and a complete epidemiologic investigation, including a herd test of all eligible animals, fails to disclose evidence of bovine tuberculosis or exposure thereto, with the concurrence of State and Federal officials, the herd may be considered free of bovine tuberculosis.

4. Responding animals classified as reactors shall not be retested or reclassified.
5. Reclassification of animals—Animals responding to the CFT test that were found negative or suspect to the CCT shall be reclassified as reactors when included in a herd test that results in the confirmation of bovine tuberculosis in the herd, or if the DTE determines that the reactor classification is justified.

### B. Interstate or international movement

1. International—No animal with a response to an official tuberculin test is eligible for international movement.
2. Interstate—No animal with a response to an official tuberculin test is eligible for interstate movement unless said animal is subsequently classified “negative for *M. bovis*” based upon an official comparative cervical test.

### **C. Reporting of tests**

A report of all approved tuberculin tests shall be submitted in accordance with the requirements of the cooperating State and Federal officials. The report shall include the individual identification of each animal by an official eartag number or tattoo, age, sex, and breed and a record of all responses listing the size of the response and test interpretation. All other tests approved for use in the tuberculosis eradication program shall also be reported to the appropriate officials.

### **D. Procedures in affected herds**

Disclosure of tuberculosis in any herd shall be followed by a complete epidemiologic investigation. All cattle and/or bison in herds from which tuberculous cattle and/or bison originate and all cattle and/or bison that are known to have associated with affected cattle and/or bison shall be tested promptly. These procedures shall apply to adjacent and contact herds as well as to the evaluation and testing of possible source herds for the affected herd. Herds that have received exposed animals shall be tested following the slaughter or testing of exposed animals. Every effort shall be made to ensure the immediate elimination of the disease from all species of domestic livestock on the premises. The first consideration in affected herds is the depopulation of the entire herd. If depopulation cannot be accomplished, the herd shall be handled as outlined under section I of this part, Quarantine Procedures.

### **E. Procedures in tuberculosis-infected feedlots**

A tuberculosis-infected feedlot shall be handled in the same manner as an affected herd in regard to epidemiologic investigation and the development of epidemiologic tracings for animal movements into and out of the feedlot. Emphasis during investigations and testing shall be on detecting possible spread from the feedlot. Cattle and bison in feedlots known to be exposed to tuberculous cattle or bison shall be quarantined and shipped under permit directly to slaughter. Feedlots or portions of feedlots that have contained affected and exposed cattle or bison shall be vacated, cleaned, and disinfected following the removal of such cattle or bison to slaughter.

### **F. Disposition of tuberculin-responding cattle and bison**

1. Reactors shall remain on the premises where they were disclosed until a State or Federal permit for movement has been obtained. Movement for immediate slaughter will be directly to a slaughtering establishment where approved State or Federal inspection is maintained within 15 days of classification. Alternatively, the animals may be destroyed under the direct supervision of a regulatory veterinarian to ensure that a proper postmortem examination can be conducted and that the carcass is either cooked or condemned.

2. Suspects in herds containing only suspects to the CFT test shall be quarantined until the suspect animals are
  - a. Retested negative by the CCT test within 10 days of the caudal-fold injection, *or*
  - b. Retested negative by the CCT after 60 days, *or*
  - c. Shipped under permit directly to slaughter in accordance with State and Federal laws and regulations.
3. Suspects to the comparative cervical test must be
  - a. Retested negative by the CCT test after 60 days, *or*
  - b. Shipped under permit directly to slaughter.
4. An animal in the suspect zone in response to two successive CCT tests should be classified as a reactor and properly identified. Exceptions must be justified in writing by the testing veterinarian to State or Federal animal health officials.
5. Postmortem examinations shall be witnessed by an animal health veterinarian, and selected tissue specimens must be submitted for laboratory examination.

#### **G. Identification of reactor cattle and bison**

Reactor cattle and bison shall be identified by branding the letter “T” on the left hip near the tailhead, not less than 2 inches (5 cm) and not more than 3 inches (7.5 cm) high, and by tagging with an approved metal eartag bearing a serial number and inscription “U.S. Reactor” or a similar State reactor tag suitably attached to the left ear of each animal. In lieu of branding, the reactor(s) may be shipped to slaughter in an officially sealed vehicle or accompanied to slaughter by a State–Federal regulatory official provided such reactor(s) are tattooed with the letters “TB” in the left ear and the same letters are sprayed on the left ear with yellow paint.

#### **H. Identification of exposed cattle, bison, and swine**

1. To be eligible for Federal indemnity, exposed cattle and bison shall be identified by branding the letter “S” on the left hip near the tailhead, not less than 2 inches (5 cm) nor more than 3 inches (7.5 cm) high, and by tagging with an approved metal eartag bearing a serial number attached to either ear of each animal. However, in lieu of branding, such animals may be accompanied to slaughter by a Federal or State representative or be shipped in vehicles closed with official seals.

