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attached to the left ear and bearing a serial number and the inscription "U.S. Reactor," and either:

(i) Branded with the letter "T" high on the left hip near the tailhead and at least 5 by 5 centimeters (2 by 2 inches) in size; or

(ii) Permanently identified by the letters "TB" tattooed legibly in the left ear, sprayed on the left ear with yellow paint, and either accompanied directly to necropsy or slaughter by an APHIS or State representative or moved directly to necropsy or slaughter in a vehicle closed with official seals. Such official seals must be applied and removed by an APHIS representative, State representative, accredited veterinarian, or an individual authorized for this purpose by an APHIS representative.

(3) *Identification of exposed captive cervids.* Exposed captive cervids must be identified by an official eartag or other approved identification and either:

(i) Branded with the letter "S" high on the left hip near the tailhead and at least 5 by 5 centimeters (2 by 2 inches) in size; or

(ii) Either accompanied directly to necropsy or slaughter by an APHIS or State representative or moved directly to necropsy or slaughter in a vehicle closed with official seals. Such official seals must be applied and removed by an APHIS representative, State representative, accredited veterinarian, or an individual authorized for this purpose by an APHIS representative.

§77.41 Cleaning and disinfection of premises, conveyances, and materials.

All conveyances and associated equipment, premises, and structures that are used for receiving, holding, shipping, loading, unloading, and delivering captive cervids in connection with their interstate movement and that are determined by cooperating State and Federal animal health officials to be contaminated because of occupation or use by tuberculous or reactor livestock must be cleaned and disinfected under the supervision of the cooperating State or Federal animal health officials. Such cleaning and disinfecting must be done in accordance

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with the procedures approved by the cooperating State or Federal animal health officials. Cleaning and disinfection must be completed before the premises, conveyances, or materials may again be used to convey, hold, or in any way come in contact with any livestock.

PART 78—BRUCELLOSIS

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- AUTHORITY: 7 U.S.C. 8301-8317; 7 CFR 2.22, 2.80, and 371.4.
- SOURCE: 51 FR 32580, Sept. 12, 1986, unless otherwise noted.

Subpart A—General Provisions

§ 78.1 Definitions.

The following terms are defined in this section:

- Accredited veterinarian
- Administrator
- Animals
- Animal and Plant Health Inspection Service
- APHIS representative
- Approved brucella vaccine
- Approved individual herd plan
- Approved intermediate handling facility
- Area
- “B” branded
- Boar
- Brucellosis
- Brucellosis exposed
- Brucellosis negative
- Brucellosis reactor
- Brucellosis ring test
- Brucellosis suspect
- Certificate
- Certified brucellosis-free herd
- Class A State or area
- Class B State or area
- Class C State or area
- Class Free State or area
- Complete herd test (CHT)
- Confirmatory test
- Dairy cattle
- Designated epidemiologist
- Directly
- Epidemiologist
- Epidemiology
- Farm of origin
- Feral swine
- Finished fed cattle
- Herd
- Herd blood test
- Herd known to be affected
- Herd not known to be affected
- Herd of origin of swine
- Interstate
- Market cattle identification test cattle
- Market swine test (MST) reactor
- Market swine test swine
- Monitored-negative feral swine population
- Moved
- Moved (movement) in interstate commerce
- Official adult vaccinate
- Official brand inspection certificate

- Official brand recording agency
- Official calfhood vaccinate
- Official eartag
- Official seal
- Official swine tattoo
- Official test
- Official vaccinate
- Official vaccination eartag
- Originate
- Parturient
- Permit
- Permit for entry
- Person
- Postparturient
- Purebred registry association
- Qualified herd
- Quarantined area
- Quarantined feedlot
- Quarantined pasture
- Recognized slaughtering establishment
- “S” branded
- “S” brand permit
- Sow
- Specifically approved stockyard
- State
- State animal health official
- State representative
- Successfully closed case
- Swine brucellosis
- Test-eligible cattle and bison
- United States Department of Agriculture
- backtag
- Validated brucellosis-free herd
- Validated brucellosis-free State
- Veterinarian in Charge
- Whole herd vaccination

As used in this part, the following terms shall have the meanings set forth in this section.

Accredited veterinarian. A veterinarian approved by the Administrator in accordance with the provisions of part 161 of this title to perform functions specified in parts 1, 2, 3, and 11 of subchapter A, and subchapters B, C, and D of this chapter, and to perform functions required by cooperative State-Federal disease control and eradication programs.

Administrator. The Administrator, Animal and Plant Health Inspection Service, or any person authorized to act for the Administrator.

Animals. Cattle, bison, and swine.

Animal and Plant Health Inspection Service (APHIS). The Animal and Plant Health Inspection Service of the United States Department of Agriculture.

Animal identification number (AIN). A numbering system for the official identification of individual animals in the United States. The AIN contains 15 digits, with the first 3 being the country

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code (840 for the United States), the alpha characters USA, or the numeric code assigned to the manufacturer of the identification device by the International Committee on Animal Recording.

APHIS representative. An individual employed by APHIS who is authorized to perform the function involved.

Approved brucella vaccine. A *Brucella* product approved by and produced under license of the United States Department of Agriculture for injection into cattle or bison to enhance their resistance to brucellosis.

Approved individual herd plan. A herd management and testing plan designed by the herd owner, the owner's veterinarian if so requested, and a State representative or APHIS representative to determine the disease status of animals in the herd and to control and eradicate brucellosis within the herd. The plan must be jointly approved by the State animal health official and the Veterinarian in Charge.

Approved intermediate handling facility. Premises approved by the Administrator and the State animal health official for receiving and handling cattle and bison for release only to recognized slaughtering establishments and quarantined feedlots. Cattle and bison may be held at an approved intermediate handling facility for a maximum of 7 days and may not change ownership during this time. No cattle or bison, except cattle or bison moved directly from a farm of origin, shall be permitted to enter an approved intermediate handling facility unless they are accompanied by a permit or "S" brand permit. Cattle or bison transported in vehicles closed with official seals are prohibited from entering the approved intermediate handling facility. No cattle or bison shall be permitted to leave an approved intermediate handling facility unless they are accompanied by a permit or "S" brand permit which lists a recognized slaughtering establishment or a quarantined feedlot as the point of destination. To qualify for and retain approval, the following conditions must be met: (a) The facility must be separate and apart from other livestock handling facilities for breeding cattle and breeding bison; (b) Serviceable

equipment for cleaning and disinfection shall be furnished and maintained with adequate disinfectant on hand; (c) The facility must be cleaned and disinfected in accordance with §71.4(a) of this chapter; (d) Any document relating to cattle or bison which are or have been in the facility shall be maintained by the facility for a period of 1 year; (e) State representatives and APHIS representatives shall be granted, at reasonable hours, access to all documents required to be maintained by the facility and authority to reproduce the documents; and (f) Each entrance and exit to the facility must prominently display a sign bearing the following words: "All cattle and bison entering this facility must go directly to slaughter or a quarantined feedlot". The Administrator may withdraw or deny approval of any intermediate handling facility in accordance with §71.20 of this chapter.

Area. That portion of any State which has a separate brucellosis classification under this part.

"B" branded. Branding with a hot iron the letter "B" high on the left hip near the tailhead and at least 5 by 5 centimeters (2 by 2 inches) in size.

Boar. An uncastrated male swine 6 months of age or over which is or has been capable of being used for breeding purposes.

Brucellosis. The contagious, infectious, and communicable disease caused by bacteria of the genus *Brucella*. It is also known as Bangs disease, undulant fever, and contagious abortion.

Brucellosis exposed. Except for brucellosis reactors, animals that are part of a herd known to be affected, or are in a quarantined feedlot or a quarantined pasture, or are brucellosis suspects, or that have been in contact with a brucellosis reactor for a period of 24 hours or more, or for a period of less than 24 hours if the brucellosis reactor has aborted, calved, or farrowed within the past 30 days or has a vaginal or uterine discharge.

Brucellosis negative. An animal subjected to one or more official tests resulting in a brucellosis negative classification or reclassified as brucellosis

negative by a designated epidemiologist as provided for in the definition of official test.

Brucellosis reactor. An animal subjected to an official test resulting in a brucellosis reactor classification or subjected to a bacteriological examination for field strain *Brucella abortus* and found positive or reclassified as a brucellosis reactor by a designated epidemiologist as provided for in the definition of official test.

Brucellosis ring test. The brucellosis ring test is conducted on composite milk or cream samples from dairy herds and is interpreted as either negative or suspicious (positive). Herds which are negative to the brucellosis ring test and which are not quarantined as brucellosis affected are classified as brucellosis negative for public health ordinances and surveillance purposes. Herds classified as suspicious require a herd blood test to determine animal and herd status.

Brucellosis suspect. An animal subjected to an official test resulting in a brucellosis suspect classification or reclassified as a brucellosis suspect by a designated epidemiologist as provided for in the definition of official test.

Certificate. An official document issued by an APHIS representative, state representative, or accredited veterinarian at the point of origin of an interstate movement of animals.

(a) The certificate must show the official eartag number, individual animal register breed association registration tattoo, individual animal registered breed association registration brand, individual animal registered breed association registration number, or similar individual identification of each animal to be moved; the number of animals covered by the certificate; the purpose for which the animals are to be moved; the points of origin and destination; the consignor; and the consignee. Ownership brands may be used in place of individual animal identification on certificates for cattle moved interstate when no official test for brucellosis is required under this part, provided the ownership brands are registered with the official brand recording agency. Except as provided in paragraphs (b) and (c) of this definition, all of the information required by

this paragraph must be typed or written on the certificate.

(b) As an alternative to typing or writing individual animal identification on a certificate, another document may be used to provide this information, but only under the following conditions:

(1) The document must be a state form or APHIS form that requires individual identification of animals;

(2) A legible copy of the document must be stapled to the original and each copy of the certificate;

(3) Each copy of the document must identify each animal to be moved with the certificate, but any information pertaining to other animals, and any unused space on the document for recording animal identification, must be crossed out in ink; and

(4) The following information must be written in ink in the identification column on the original and each copy of the certificate and must be circled or boxed, also in ink, so that no additional information can be added:

(i) The name of the document; and

(ii) Either the serial number on the document or, if the document is not imprinted with a serial number, both the name of the person who prepared the document and the date the document was signed.

(c) As an alternative to typing or writing ownership brands on a certificate, an official brand inspection certificate may be used to provide this information, but only under the following conditions:

(1) A legible copy of the official brand inspection certificate must be stapled to the original and each copy of the certificate;

(2) Each copy of the official brand inspection certificate must show the ownership brand of each animal to be moved with the certificate, but any other ownership brands, and any unused space for recording ownership brands, must be crossed out in ink;

(3) The following information must be written in ink in the identification column on the original and each copy of the certificate and must be circled or boxed, also in ink, so that no additional information can be added:

(i) The name of the attached document; and

(ii) Either the serial number on the official brand inspection certificate or, if the official brand inspection certificate is not imprinted with a serial number, both the name of the person who prepared the official brand inspection certificate and the date it was signed.

Certified brucellosis-free herd. A herd of cattle or bison which has qualified for and whose owner has been issued a certified brucellosis-free herd certificate signed by the appropriate State animal health official and the Veterinarian in Charge.

(a) *Certification.* Either of the following two methods may be used to qualify a herd:

(1) In the case of dairy cattle, by conducting a minimum of four consecutive negative brucellosis ring tests at not less than 90-day intervals, followed by a negative herd blood test within 90 days after the last negative brucellosis ring test; or

(2) By conducting at least two consecutive negative herd blood tests not less than 10 months nor more than 14 months apart.

(b) *Maintaining certification.* Certified brucellosis-free herd status will remain in effect for 1 year beginning with the date of issuance of the certified brucellosis-free herd certificate. A negative herd blood test must be conducted within 10 to 12 months of the last certification date for continuous status. Lapsed certification may be reinstated if a herd blood test is conducted within 14 months of the last certification date. A new recertification test date may be established if requested by the owner and if the herd is negative to a herd blood test on that date, provided that date is within 1 year of the previous certification date. A herd which loses certified brucellosis-free herd status because a brucellosis reactor is found in the herd may be recertified only by repeating the certification process, except that certified brucellosis-free herd status may be reinstated without repeating the certification process if epidemiological studies and bacteriological cultures conducted by an APHIS representative or State representative show that the herd was not affected with field strain *Brucella abortus*.

Class A State or area. A State or area which meets standards for classification as a Class A State or area and is certified as such on initial classification or on reclassification by the State animal health official, the Veterinarian in Charge, and the Administrator. Any reclassification will be made in accordance with §78.40 of this part. The following are the standards to attain and maintain Class A status.

(a) *Surveillance—(1) Brucellosis ring test.* The brucellosis ring test shall be conducted in the State or area at least four times per year at approximately 90-day intervals. All herds producing milk for sale shall be included in at least three of the four brucellosis ring tests per year.

(2) *Market Cattle Identification (MCI) program—(i) Coverage.* All recognized slaughtering establishments in the State or area must participate in the MCI program. Blood samples shall be collected from at least 95 percent of all cows and bulls 2 years of age or over at each recognized slaughtering establishment and subjected to an official test;

(ii) *Brucellosis reactors—(A) Tracebacks.* At least 90 percent of all brucellosis reactors found in the course of MCI testing must be traced to the farm of origin.

(B) *Successfully closed cases.* The State or area must successfully close at least 95 percent of the MCI reactor cases traced to the farm of origin during the 12-consecutive-month period immediately prior to the most recent anniversary of the date the State or area was classified Class A. To successfully close an MCI reactor case, State representatives or APHIS representatives must conduct an epidemiologic investigation at the farm of origin within 15 days after notification by the cooperative State-Federal laboratory that brucellosis reactors were found on the MCI test. Herd blood tests must be conducted or the herd must be confined to the premises under quarantine within 30 days after notification that brucellosis reactors were found on the MCI test, unless a designated epidemiologist determines that:

(1) The brucellosis reactor is located in a herd in a different State than the State where the MCI blood sample was

collected. In such cases a State representative or APHIS representative must give written notice of the MCI test results to the State animal health official in the State where the brucellosis reactor is located; or

(2) Evidence indicates that the brucellosis reactor is from a herd that no longer presents a risk of spreading brucellosis, or is from a herd that is unlikely to be infected with brucellosis. Such evidence could include, but is not limited to, situations where:

(i) The brucellosis reactor is traced back to a herd that has been sold for slaughter in entirety;

(ii) The brucellosis reactor is traced back to a herd that is certified brucellosis free and is 100-percent vaccinated; or

(iii) The brucellosis reactor showed a low titer in the MCI test and is traced back to a dairy herd that is 100 percent vaccinated and has tested negative to the most recent brucellosis ring test required by this section for herds producing milk for sale.