2. To be eligible for Federal indemnity, exposed swine shall be identified by tagging with a serially numbered metal eartag attached to either ear. All such animals to be destroyed shall be transported to the place of destruction in vehicles closed with official seals or shall be accompanied to the place of destruction by a Federal or State representative. The aforementioned conditions prevail provided that animals destroyed and disposed of under the direct supervision of a Federal or State representative on the premises where the animals were exposed do not require individual identification.

**I. Quarantine procedures (cattle and bison)**

1. All herds in which reactor animals are disclosed shall be quarantined. Exposed animals must remain on the premises where disclosed unless a State or Federal permit has been obtained. Movement for immediate slaughter must be directly to a slaughtering establishment where approved State or Federal inspection is administered. Exposed animals must be identified by official eartags. Use of "S" brand is required unless animals are shipped in a sealed vehicle under permit, or accompanied to slaughter by a State or Federal representative.
2. Sale of feeder calves from quarantined herds shall be restricted. Feeder calves under 12 months of age that have passed a CFT test within 60 days may be permitted to move intrastate to a quarantined feedlot.
3. Herds in which *Mycobacterium bovis* infection has been confirmed shall remain under quarantine if not depopulated and must pass two tuberculin tests at intervals of at least 60 days, one additional test after 180 days, and three annual whole-herd tests. All animals moved from the farm shall be shipped directly to slaughter and shall be accompanied by a slaughter permit issued by a State or Federal representative. The herd must undergo two additional whole-herd tests after the quarantine is released. These tests may be applied to accreditation status.
4. Herds in which only NGL reactor(s) occur and selected tissues are found negative on histopathology and in which no evidence of *Mycobacterium bovis* infection has been disclosed may be released from quarantine only after a negative retest of the entire herd is completed at least 60 days subsequent to slaughter of the NGL reactors.
5. Suspects in herds in which at least one suspect and no reactor animals are disclosed shall be quarantined until all suspects are retested and classified negative or shipped directly to slaughter under permit. Herds with only suspects should be quarantined until all suspects are retested and classified negative or shipped directly to slaughter under permit.

Section 9 of the Code of Federal Regulations [CFR], Part 77.5, C, prohibits the interstate movement of suspect cattle and bison and negative cattle or bison in herds containing suspect cattle or bison [except for slaughter] until the tuberculosis status of all suspect(s) has been determined.

If animals are slaughtered as suspects (according to part III, section A(3)) but show no gross lesions, selected tissues are found negative on histopathology, and a complete epidemiologic investigation, including a herd test of all eligible animals, fails to disclose evidence of bovine tuberculosis or exposure thereto, upon concurrence of State and Federal officials the herd may be considered free of bovine tuberculosis. A 60-day herd retest is recommended.

6. Herds indicated as the source(s) of slaughter traceback case investigations shall be placed under quarantine within 30 days of notification, and a herd test of all eligible livestock shall be scheduled.

#### **J. Retest schedules for high-risk herds (cattle and bison)**

1. In herds with a history of lesions suggestive of bovine tuberculosis (but not confirmed), two complete annual herd tests shall be given after release from quarantine. The first test is to be applied about 1 year after release from quarantine.
2. In a newly assembled herd on premises where a tuberculous herd has been depopulated, two annual herd tests shall be applied to all cattle and/or bison. The first test must be applied about 6 months after assembly of the new herd. If the premises are vacated for over 1 year, these requirements can be waived by the DTE.
3. Exposed animals previously sold from a known-infected herd shall be depopulated with indemnity if at all possible. If the exposed animal(s) are not depopulated, only the cervical test shall be used as the initial test. All responding animals shall be classified as reactors. If negative to the test, the exposed animal(s) will subsequently be handled as if a part of the infected herd of origin for purposes of testing, quarantine release, and the five annual high-risk tests; also, the remainder of the herd shall be retested in 1 year with the caudal-fold test. The balance of the receiving herd shall initially be tested as follows:
  - a. If lesions of tuberculosis (based on histopathologic examination) are found in the exposed animal(s), the remainder of the herd shall be depopulated or tested, preferably with the cervical test.
  - b. In all other cases, the remainder of the herd shall be tested by the caudal-fold test. The responding animals may be classified as suspects and retested with the comparative cervical test.

4. The testing of source herds of regular-kill animals having lesions of tuberculosis shall be done by full-time State or Federal regulatory veterinarians. If the herd of origin is positively identified, all animals responding to the caudal-fold test shall be classified as reactors. Only when the herd of origin is not positively identified should the comparative cervical test be used to classify animals that respond to the caudal-fold test.
5. Testing of source herds of reactors shall be by full-time State or Federal regulatory veterinarians using the caudal-fold test procedure. Responding animals may be classified as reactors, or if classified as suspects, may be retested by the comparative cervical test.
6. In herds where *Mycobacterium bovis* infection has been confirmed but the herd has not been depopulated, five annual tests on the entire herd shall be given following the release from quarantine.