(3) *Epidemiologic surveillance*—(i) *Adjacent herds*. All adjacent herds or other herds having contact with cattle in a herd known to be affected shall have an approved individual herd plan in effect within 15 days of notification of brucellosis in the herd known to be affected; (ii) *Epidemiologically traced herds*. All herds from which cattle are moved into a herd known to be affected and all herds which have received cattle from a herd known to be affected shall have an approved individual herd plan in effect within 15 days of locating the source herd or recipient herd. (iii) Each State shall ensure that such approved individual herd plans are effectively complied with, as determined by the Administrator.

(b) *Herd infection rate*—(1) *Percentage of herds affected*. States or areas must not exceed a cattle herd infection rate, based on the number of herds found to have brucellosis reactors within the State or area during any 12 consecutive months due to field strain *Brucella abortus*, of 0.25 percent or 2.5 herds per 1,000, except in States with 10,000 or fewer herds. A special review by the Administrator will be made to determine if such small herd population States would qualify for Class A status.

Locations of herds, sources of brucellosis, and brucellosis control measures taken by the State will be considered.

(2) *Epidemiologic investigation*. Within 15 days after notification by the cooperative State-Federal laboratory that brucellosis reactors have been found in any herd, State representatives or APHIS representatives shall investigate that herd to identify possible sources of brucellosis. All possible sources of brucellosis identified shall be contacted within an additional 15 days to determine appropriate action.

(3) All herds known to be affected shall have approved individual herd plans in effect within 15 days after notification by a State representative or APHIS representative of a brucellosis reactor in the herd. Each State shall ensure that such approved individual herd plans are effectively complied with, as determined by the Administrator.

Class B State or area. A State or area which meets standards for classification as a Class B State or area and is certified as such on initial classification or on reclassification by the State animal health official, the Veterinarian in Charge, and the Administrator. Any reclassification will be made in accordance with § 78.40 of this part. The following are the standards to attain and maintain Class B status.

(a) *Surveillance*—(1) *Brucellosis ring test*. The brucellosis ring test shall be conducted in the State or area at least four times per year at approximately 90-day intervals. All herds producing milk for sale shall be included in at least three of the four brucellosis ring tests per year.

(2) *Market Cattle Identification (MCI) program*—(i) *Coverage*. All recognized slaughtering establishments in the State or area must participate in the MCI program. Blood samples shall be collected from at least 95 percent of all cows and bulls 2 years of age or over at each recognized slaughtering establishment and subjected to an official test; (ii) *Brucellosis reactors*—(A) *Tracebacks*. At least 80 percent of all brucellosis reactors found in the course of MCI testing must be traced to the farm of origin.

(B) *Successfully closed cases*. The State or area must successfully close at least

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90 percent of the MCI reactor cases traced to the farm of origin during the 12-consecutive-month period immediately prior to the most recent anniversary of the date the State or area was classified Class B. To successfully close an MCI reactor case, State representatives or APHIS representatives must conduct an epidemiologic investigation at the farm of origin within 30 days after notification by the cooperative State-Federal laboratory that brucellosis reactors were found on the MCI test. Herd blood tests must be conducted or the herd must be confined to the premises under quarantine within 30 days after notification that brucellosis reactors were found on the MCI test, unless a designated epidemiologist determines that:

(1) The brucellosis reactor is located in a herd in a different State than the State where the MCI blood sample was collected. In such cases a State representative or APHIS representative must give written notice of the MCI test results to the State animal health official in the State where the brucellosis reactor is located; or

(2) Evidence indicates that the brucellosis reactor is from a herd that no longer presents a risk of spreading brucellosis, or is from a herd that is unlikely to be infected with brucellosis. Such evidence could include, but is not limited to, situations where:

(i) The brucellosis reactor is traced back to a herd that has been sold for slaughter in entirety;

(ii) The brucellosis reactor is traced back to a herd that is certified brucellosis free and is 100-percent vaccinated; or

(iii) The brucellosis reactor showed a low titer in the MCI test and is traced back to a dairy herd that is 100 percent vaccinated and has tested negative to the most recent brucellosis ring test required by this section for herds producing milk for sale.

(3) *Epidemiologic surveillance*—(i) *Adjacent herds*. All adjacent herds or other herds having contact with cattle in a herd known to be affected shall have an approved individual herd plan in effect within 45 days of notification of brucellosis in the herd known to be affected; (ii) *Epidemiologically traced herds*. All herds from which cattle are moved into

a herd known to be affected and all herds which have received cattle from a herd known to be affected shall have an approved individual herd plan in effect within 45 days of locating the source herd or recipient herd. (iii) Each State shall ensure that such approved individual herd plans are effectively complied with, as determined by the Administrator.

(b) *Herd infection rate*—(1) *Percentage of herds affected*. States or areas must not exceed a cattle herd infection rate, based on the number of herds found to have brucellosis reactors within the State or area during any 12 consecutive months due to field strain *Brucella abortus*, of 1.5 percent or 15 herds per 1,000, except in States with 1,000 or fewer herds. A special review by the Administrator will be made to determine if such small herd population States would qualify for Class B status. Locations of herds, sources of brucellosis, and brucellosis control measures taken by the State will be considered.

(2) *Epidemiologic investigation*. Within 45 days after notification by the cooperative State-Federal laboratory that brucellosis reactors have been found in any herd, State representatives or APHIS representatives shall investigate that herd to identify possible sources of brucellosis. All possible sources of brucellosis identified shall be contacted within an additional 30 days to determine appropriate action.

(3) All herds known to be affected shall have approved individual herd plans in effect within 45 days after notification by a State representative or APHIS representative of a brucellosis reactor in the herd. Each State shall ensure that such approved individual herd plans are effectively complied with, as determined by the Administrator.

Class C State or area. A State or area which meets standards for classification as a Class C State or area and is certified as such on initial classification or on reclassification by the State animal health official, the Veterinarian in Charge, and the Administrator. Any reclassification will be made in accordance with §78.40 of this part. The following are the standards to attain and maintain Class C status.

(a) *Surveillance*—(1) *Brucellosis ring test*. The brucellosis ring test shall be conducted in the State or area at least four times per year at approximately 90-day intervals. All herds producing milk for sale shall be included in at least three of the four brucellosis ring tests per year.

(2) *Market Cattle Identification (MCI) program*—(i) *Coverage*. All recognized slaughtering establishments in the State or area must participate in the MCI program. Blood samples shall be collected from at least 95 percent of all cows and bulls 2 years of age or over at each recognized slaughtering establishment and subjected to an official test;

(ii) *Brucellosis reactors*—(A) *Tracebacks*. At least 80 percent of all brucellosis reactors found in the course of MCI testing must be traced to the farm of origin.

(B) *Successfully closed cases*. The State or area must successfully close at least 90 percent of the MCI reactor cases traced to the farm of origin during the 12-consecutive-month period immediately prior to the most recent anniversary of the date the State or area was classified Class C. To successfully close an MCI reactor case, State representatives or APHIS representatives must conduct an epidemiologic investigation at the farm of origin within 30 days after notification by the cooperative State-Federal laboratory that brucellosis reactors were found on the MCI test. Herd blood tests must be conducted or the herd must be confined to the premises under quarantine within 30 days after notification that brucellosis reactors were found on the MCI test, unless a designated epidemiologist determines that:

(1) The brucellosis reactor is located in a herd in a different State than the State where the MCI blood sample was collected. In such cases a State representative or APHIS representative must give written notice of the MCI test results to the State animal health official in the State where the brucellosis reactor is located; or

(2) Evidence indicates that the brucellosis reactor is from a herd that no longer presents a risk of spreading brucellosis, or is from a herd that is unlikely to be infected with brucellosis.

Such evidence could include, but is not limited to, situations where:

(i) The brucellosis reactor is traced back to a herd that has been sold for slaughter in entirety;

(ii) The brucellosis reactor is traced back to a herd that is certified brucellosis free and is 100-percent vaccinated; or

(iii) The brucellosis reactor showed a low titer in the MCI test and is traced back to a dairy herd that is 100 percent vaccinated and has tested negative to the most recent brucellosis ring test required by this section for herds producing milk for sale.

(3) *Epidemiologic surveillance*—(i) *Adjacent herds*. All adjacent herds or other herds having contact with cattle in a herd known to be affected shall have an approved individual herd plan in effect within 45 days of notification of brucellosis in the herd known to be affected; (ii) *Epidemiologically traced herds*. All herds from which cattle are moved into a herd known to be affected and all herds which have received cattle from a herd known to be affected shall have an approved individual herd plan in effect within 45 days of locating the source herd or recipient herd. (iii) Each State shall ensure that such approved individual herd plans are effectively complied with, as determined by the Administrator.

(b) *Herd infection rate*—(1) *Percentage of herds affected*. States or areas exceed a cattle herd infection rate, based on the number of herds found to have brucellosis reactors within the State or area during any 12 consecutive months due to field strain *Brucella abortus*, of 1.5 percent or 15 herds per 1,000, except in States with 1,000 or fewer herds. A special review by the Administrator will be made to determine if such small herd population States should be classified as a Class C State. Locations of herds, sources of brucellosis, and brucellosis control measures taken by the State will be considered.

(2) *Epidemiologic investigation*. Within 45 days after notification by the cooperative State-Federal laboratory that brucellosis reactors have been found in any herd, State representatives or APHIS representatives shall investigate that herd to identify possible sources of brucellosis. All possible

sources of brucellosis identified shall be contacted within an additional 30 days to determine appropriate action.

(3) All herds known to be affected shall have approved individual herd plans in effect within 45 days after notification by a State representative or APHIS representative of a brucellosis reactor in the herd. Each State shall ensure that such approved individual herd plans are effectively complied with, as determined by the Administrator.

(c) *Compliance with minimum procedural standards.* (1) A State must implement and maintain minimum procedural standards.

(2) A State or area must make continued progress over a 2-year period in reducing the prevalence of brucellosis as determined by epidemiologic evaluation or it will be placed under Federal quarantine.

Class Free State or area. A State or area which meets standards for classification as a Class Free State or area and is certified as such on initial classification or on reclassification by the State animal health official, the Veterinarian in Charge, and the Administrator. Any reclassification will be made in accordance with § 78.40 of this part. All cattle herds in the State or area in which brucellosis has been known to exist must be released from any State or Federal brucellosis quarantine prior to classification. In addition, if any herds of other species of domestic livestock have been found to be affected with brucellosis, they must be subjected to an official test and found negative, slaughtered, or quarantined so that no known foci of brucellosis in any species of domestic livestock are left uncontrolled. The following are the standards to attain and maintain Class Free status.

(a) *Surveillance*—(1) *Brucellosis ring test.* The State or area shall conduct as many brucellosis ring tests per year as are necessary to ensure that all herds producing milk for sale are tested at least twice per year at approximately 6-month intervals.

(2) *Market Cattle Identification (MCI) program*—(i) *Coverage.* All recognized slaughtering establishments in the State or area must participate in the MCI program. Blood samples shall be

collected from at least 95 percent of all cows and bulls 2 years of age or over at each recognized slaughtering establishment and subjected to an official test;

(ii) *Brucellosis reactors*—(A) *Tracebacks.* At least 90 percent of all brucellosis reactors found in the course of MCI testing must be traced to the farm of origin.

(B) *Successfully closed cases.* The State or area must successfully close at least 95 percent of the MCI reactor cases traced to the farm of origin during the 12-consecutive-month period immediately prior to the most recent anniversary of the date the State or area was classified Class Free. To successfully close an MCI reactor case, State representatives or APHIS representatives must conduct an epidemiologic investigation at the farm of origin within 15 days after notification by the cooperative State-Federal laboratory that brucellosis reactors were found on the MCI test. Herd blood tests must be conducted or the herd must be confined to the premises under quarantine within 30 days after notification that brucellosis reactors were found on the MCI test, unless a designated epidemiologist determines that:

(1) The brucellosis reactor is located in a herd in a different State than the State where the MCI blood sample was collected. In such cases a State representative or APHIS representative must give written notice of the MCI test results to the State animal health official in the State where the brucellosis reactor is located; or

(2) Evidence indicates that the brucellosis reactor is from a herd that no longer presents a risk of spreading brucellosis, or is from a herd that is unlikely to be infected with brucellosis. Such evidence could include, but is not limited to, situations where:

(i) The brucellosis reactor is traced back to a herd that has been sold for slaughter in entirety;

(ii) The brucellosis reactor is traced back to a herd that is certified brucellosis free and is 100-percent vaccinated; or

(iii) The brucellosis reactor showed a low titer in the MCI test and is traced back to a dairy herd that is 100 percent vaccinated and has tested negative to the most recent brucellosis ring test

required by this section for herds producing milk for sale.

(3) *Epidemiologic surveillance*—(i) *Adjacent herds*. All adjacent herds or other herds having contact with cattle in a herd known to be affected shall be placed under quarantine and have an approved individual herd plan in effect within 15 days after notification of brucellosis in the herd known to be affected; (ii) *Epidemiologically traced herds*. All herds from which cattle are moved into a herd known to be affected and all herds which have received cattle from a herd known to be affected shall be placed under quarantine and have an approved individual herd plan in effect within 15 days of locating the source herd or recipient herd. (iii) Each State shall ensure that such approved individual herd plans are effectively complied with, as determined by the Administrator.

(b) *Herd infection rate*—(1) *Percentage of herds affected*. All cattle herds in the State or area must remain free of field strain *Brucella abortus* for 12 consecutive months. States or areas must have a cattle herd infection rate, based on the number of herds found to have brucellosis reactors within the State or area during any 12 consecutive months due to field strain *Brucella abortus* of 0.0 percent or 0 herds per 1,000.

(2) *Epidemiologic investigation*. Within 15 days after notification by the cooperative State-Federal laboratory that brucellosis reactors have been found in any herd, State representatives or APHIS representatives shall investigate that herd to identify possible sources of brucellosis. All possible sources of brucellosis identified shall be contacted within an additional 15 days to determine appropriate action.

(3) All herds known to be affected shall have approved individual herd plans in effect within 15 days after notification by a State representative or APHIS representative of a brucellosis reactor in the herd. Each State shall ensure that such approved individual herd plans are effectively complied with, as determined by the Administrator.