## Part IV—Captive Cervids: Standard Procedures (Minimum Requirements)

### A. Classification of captive cervids tested

1. Single cervical tuberculin test
  - a. Herds of unknown status—All responses shall be recorded and the animals shall be classified as suspects and quarantined for retest with the CCT test or BTB test unless, in the judgment of the testing veterinarian, the reactor classification is indicated.
  - b. Known infected herds—All responses shall be recorded and the animals shall be classified as reactors.
2. Comparative cervical tuberculin test—All responses are to be measured to the nearest 0.5 mm.
  - a. Animals having a response to bovine PPD of less than 1 mm should be classified negative.
  - b. Animals having a response to bovine PPD of 1 through 2 mm, and also equal to or greater than their response to the avian PPD, shall be classified as suspects. Animals having a response to bovine PPD greater than 2 mm but equal to their response to avian PPD shall be classified as suspects, except when, in the judgment of the testing veterinarian, the reactor classification is indicated. Animals meeting the criteria for suspect classification in response to two successive CCT tests shall be classified as reactors.
  - c. Animals having a response to bovine PPD that is greater than 2 mm and is at least 0.5 mm greater than their avian PPD response shall be classified as reactors.
3. Suspects to the SCT test may be retested by either the CCT or the BTB tests. The CCT may be applied within 10 days following the SCT test injection or after 90 days. If the CCT test is applied within 10 days of the SCT test, the opposite side of the neck shall be used. The sample for the BTB test shall be taken after 12 days and optimally before 30 days after the SCT test injection. Animals positive to the CCT test or the BTB test shall be classified as reactors.
4. Suspects to the SCT test may be necropsied in lieu of retesting by supplemental tests and, if found without evidence of *M. bovis* infection by histopathology (including selected specimens submitted from animals having no gross lesions indicative of tuberculosis) or culture, shall be considered negative for tuberculosis.

## **B. Interstate or international movement**

1. No captive cervid with a response to any tuberculosis test is eligible for international movement.
2. No captive cervid with a response to any tuberculosis test is eligible for interstate movement unless said animal is subsequently classified “negative for tuberculosis” based upon an official tuberculosis test or is consigned directly to slaughter.
3. Captive cervids that originate from accredited herds may be moved interstate without further tuberculosis testing, provided that they are accompanied by a certificate stating that such captive cervids originated from an accredited herd.
4. Captive cervids not known to be affected with or exposed to tuberculosis that originate from qualified herds may be moved interstate if the animals are accompanied by a certificate stating that they originate from a qualified herd and have been classified negative to an official tuberculosis test that was conducted within 90 days prior to the date of movement. If the qualifying test was administered within 90 days of movement, the animal(s) to be moved do not require an additional test.
5. Captive cervids not known to be affected with or exposed to tuberculosis that originate from monitored herds may be moved interstate if they are accompanied by a certificate stating that such captive cervids originate from a monitored herd and have been classified negative to an official tuberculosis test that was conducted within 90 days prior to the date of movement.
6. Captive cervids not known to be affected with or exposed to tuberculosis that originate from all other herds may be moved interstate, provided that (1) they are accompanied by a certificate stating that such captive cervids have been classified negative in response to two official tuberculosis tests conducted no less than 90 days apart, (2) the second test was conducted within 90 days prior to the date of movement, and (3) the animals were isolated from all other members of the herd during the testing period.
7. Captive cervids less than 12 months of age that originate from and were born in qualified or monitored herds may be moved without further tuberculosis testing, provided that they are accompanied by a certificate stating that such captive cervids originated from such herds and have not been exposed to captive cervids from a lower status herd.



8. Institutions that have been accredited by the American Zoo and Aquarium Association (AZA) are exempt from these requirements when movement is between accredited member facilities. Captive cervids in zoological parks that have been accredited by AZA are exempt from the regulations in this subpart when the captive cervids are moved directly interstate between AZA member facilities. Any captive cervids moved interstate that are not moved directly from an AZA member facility to another AZA member facility must be moved in accordance with the regulations in this subpart.
9. Except for captive cervids moving interstate under permit directly to slaughter or necropsy, each captive cervid or shipment of captive cervids to be moved interstate must be accompanied by a certificate issued within 30 days of the movement by a State or Federal animal health official or an accredited veterinarian. The certificate must state the number of the official eartag or other identification approved by the Administrator for each captive cervid to be moved, the number of captive cervids covered by the certificate, the purpose of the movement, the origin and destination of the captive cervids, the consignor, and the consignee.