(4) *Retaining Class Free status*. (i) If a single herd in a Class Free State is found to be affected with brucellosis, the State may retain its Class Free

status if it meets the conditions of this paragraph. A State may retain its status in this manner only once during any 2-year period. The following conditions must be satisfied within 60 days of the date an animal in the herd is determined to be infected:

(A) The affected herd must be immediately quarantined, tested for brucellosis, and depopulated; and

(B) An epidemiological investigation must be performed and the investigation must confirm that brucellosis has not spread from the affected herd. All herds on premises adjacent to the affected herd (adjacent herds), all herds from which animals may have been brought into the affected herd (source herds), and all herds that may have had contact with or accepted animals from the affected herd (contact herds) must be epidemiologically investigated, and each of those herds must be placed under an approved individual herd plan. If the investigating epidemiologist determines that a herd blood test for a particular adjacent herd, source herd, or contact herd is not warranted, the epidemiologist must include that determination, and the reasons supporting it, in the individual herd plan.

(ii) After the close of the 60-day period following the date an animal in the herd is determined to be infected, APHIS will conduct a review to confirm that the requirements of paragraph (b)(4)(i) have been satisfied and that the State is in compliance with all other applicable provisions.

Complete herd test (CHT). An official swine brucellosis test of all swine on a premises that are 6 months of age or older and maintained for breeding purposes.

Confirmatory test. A follow-up test to verify any official test results. Confirmatory tests include the standard tube test, the Rivanol test, the complement fixation test (CF), the fluorescence polarization assay (FP assay), the particle concentration fluorescence immunoassay (PCFIA), the semen plasma test, and the standard plate test.

Dairy cattle. A bovine animal of a recognized dairy breed.

Designated epidemiologist. An epidemiologist selected by the State animal health official and the Veterinarian in Charge to perform the functions required. The regional epidemiologist and the APHIS brucellosis staff must concur in the selection and appointment of the designated epidemiologist.

Directly. Without unloading en route if moved in a means of conveyance, or without stopping if moved in any other manner.

Epidemiologist. A veterinarian who has received a master's degree in epidemiology or completed a course of study in epidemiology sponsored by the Animal and Plant Health Inspection Service, United States Department of Agriculture.

Epidemiology. A branch of medical science that deals with the incidence, distribution, and control of disease in the animal population.

Farm of origin. (a) Premises where cattle or bison are born and remain prior to movement from the premises but which are not used to assemble cattle or bison from any other premises for 4 months before such movement; or

(b) Premises where cattle or bison remain for not less than 4 months immediately before movement from the premises but which are not used to assemble cattle or bison from any other premises for 4 months before such movement.

Feral swine. Free-roaming swine. Formerly free-roaming swine could qualify for reclassification as domestic swine upon testing negative to an official swine brucellosis test after a period of at least 60 days' confinement in isolation from other feral swine.

Finished fed cattle. Cattle fattened on a ration of feed concentrates to reach a slaughter condition equivalent to that which would be attained on full feed with a high concentrate grain ration for 90 days.

Herd. (a) All animals under common ownership or supervision that are grouped on one or more parts of any single premises (lot, farm or ranch); or

(b) All animals under common ownership or supervision on two or more premises which are geographically separated but on which animals from the different premises have been inter-

changed or had contact with each other.

Herd blood test. (a) *Cattle and bison.* A blood test for brucellosis conducted in a herd on all cattle or bison which are

(1) 6 months of age or over and not official vaccinates, except steers and spayed heifers;

(2) Official calfhood vaccinates of any age which are parturient or postparturient;

(3) Official calfhood vaccinates of beef breeds or bison with the first pair of permanent incisors fully erupted (2 years of age or over); and

(4) Official calfhood vaccinates of dairy breeds with partial eruption of the first pair of permanent incisors (20 months of age or over).

(b) [Reserved]

Herd known to be affected. Any herd in which any animal has been classified as a brucellosis reactor and which has not been released from quarantine.

Herd not known to be affected. Any herd in which no animal has been classified as a brucellosis reactor or any herd in which one or more animals have been classified as brucellosis reactors but which has been released from quarantine.

Herd of origin of swine. Any herd in which swine are farrowed and remain until movement or any herd in which swine remain for 30 days immediately prior to movement.

Interstate. From any State into or through any other State.

Market cattle identification test cattle. Cows and bulls 2 years of age or over which have been moved to recognized slaughtering establishments, and test-eligible cattle which are subjected to an official test for the purposes of movement at farms, ranches, auction markets, stockyards, quarantined feedlots, or other assembly points. Such cattle shall be identified by an official eartag and/or United States Department of Agriculture backtag prior to or at the first market, stockyard, quarantined feedlot, or slaughtering establishment they reach.

Market swine test (MST) reactor. Market swine test swine with a positive reaction to a swine brucellosis confirmatory test or other official test, if no confirmatory test is performed.

Market swine test swine. Sows and boars which have been moved to slaughtering establishments and sows and boars which are subjected to an official test for the purposes of movement at farms, ranches, auction markets, stockyards, or other assembly points.

Monitored-negative feral swine population. Feral swine indicating no evidence of infection (indicators would include positive blood tests or clinical signs, such as abortion) and originating from a specified, geographically isolated area (a forest area, hunting preserve, or swamp, for example) may be classified by the designated epidemiologist as a monitored-negative feral swine population.

Moved. Shipped, transported, delivered, or received for movement, or otherwise aided, induced, or caused to be moved.

Moved (movement) in interstate commerce. Moved from the point of origin of the interstate movement to the animals' final destination, such as a slaughtering establishment or a farm for breeding or raising, and including any temporary stops for any purpose along the way, such as at a stockyard or dealer premises for feed, water, rest, or sale.

Official adult vaccinate. (a) Female cattle or female bison older than the specified ages defined for official calfhood vaccinate and vaccinated by an APHIS representative, State representative, or accredited veterinarian with a reduced dose approved brucella vaccine, diluted so as to contain at least 300 million and not more than 1 billion live cells per 2 mL dose of *Brucella abortus* Strain 19 vaccine or at the dosage indicated on the label instructions for other approved brucella vaccines, as part of a whole herd vaccination plan authorized jointly by the State animal health official and the Veterinarian in Charge; and

(b)(1) Permanently identified by a "V" hot brand high on the hip near the tailhead at least 5 by 5 centimeters (2 by 2 inches) in size, or by an official AV (adult vaccination) tattoo in the right ear preceded by the quarter of the year and followed by the last digit of the year; and

(2) Identified with an official eartag or individual animal registered breed association registration brand or individual animal registered breed association tattoo.

Official brand inspection certificate. A document issued by an official brand inspection agency in any State which requires such documents for movement of cattle.

Official brand recording agency. The duly constituted body authorized by a State or governmental subdivision thereof to administer laws, regulations, ordinances or rules pertaining to the brand identification of cattle.

Official calfhood vaccinate. (a) Female cattle or female bison vaccinated while from 4 through 12 months of age by an APHIS representative, State representative, or accredited veterinarian with a reduced dose approved brucella vaccine containing at least 2.7 billion and not more than 10 billion live cells per 2 mL dose of *Brucella abortus* Strain 19 vaccine or at the dosage indicated on the label instructions for other approved brucella vaccines; and

(b) Permanently identified by a tattoo and by an official vaccination eartag in the right ear. However, if already identified with an official eartag prior to vaccination, an additional tag is not required. The tattoo must include the U.S. Registered Shield and "V," preceded by the quarter of the year and followed by the last digit of the year of vaccination. Individual animal registered breed association registration brands or individual animal registered breed association registration tattoos may be substituted for official eartags.