#### **C. Reporting of tests**

A report of all tuberculosis tests (SCT, CCT, and BTB) shall be submitted in accordance with the requirements of the cooperating State and Federal officials.

Results of the BTB test and other in vitro laboratory tests shall be reported by the authorized testing laboratories.

This report shall include the identification of each animal by eartag number or tattoo or other identification, age, sex, and breed, record of all responses and a record of the size of the response, where indicated, and the test interpretation. Summary supporting BTB test data shall be included in reports submitted to State and Federal officials, and full supporting data shall be submitted on a case-by-case basis.

#### **D. Procedures in affected herds**

Disclosure of tuberculosis in any herd shall be followed by a complete epidemiologic investigation. All captive cervids in herds from which tuberculous animals originate and all captive cervids that are known to have associated with affected captive cervids or other affected animals shall be tested promptly. These procedures shall apply to adjacent and contact herds as well as to the evaluation and testing of possible source herds for the affected herd. Herds that have received exposed animals shall be tested following the slaughter or testing of the exposed animals. Every effort shall be made to ensure the immediate elimination of the disease from all species of animals on the

premises. The herd shall be handled as outlined under Section G, Quarantine Procedures.

**E. Disposition of tuberculin-responding captive cervids**

1. Reactors shall remain on the premises where they were disclosed until a State or Federal permit for movement has been obtained. Movement for immediate slaughter will be within 15 days of classification directly to a slaughter establishment where approved State or Federal inspection is maintained. Alternatively, the animals may be destroyed and a necropsy may be conducted by, or under the supervision of, a State or Federal regulatory veterinarian trained in tuberculosis necropsy procedures.
2. Herds containing suspects to the SCT test shall be quarantined until the suspect animals are
  - a. Retested negative by the CCT test within 10 days of the SCT test injection  
*or*
  - b. Retested negative by the CCT test after 90 days, *or*
  - c. Retested negative by the BTB test after 12 days and optimally before 30 days following the SCT test injection *or*
  - d. Shipped under permit directly to a slaughter facility under State or Federal inspection, or they may be necropsied by, or under the supervision of, a State or Federal regulatory veterinarian trained in tuberculosis necropsy procedures. If such animals are found without evidence of *M. bovis* infection by histopathology (including selected specimens submitted from animals having no gross lesions indicative of tuberculosis) or culture, they shall be considered negative for tuberculosis.
3. Suspects to the CCT test or equivocal to the BTB test shall remain under quarantine until
  - a. Comparative cervical suspects are retested using the CCT test after 90 days *or*
  - b. BTB-equivocal animals are retested using the BTB test optimally before 60 days following the SCT test injection *or*
  - c. They are shipped under permit directly to a slaughter facility under State or Federal inspection, or necropsied by, or under the supervision of, a State or Federal regulatory veterinarian trained in tuberculosis necropsy procedures. Such animals shall be considered tuberculosis negative unless evidence of the disease is found by culture or histopathology (including selected specimens submitted from animals having no gross lesions).

4. An animal meeting the suspect criteria on two successive CCT or two BTB equivocal tests followed by one suspect CCT test shall be classified as a reactor and be identified as such. The testing veterinarian must justify exceptions in writing and must have the concurrence of State or Federal animal health officials.
5. An animal having two successive equivocal BTB tests may be retested with a CCT after 90 days of the SCT test injection, or may, at the owner's discretion, be sent to slaughter.

#### **F. Identification of reactors (captive cervids)**

Reactor captive cervids shall be identified by branding with the letter "T" on the left hip, not less than 2 inches (5 cm) nor more than 3 inches (7.5 cm) high, and by tagging with an official eartag bearing a serial number and the inscription "U.S. Reactor" attached to the left ear of each animal. In lieu of branding, the reactor(s) may be shipped to slaughter in an officially sealed vehicle or accompanied to slaughter by a State–Federal regulatory official, provided that such reactor(s) are tattooed with the letters "TB" in the left ear and these letters are sprayed on the left ear with yellow paint.

#### **G. Quarantine procedures (captive cervids)**

1. All herds in which reactor animals are disclosed shall be quarantined. The remaining exposed animals must remain on the premises where the disease was disclosed unless a State or Federal permit for movement to slaughter has been obtained. Movement for immediate slaughter must be directly to a slaughter establishment where approved State or Federal inspection is administered. Animals must be identified by official eartag. Use of "S" branding is required as per 9 CFR, Part 50, or animals must be shipped in an officially sealed vehicle or accompanied to slaughter by a State–Federal regulatory official. The "S" brand shall be applied to the left hip.
2. If captive cervid herds in which *M. bovis* is confirmed (affected herds) are not depopulated, they shall remain under quarantine. Such herds must also pass three consecutive whole-herd SCT tests at intervals of at least 90 days, one additional test after 180 days, and three annual whole-herd tests. The CCT test shall not be used in affected herds until the completion of two consecutive negative whole-herd tests, or two consecutive whole-herd tests with NGL reactors only, in which selected tissues are negative on the basis of histopathology and culture. The BTB test may also be used, provided that it is used simultaneously with a whole-herd SCT test. The sample for the BTB test may be taken at the time of injection or reading of the SCT test. All animals positive to either test shall be classified as reactors. The herd must undergo two additional whole-herd annual tests after the quarantine is released. These tests may be applied to accreditation status.