Official eartag. An identification tag providing unique identification for individual animals. An official eartag must bear the U.S. shield. The design, size, shape, color, and other characteristics of the official eartag will depend on the needs of the users. The official eartag must be tamper-resistant and have a high retention rate in the animal. Official eartags must adhere to one of the following numbering systems:

(a) National Uniform Eartagging System.

(b) Animal identification number (AIN).

(c) Premises-based number system. The premises-based number system combines an official premises identification number (PIN), as defined in § 71.1 of this chapter, with a producer's livestock production numbering system to provide a unique identification number. The PIN and the production number must both appear on the official tag.

(d) Any other numbering system approved by the Administrator for the identification of animals in commerce.

Official identification device or method. A means of officially identifying an animal or group of animals using devices or methods approved by the Administrator, including, but not limited to, official tags, tattoos, and registered brands when accompanied by a certificate of inspection from a recognized brand inspection authority.

Official seal. A serially numbered, metal or plastic strip, consisting of a self-locking device on one end and a slot on the other end, which forms a loop when the ends are engaged and which cannot be reused if opened, or a serially numbered, self-locking button which can be used for this purpose.

Official swine tattoo. A tattoo, conforming to the six-character alpha-numeric National Tattoo System, that provides a unique identification for each herd or lot of swine.

Official test. (a) *Classification of cattle and bison*—(1) *Standard card test.* (i) A test to determine the brucellosis disease status of test-eligible cattle and bison when conducted according to instructions approved by APHIS and the State in which the test is to be conducted and when conducted under the following circumstances:

(A) When conditions and time are such that no other test is available; or

(B) When the owner or the owner's agent requests it because of time or situation constraints; or

(C) In specifically approved stockyards when the State animal health official either:

(1) Designates the standard card test as the official test for determining the brucellosis disease status of cattle and bison in all specifically approved stockyards in the State. In these States, no other official test except the Buffered Acidified Plate Antigen test

shall be used in specifically approved stockyards; or

(2) Designates the standard card test as the official test for determining the brucellosis disease status of non-vaccinated cattle or bison (the CITE® test may be designated as a supplemental test for non-vaccinated cattle or bison that test positive to the standard card test); and designates the standard card test as the official test for determining the brucellosis disease status of official vaccinates and the CITE® test, the standard plate test, or the Rivanol test as supplemental tests for official vaccinates that test positive to the standard card test. If supplemental tests are conducted, cattle or bison that are positive to the standard card test shall be classified as brucellosis suspects if all of the supplemental tests conducted disclose a negative or suspect reaction, and shall be classified as brucellosis reactors if any one of the supplemental tests conducted has a positive reaction; or

(D) To test market cattle identification (MCI) program test samples. Cattle and bison which test positive to the BAPA test or RST under the MCI program must be retested using the standard card test or the standard plate or tube agglutination test.

(ii) Results of the standard card test also may be used to supplement the results of other official tests conducted in the cooperative State-Federal laboratory to give the designated epidemiologist additional information when classifying cattle and bison.

(iii) *Standard card test results are interpreted as either negative or positive.* A moderate to marked clumping agglutination reaction is a positive result. Test-eligible cattle and bison positive to the standard card test are classified as brucellosis reactors. Test-eligible cattle and bison negative to the standard card test are classified as brucellosis negative.

(2) *Standard tube test (STT) or standard plate test (SPT).* A test to determine the brucellosis disease status of test-eligible cattle and bison when conducted according to instructions approved by APHIS and the State in which the test is to be conducted. Cattle and bison are classified according to the following agglutination reactions:

SPT OR STT CLASSIFICATION—OFFICIAL VACCINATES VACCINATED WITH A BRUCELLA ABORTUS STRAIN 19 APPROVED BRUCELLA VACCINE

Titer		Classification	
1:50	1:100	1:200	
—	—	—	Negative.
I	—	—	Do.
+	—	—	Do.
+	I	—	Suspect.
+	+	—	Do.
+	+	I	Do.
+	+	+	Reactor.

— No agglutination.
 I Incomplete agglutination.
 + Complete agglutination.

OFFICIAL VACCINATES VACCINATED WITH AN APPROVED BRUCELLA VACCINE OTHER THAN A BRUCELLA ABORTUS STRAIN 19 APPROVED BRUCELLA VACCINE

Titer			Classification
1:50	1:100	1:200	
—	—	—	Negative.
I	—	—	Suspect.
+	—	—	Do.
+	I	—	Do.
+	+	—	Reactor.
+	+	I	Do.
+	+	+	Do.

— No agglutination.
 I Incomplete agglutination.
 + Complete agglutination.

ALL CATTLE AND BISON WHICH ARE NOT OFFICIAL VACCINATES

Titer			Classification
1:50	1:100	1:200	
—	—	—	Negative.
I	—	—	Suspect.
+	—	—	Do.
+	I	—	Do.
+	+	—	Reactor.
+	+	I	Do.
+	+	+	Do.

— No agglutination.
 I Incomplete agglutination.
 + Complete agglutination.

(3) *Manual complement-fixation (CF) test.* A test to determine the brucellosis disease status of test-eligible cattle and bison when conducted according to instructions approved by APHIS and the State in which the test is to be conducted. Cattle and bison are classified according to the following reactions:

(i) Cattle and bison which are not official vaccinates:

(A) Fifty percent fixation (2 plus) in a dilution of 1:20 or higher—brucellosis reactor;

(B) Fifty percent fixation (2 plus) in a dilution of 1:10 but less than 50 percent fixation (2 plus) in a dilution of 1:20—brucellosis suspect;

(C) Less than 50 percent fixation (2 plus) in a dilution of 1:10—brucellosis negative;

(ii) Official vaccinates vaccinated with a *Brucella abortus* Strain 19 approved brucella vaccine:

(A) Twenty-five percent fixation (1 plus) in a dilution of 1:40 or higher—brucellosis reactor;

(B) Fifty percent fixation (2 plus) in a dilution of 1:10 but less than 25 percent fixation (1 plus) in a dilution of 1:40—brucellosis suspect;

(C) Less than 50 percent fixation (2 plus) in a dilution of 1:10—brucellosis negative.

(iii) Official vaccinates vaccinated with an approved brucella vaccine other than a *Brucella abortus* Strain 19 approved brucella vaccine:

(A) Fifty percent fixation (2 plus) in a dilution of 1:20 or higher—brucellosis reactor;

(B) Fifty percent fixation (2 plus) in a dilution of 1:10 but less than 50 percent fixation (2 plus) in a dilution of 1:20—brucellosis suspect;

(C) Less than 50 percent fixation (2 plus) in a dilution of 1:10—brucellosis negative.