3. Captive cervid herds that have had a test of all eligible animals with NGL reactors only and no evidence of tuberculosis infection found by histopathology and culture of *M. bovis* (including selected specimens submitted from animals having no gross lesions indicative of tuberculosis) may be released without further restrictions.
4. Captive cervid herds in which one or more animals are found to have compatible or suggestive lesions by histopathology without the isolation of *M. bovis* may be released from quarantine following a negative 90-day retest of the entire herd and with the concurrence of the regional tuberculosis epidemiologist, provided that there is no known association with *M. bovis*.
5. Captive cervid herds with NGL reactors only (in which no evidence of tuberculosis infection is found by histopathology and culture of *M. bovis*) and such herds where all eligible animals cannot be tested shall be evaluated by the State and/or regional tuberculosis epidemiologist for possible release from quarantine.

#### **H. Retest schedules for high-risk herds**

1. In herds with a history of lesions compatible with or suggestive of tuberculosis by histopathology (without isolation of *M. bovis*), two annual whole-herd tests shall be given after release from quarantine. Herds with a bacteriologic isolation of a mycobacterial species other than *M. bovis* should be considered negative for bovine tuberculosis with no further testing requirements.
2. In a newly assembled herd on premises where a tuberculous herd has been depopulated, two annual whole-herd tests shall be given. The first test is to be given about 6 months after assembly of the new herd. If the premises had been vacated for 1 year, these requirements may be waived.
3. Exposed animals previously sold from known-infected herds shall be depopulated if possible or tested with the SCT test by State or Federal veterinarians. The BTB test may be used simultaneously with the SCT test as an additional diagnostic tool. The sample for the BTB test may be taken at the time of injection or reading of the SCT test. All animals with a positive response to either test shall be classified as reactors.
  - a. If bovine tuberculosis is confirmed in the exposed animal(s), the remainder of the receiving herd shall be classified as an infected herd and handled according to part IV, section G(2), of these UMR.

- b. If negative to the test, the exposed animals will subsequently be handled as if they were part of the infected herd of origin for purposes of testing, quarantine release, and the five annual high-risk tests. The remainder of the herd shall be tested at the time of the initial investigation and retested in 1 year with the SCT test. Supplemental diagnostic tests may be used if needed.
4. Herds indicated as the source of an infected animal in slaughter traceback investigations shall be placed under quarantine within 30 days of notification to the Area Veterinarian-in-Charge, and a herd test shall be scheduled. Testing of source herds of slaughter animals having lesions of tuberculosis shall be done by State or Federal regulatory veterinarians. If the herd of origin is positively identified and *M. bovis* has been confirmed by bacterial isolation from the slaughtered animal, all animals responding to the SCT test shall be classified as reactors. In all other cases, supplemental diagnostic tests may be used.
5. Herds identified as the source of animals found to have tuberculous lesions in an affected herd shall be tested by State or Federal regulatory veterinarians using the SCT test. Responding animals may be classified as reactors or suspects. If classified as suspects, they may be retested by supplemental

diagnostic tests.

## **Part V—Herd Status Plans for Cattle, Bison, and Goats**

### **A. Accredited herd plan for cattle or bison**

1. Animals to be tested—Testing of herds for accreditation or reaccreditation shall include all cattle or bison 24 months of age and older and any animals other than natural additions under 24 months of age. In herds released from tests for high-risk herds (part III, section H) after 5 years, the fourth and fifth annual negative test will requalify for accreditation. All natural additions shall be individually identified and recorded on the test report as members of the herd at the time of the annual test.
2. Additions—Herd additions must originate directly from one of the following:
  - a. Accredited herd.
  - b. Herd in an Accredited-Free State.
  - c. Herd in a Modified Accredited State that has passed a herd test of all animals 24 months of age and older within 12 months and in which the individual animals for addition had negative results on the tuberculin test conducted within 60 days.
  - d. Herd in a Modified Accredited State not meeting the requirements of (a), (b), or (c) in this section. Individual animals for addition must have a negative result on a tuberculin test within 60 days prior to entering the premises of the accredited herd. Such animals must also be kept in isolation from all members of the accredited herd until they have negative results on a test conducted after 60 days from their date of entry into the herd.