(4) *Technicon automated complement-fixation test.* A test to determine the brucellosis disease status of test-eligible cattle and bison when conducted according to instructions approved by APHIS and the State in which the test is to be conducted. Cattle and bison are classified according to the following reactions:

(i) Cattle and bison which are not official vaccinates:

(A) Fixation in a dilution of 1:10 or higher—brucellosis reactor;

(B) Fixation in a dilution of 1:5 but no fixation in a dilution of 1:10—brucellosis suspect;

(C) No fixation in a dilution of 1:5 or lower—brucellosis negative;

(ii) Official vaccinates vaccinated with a *Brucella abortus* Strain 19 approved brucella vaccine:

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(A) Fixation in a dilution of 1:20 or higher—brucellosis reactor;

(B) Fixation in a dilution of 1:10 but no fixation in a dilution of 1:20—brucellosis suspect;

(C) Fixation in a dilution of 1:5 or less but no fixation in a dilution of 1:10—brucellosis negative.

(iii) Official vaccinates vaccinated with an approved brucella vaccine other than a *Brucella abortus* Strain 19 approved brucella vaccine:

(A) Fixation in a dilution of 1:10 or higher—brucellosis reactor;

(B) Fixation in a dilution of 1:5 but no fixation in a dilution of 1:10—brucellosis suspect;

(C) No fixation in a dilution of 1:5 or lower—brucellosis negative.

(5) *Rivanol test*. A test to determine the brucellosis disease status of test-eligible cattle and bison when conducted according to instructions approved by APHIS and the State in which the test is to be conducted. Cattle and bison are classified according to the following agglutination reactions:

(i) Cattle and bison which are not official vaccinates:

(A) Complete agglutination at a titer of 1:25 or higher—brucellosis reactor;

(B) Less than complete agglutination at a titer of 1:25—brucellosis negative;

(ii) Official adult vaccinates more than 5 months after vaccination with a *Brucella abortus* Strain 19 approved brucella vaccine and official calfhood vaccinates vaccinated with a *Brucella abortus* Strain 19 approved brucella vaccine:

(A) Incomplete agglutination at a titer of 1:100 or higher—brucellosis reactor;

(B) Complete agglutination at a titer of 1:25 or higher when the manual or technicon automated complement-fixation test is not conducted—brucellosis reactor;

(C) Complete agglutination at a titer of 1:50 or less when the manual complement-fixation test or the technicon automated complement-fixation test is conducted and results in a classification of brucellosis suspect or brucellosis negative—brucellosis suspect;

(D) Less than complete agglutination at a titer of 1:25—brucellosis negative;

(iii) Official adult vaccinates less than 5 months after vaccination with a

Brucella abortus Strain 19 approved brucella vaccine: Less than complete agglutination at the 1:50 titer—brucellosis negative.

(iv) Official vaccinates vaccinated with an approved brucella vaccine other than a *Brucella abortus* Strain 19 approved brucella vaccine:

(A) Complete agglutination at a titer of 1:25 or higher—brucellosis reactor;

(B) Less than complete agglutination at a titer of 1:25—brucellosis negative.

(6) *Semen plasma test*. A test to determine the brucellosis disease status of bulls used for artificial insemination when conducted in conjunction with an official serological test and according to instructions approved by APHIS and the State in which the test is to be conducted. The classification of such bulls shall be based on the maximum agglutination titer of either the official serological test or the semen plasma test.

(7) *Buffered acidified plate antigen (BAPA) test*. A test to determine the brucellosis disease status of test-eligible cattle and bison at recognized slaughtering establishments and specifically approved stockyards when conducted according to instructions approved by APHIS and the State in which the test is to be conducted. BAPA test results are interpreted as either negative or positive. Cattle and bison negative to the BAPA test are classified as brucellosis negative. Cattle and bison positive to the BAPA test shall be subjected to other official tests to determine their brucellosis classification.

(8) *Rapid screening test (RST)*. A test to determine the brucellosis disease status of test-eligible cattle and bison in cooperative State-Federal laboratories when conducted according to instructions approved by APHIS and the State in which the test is to be conducted. RST results are interpreted as either negative or positive. Cattle and bison negative to the RST are classified as brucellosis negative. Cattle and bison positive to the RST shall be subjected to other official tests to determine their brucellosis classification.

(9) *Concentration immunoassay technology (CITE®) test*. An enzyme immunoassay that may be used as a diagnostic supplement to the standard

card test by designated epidemiologists determining the brucellosis disease status of cattle and bison. The test must be done in accordance with the CITE® *Brucella abortus* Antibody Test Kit instructions, licensed by the United States Department of Agriculture and approved as of December 31, 1987, and incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from AgriTech Systems, Inc., 100 Fore Street, Portland, ME 04101. Copies may be inspected at the Animal and Plant Health Inspection Service, Veterinary Services, Operational Support, 4700 River Road Unit 33, Riverdale, Maryland 20737-1231, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(10) *Particle concentration fluorescence immunoassay (PCFIA) test.* An automated serologic test to determine the brucellosis disease status of test-eligible cattle and bison when conducted according to instructions approved by APHIS. Cattle and bison are classified according to the following ratio between the test sample and a known negative sample (S/N ratio):

S/N ratio	Classification
Greater than .60	Negative.
Greater than .30 but less than or equal to .60.	Suspect.
.30 or less	Positive.

(11) *D-Tec® Brucella A test.* An automated serologic test to determine the brucellosis disease status of test-eligible cattle and bison when conducted according to instructions approved by APHIS. The degree of reactivity is measured by the ratio of the average optical density of the sample to that of the Negative Control (S/N) and is expressed as Percent Inhibition $(1-S/N) \times 100$. The brucellosis disease status of the animals is classified according to the following established criteria:

Percent inhibition	Classification
Less than or equal to 40 percent	Negative.

Percent inhibition	Classification
Greater than 40 percent and less than or equal to 70 percent.	Suspect.
Greater than 70 percent	Reactor.

(12) *Rapid Automated Presumptive (RAP) test.* An automated serologic test to detect the presence of *Brucella* antibodies in test-eligible cattle and bison. RAP test results are interpreted as either positive or negative; the results are interpreted and reported by a scanning autoreader that measures alterations in light transmission through each test well and the degree of agglutination present. Cattle and bison negative to the RAP test are classified as brucellosis negative; cattle and bison positive to the RAP test shall be subjected to other official tests to determine their brucellosis disease classification.

(13) *Fluorescence polarization assay (FP assay).* An automated serologic test to determine the brucellosis status of test-eligible cattle and bison when conducted according to instructions approved by APHIS. FP assays are interpreted as either positive, negative, or suspect. A 10-microliter sample is used. If a sample reads <10 millipolarization units (mP) above the mean negative control, the sample is considered negative. If a sample reads >20 mP above the mean negative control, the sample is considered positive. Samples that read between 10 and 20 mP above the negative control mean should be retested using 20 microliters of sample. If the 20-microliter sample is >20 mP above the mean negative control, the sample is considered positive. If the 20-microliter sample is still in the 10 to 20 mP range above the mean negative control, the sample is considered suspect. If the 20-microliter sample is <10 mP above the mean negative control, the sample is considered negative. Cattle and bison negative to the FP assay are classified as brucellosis negative. Cattle and bison with positive FP assay results are classified as brucellosis reactors, while cattle and bison with suspect FP assay results are classified as brucellosis suspects.

(14) The evaluation of test results for all cattle and bison shall be the responsibility of a designated epidemiologist

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in each State. The designated epidemiologist shall consider the animal and herd history and other epidemiologic factors when determining the brucellosis classification of cattle and bison. Deviations from the brucellosis classification criteria as provided in this definition of official test are acceptable when made by the designated epidemiologist.