Animals added under (b), (c), or (d) in this section shall not receive accredited herd status for sale purposes until they have been members of the herds at least 60 days and were retested with a negative result 60 days after entry.

3. Accreditation and reaccreditation—To qualify for accredited herd status, the herd must pass at least two consecutive annual tuberculin tests with no evidence of bovine tuberculosis. All animals must be bona fide members of the herd. Qualified herds shall be issued a certificate by the local State and Federal animal health officials and other appropriate information to emphasize the significance of the herd-accreditation plan. The accreditation period will be 12 months (365 days) from the anniversary date and not 12 months from the

date of the reaccreditation test. To qualify for reaccreditation, the herd must pass an annual test within a period of 10 to 14 months of the anniversary date.

## **B. Accredited herd plan for goats**

1. Animals to be tested—Testing of herds for accreditation or reaccreditation shall include all goats 12 months of age and older. All natural additions shall be individually identified and recorded on the test charts as members of the herd at the time of the annual test.
2. Additions—Herd additions must originate directly from one of the following:
  - a. Accredited herd.
  - b. In a Modified Accredited State, a herd that has passed a herd test of all animals over 12 months of age and older. Also, the individual animals for addition must have negative results on the tuberculin test conducted within 60 days.
  - c. In a Modified Accredited State or Accredited-Free State (bovine), a herd not meeting the requirements of (a) or (b) in this section. Individual animals for addition must have a negative test result within 60 days prior to entering the premises of the accredited herd and must be kept in isolation from all members of the accredited herd until they have a negative result on a tuberculosis test administered at least 60 days after date of entry.

Animals added under (b) and (c) shall not receive accredited herd status for sale purposes until they have been members of the herd at least 60 days and have been retested and found negative 60 days after entry.

3. Accreditation and reaccreditation—To qualify for accredited herd status, the herd must pass at least two consecutive annual tuberculin tests with no evidence of bovine tuberculosis.

All animals must be bona fide members of the herd. Qualified herds shall be

issued a certificate by local State and Federal Animal Health officials. The accreditation period will be 12 months (365 days) from the anniversary date and not 12 months from the date of the reaccreditation test. To qualify for reaccreditation, the herd must pass an annual test within a period of 10 to 14 months of the anniversary date.

## **Part VI—Herd Status Plans for Captive Cervids**

### **A. Accredited herd plan for captive cervids**

1. Animals to be tested—Testing of herds for accreditation or reaccreditation shall include all captive cervids and all other hoof stock over 12 months of age and animals under 12 months of age that are not natural additions, except that animals under 12 months of age that are not natural additions originating from an accredited herd need not be tested.
2. Qualifying standards—To meet the requirements for accredited herd status, the herd must pass at least three consecutive official tests for tuberculosis conducted at 9- to 15-month intervals with no evidence of bovine tuberculosis.

In herds previously infected, the fourth, fifth, and sixth annual whole-herd negative test will requalify the herd for accreditation.

Herds meeting these standards may be issued a certificate by local State and Federal animal health officials.

3. Additions—Accredited herd additions must originate directly from one of the following and have no exposure to captive cervids from herds of lesser status than the additions' herd of origin:
  - a. An accredited herd.
  - b. A qualified or monitored herd, provided that the individual animals for addition had negative results on an official tuberculosis test conducted within 90 days prior to entry and were isolated from members of the accredited herd until these animals had a negative result on an official tuberculosis test conducted at least 90 days following entry.
  - c. A herd not meeting the requirements of (a) or (b) in this section. Individual animals for addition must be isolated from all other members of the herd of origin and must have negative results on two official tests for tuberculosis conducted at least 90 days apart. The second of these tests must be conducted within 90 days prior to movement to the premises of the accredited herd. The additions must be kept in isolation from members of the accredited herd until the additions have a negative result on an official tuberculosis test conducted at least 90 days following the date of entry.



Animals other than natural additions added to an accredited-free herd shall not receive the accredited herd status for sale or movement purposes until they have a negative result on a retest 90 days after entry and until they have been included in a recertification herd test.

4. Reaccreditation—To qualify for reaccreditation, the accredited herd must pass a test within a period of 21 to 27 months of the anniversary date. The accreditation period will be 24 months (730 days) from the anniversary date (not 24 months from the date of the reaccreditation test). In an Accredited-Free State (captive cervids), to qualify for reaccreditation the accredited herd must pass a test within a period of 33 to 39 months of the anniversary date. The accreditation period will be 36 months (1,095 days) from the anniversary date (not 36 months from the date of the reaccreditation test).

#### **B. Monitored herd plan for captive cervids**

1. Requirements—For a herd to be eligible for monitored herd status, identification records must be maintained on animals 1 year of age and older that have been slaughtered, inspected, and found negative for tuberculosis at an approved slaughter facility or at an approved diagnostic laboratory. Such records may also include animals that had a negative result on an official tuberculosis test. For monitored herd status, owners must identify animals 1 year of age or older at slaughter and animals that had a negative result on an official test at a rate to detect infection at a 2-percent prevalence level with 95-percent confidence evenly distributed over a 3-year period. No less than 20 percent of the qualifying animals must be slaughter inspected. This rate would require a maximum of 178 animals. (See appendix 1.) The qualifying total herd size is the annual average of herd members 1 year of age or older maintained during the initial test period, which period shall not exceed 3 years.
2. Maintenance of monitored herd status—For monitored herd status to be renewed, an annual report shall be submitted by the person, firm, or corporation responsible for the management of the herd to the cooperating State or Federal animal health official prior to the anniversary date. This report shall give the number of eligible animals currently in the herd, the number of animals 1 year of age or older identified and slaughtered at a State or federally approved slaughter facility, and animals that had a negative result on an official tuberculin test during the preceding year. The number of slaughter inspections and animals tuberculosis-tested in accordance with requirements

for interstate movement reported in any given year must be at least 25 percent of the number required to initially qualify a herd of this size for monitored herd status provided. Also, during each consecutive 3-year period, 100 percent of the initial qualifying total shall be achieved.

3. Additions—Monitored herd additions must originate directly from one of the following:
  - a. An accredited herd.
  - b. A qualified or monitored herd, provided that the individual animals for addition were negative to an official tuberculosis test conducted within 90 days prior to entry.
  - c. A herd not meeting the requirements of (a) or (b) in this section. Individual animals for addition must be isolated from other members of the herd of origin and must have negative results to two official tests for tuberculosis conducted at least 90 days apart, provided that the second test was conducted within 90 days prior to movement to the premises of the monitored herd. The additions must be kept in isolation from all members of the monitored herd until the additions have a negative result on an official tuberculosis test conducted at least 90 days following the date of entry.

Animals added under (c) shall not receive monitored herd status for sale purposes until they have a negative result on a retest 90 days after entry.

### **C. Qualified herd plan for captive cervids**

1. Animals to be tested—Testing of herds for qualified herd status shall include all captive cervids 12 months of age or older and any animals under 12 months of age that are not natural additions. Animals under 12 months of age that are not natural additions and that were born in and originate from accredited, qualified, or monitored herds need not be tested.
2. Qualifying standards—To meet the requirements for qualified herd status, the herd must be administered one official test for tuberculosis within a 7-month period with results indicating no evidence of bovine tuberculosis. The qualified herd status remains in effect for 12 months following the qualifying test.
3. Additions—Herd additions must originate directly from one of the following:
  - a. An accredited herd.

- b. A monitored or qualified herd provided that the individual animals for addition were negative to an official tuberculosis test conducted within 90 days before entry.
- c. A herd not meeting the requirements of (a) or (b) in this section. Individual animals for addition must be isolated from other members of the herd of origin and must have negative results on two official tests for tuberculosis conducted at least 90 days apart, provided that the second test was conducted within 90 days prior to movement to the premises of the qualified herd. The additions must be kept in isolation from all members of the qualified herd until the additions have a negative results on an official tuberculosis test conducted at least 90 days following the date of entry.

Animals added under (c) shall not receive qualified herd status for sale or movement purposes until they are negative to a retest 90 days after entry.

#### **D. Status of newly assembled herds**

A newly assembled herd shall assume the herd status of the herd from which the animals originated. If the new herd is assembled from more than one herd, it shall assume the status of the old herd with the lowest status. A newly assembled herd shall also assume the testing schedule of the herd whose status it assumes.

### **Part VII—State Status**

#### **A. General provisions**

1. Revocation or suspension of status—Disclosure of tuberculosis in the State and/or failure to take progressive steps to comply with these UMR to seek out and eliminate bovine tuberculosis shall be cause for revocation or reduction of status.
2. A State may maintain status, as defined in Title 9, CFR, Part 77.1, if the State complies with all of the procedures in these UMR.
3. Tuberculosis must be compulsorily notifiable to State animal health authorities. The State must have an infrastructure, laws, and regulations to make the disease notifiable and to ensure compliance.
4. The State must have an effective veterinary organization and infrastructure. A State must have the legal and financial resources to implement a tuberculosis eradication program and ensure compliance.
5. The State must be able to supervise boundaries, maintain clinical and epidemiologic surveillance, and carry out necessary diagnostic tests.
6. Disease cases and outbreaks must be reported promptly.

#### **B. Surveillance**

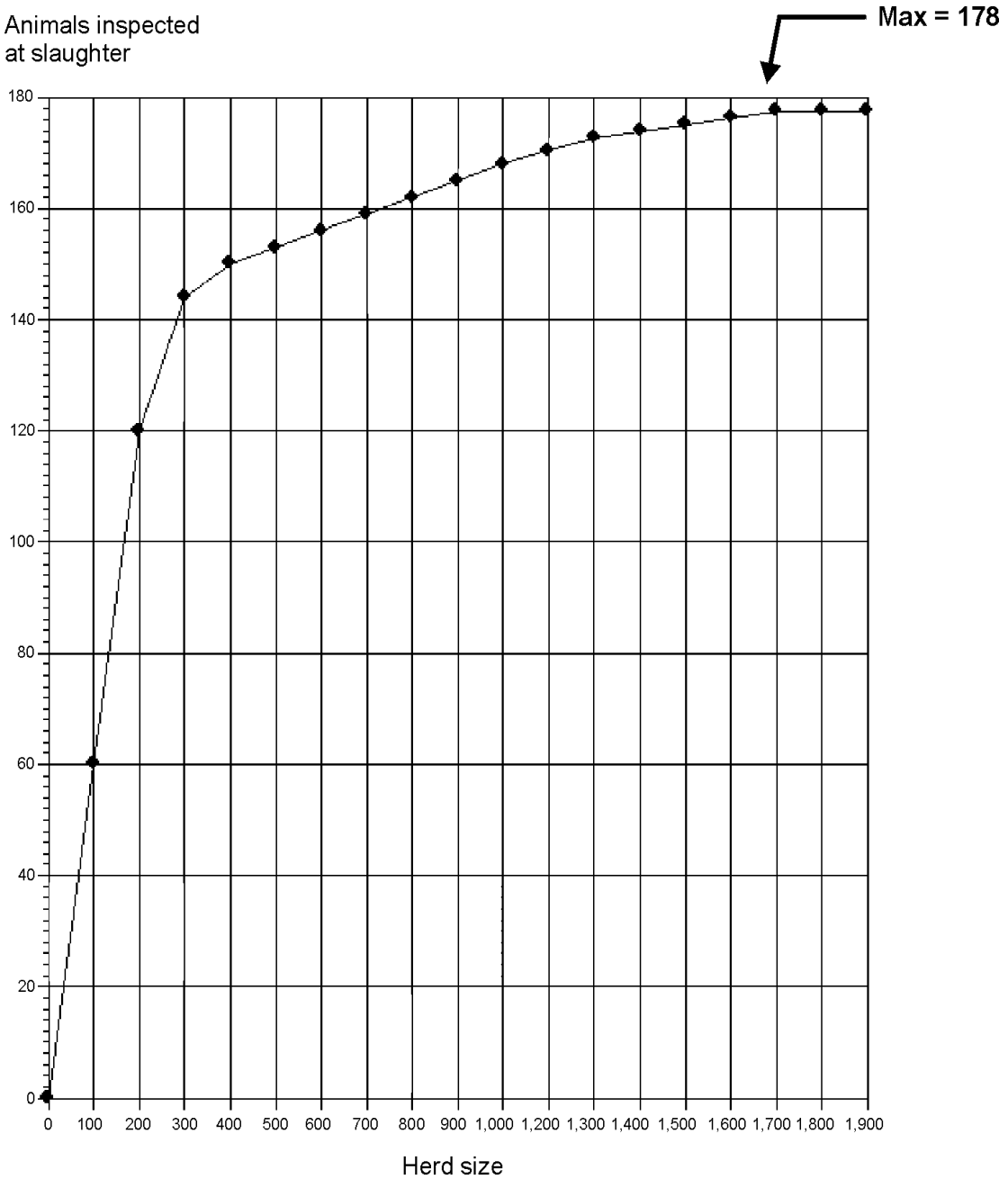
1. Surveillance through slaughter monitoring and/or tuberculin testing and traceback procedures should be conducted at a rate that allows detection of tuberculosis in the overall population of livestock at a 2-percent prevalence level with 95-percent confidence.
2. Trace testing—Use the following procedures:
  - a. All cattle and bison in herds of origin or cattle and bison associated with those showing evidence of tuberculosis at time of slaughter must be quarantined and tested.
  - b. The testing schedule of all reactor and suspect herds must be current.

### **C. Annual reporting**

1. Testing and slaughter surveillance—An annual report shall be submitted for each State or appropriate subdivision to APHIS, VS, prior to November 30 to show the amount of testing and slaughter surveillance that has been conducted. Such surveillance shall be adequate to ensure the discovery of bovine tuberculosis should the disease be present in the State.
2. Approval and maintenance of State status requires a yearly review and approval by the Administrator of APHIS. Only two status zones are allowed in a State. An annual report must be submitted by the State for each zone.

## Appendix 1—Monitored Herd Plan for Cervidae\*

Animals inspected  
at slaughter



\* Required for herd eligibility:  
detection at a 2-percent prevalence level  
with 95-percent confidence.