(i) The designated epidemiologist may consider the results of CITE® tests when evaluating the results of standard card tests of cattle and bison.

(b) *Classification of swine*—(1) *Standard card test*. A test to determine the brucellosis disease status of swine. Standard card test results are interpreted as either negative or positive. A moderate to marked clumping agglutination reaction is a positive result. Swine negative to the standard card test are classified as brucellosis negative. Swine positive to the standard card test in a herd not known to be affected but negative to any other official test or bacteriological culture for *brucella* are classified as brucellosis suspects. Other swine positive to the standard card test are classified as brucellosis reactors.

(2) *Standard tube test*. A test to determine the brucellosis disease status of swine.

(i) If all of the following apply: (A) The swine are part of a herd not known to be affected; (B) No swine tested, individually or as part of a group, has a complete agglutination reaction at a dilution of 1:100 or higher; and (C) the swine are tested as part of a herd blood test or are part of a validated brucellosis-free herd, then the swine are classified according to the following agglutination reactions:

Titer		Classification	
1:25	1:50	1:100	
l]—	—	Negative.
+	—	—	Do.
+	l	—	Do.
+	+	—	Do.
+	+	l	Do.
+	+	+	Do.

— No agglutination.
 l Incomplete agglutination.
 + Complete agglutination.

(ii) If any of the following apply: (A) The swine are part of a herd known to be affected; (B) Any swine tested, individually or as part of a group, has a

complete agglutination reaction at a dilution of 1:100 or higher or; (C) The swine are not part of a validated brucellosis-free herd and are not being tested as part of a herd blood test, then the swine are classified according to the following agglutination reactions:

Titer		Classification	
1:25	1:50	1:100	
l	—	—	Negative.
+	—	—	Reactor.
+	l	—	Do.
+	+	—	Do.
+	+	l	Do.
+	+	+	Do.

— No agglutination.
 l Incomplete agglutination.
 + Complete agglutination.

(3) *Particle concentration fluorescence immunoassay (PCFIA)*. An automated serologic test to determine the brucellosis disease status of test-eligible swine when conducted according to instructions approved by the Animal and Plant Health Inspection Service. Swine are classified according to the following ratios between the test sample and a known negative sample (S/N ratio):

S/N Ratio	Classification
0.71 or greater	Negative.
0.51 to 0.70	Suspect.
0.50 or less	Reactor.

(4) *Rapid Automated Presumptive (RAP) test*. An automated serologic test to detect the presence of *Brucella* antibodies in test-eligible swine. RAP test results are interpreted as either positive or negative; the results are interpreted and reported by a scanning autoreader that measures agglutination based on alterations in light transmission through each test well. Swine negative to the RAP test are classified as brucellosis negative; swine positive to the RAP test shall be subjected to other official tests to determine their brucellosis disease classification.

(5) *Fluorescence polarization assay (FP assay)*. An automated serologic test to determine the brucellosis status of test-eligible swine when conducted according to instructions approved by APHIS. FP assays are interpreted as either positive, negative, or suspect. A

40-microliter sample is used. If a sample reads <10 millipolarization units (mP) above the mean negative control, the sample is considered negative. If a sample reads >20 mP above the mean negative control, the sample is considered positive. Samples that read between 10 and 20 mP above the negative control mean must be retested using 40 microliters of sample. If the 40-microliter sample is >20 mP above the mean negative control, the sample is considered positive. If the 40-microliter sample is still in the 10 to 20 mP range above the mean negative control, the sample is considered suspect. If the 40-microliter sample is <10 mP above the mean negative control, the sample is considered negative. Swine with negative FP assay results are classified as brucellosis negative. Swine with positive FP assay results are classified as brucellosis reactors, while swine with suspect FP assay results are classified as brucellosis suspects.

(6) The evaluation of test results for all swine shall be the responsibility of a designated epidemiologist in each State. The designated epidemiologist shall consider the animal and herd history and other epidemiologic factors when determining the brucellosis classification of swine. Deviations from the brucellosis classification criteria as provided in this definition of official test are acceptable when made by the designated epidemiologist.

Official vaccinate. An official calfhood vaccinate or an official adult vaccinate. The accredited veterinarian, State representative or APHIS representative who performs the vaccination must forward a completed official vaccination certificate for each animal vaccinated to the State animal health official of the State in which the animal was vaccinated.

Official vaccination eartag. An APHIS approved identification eartag conforming to the alpha-numeric National Uniform Eartagging System which provides unique identification for each animal. The eartag shall have a "V" followed by 2 letters and 4 numbers. States which require more official vaccination eartags than the number of combinations available in the "V" series of tags shall use a "T" or "S" followed by 2 letters and 4 numbers. Du-

plicate reissue of official vaccination eartags shall not be made more often than once each 15 years.

Originate. (a) Animals will have the status of the herd from which they are moved if:

(1) They were born and maintained in the herd since birth; or

(2) They have been in the herd for at least 120 days.

(b) Animals will have the status of the State or area from which they are moved if:

(1) They were born and maintained in the State or area since birth; or

(2) They were previously moved from a State or area of equal or higher class to the State or area; or

(3) They were previously moved from a State or area of lower class to the State or area where they are now located and have been in the new State or area for at least 120 days.

(c) Cattle penned in a specifically approved stockyard with cattle from a lower class State or area, in violation of the requirements set forth in §71.20 of this chapter, shall have the status of the State or area of lower class for any subsequent movement.

Parturient. Visibly prepared to give birth or within 2 weeks of giving birth (springers).

Permit. An official document (VS Form 1-27 or a State form which contains the same information but not a "permit for entry" or "'S' brand permit") issued by an APHIS representative, State representative, or accredited veterinarian which lists the owner's name and address, points of origin and destination, number of animals covered, purpose of the movement, any reactor tag number, and one of the following: The official eartag number, individual animal registered breed association registration tattoo, individual animal registered breed association registration brand, United States Department of Agriculture backtag (when applied serially, only the beginning and the ending numbers need be recorded), individual animal registered breed association registration number, or similar individual identification. (A new permit is required for each change in destination. However, permits accompanying cattle or bison to an approved intermediate handling facility may list

either the approved intermediate handling facility, a quarantined feedlot or a recognized slaughtering establishment as the point of destination. If the permit lists a quarantined feedlot or a recognized slaughtering establishment as the point of destination, then the permit must list the approved intermediate handling facility as a temporary stopping point, and no additional permit is required for the subsequent movement of the cattle or bison to the quarantined feedlot or to the recognized slaughtering establishment.)

Permit for entry. A premovement authorization for entry of cattle into a State from the State animal health official of the State of destination. It may be oral or written.

Person. Any individual, corporation, company, association, firm, partnership, society, or joint stock company or other legal entity.

Postparturient. Having given birth.

Purebred registry association. A swine breed association formed and perpetuated for the maintenance of records of purebreeding of swine species for a specific breed whose characteristics are set forth in Constitutions, By-Laws, and other rules of the association.

Qualified herd. (a) *Qualification.* (1) Any herd of cattle or bison which is in a quarantined area, not known to be affected, and negative to two consecutive herd blood tests. The first of these two herd blood tests shall be conducted not more than 240 days nor less than 120 days prior to the date of classification as a qualified herd. The second herd blood test may not be conducted less than 90 days nor more than 150 days after the first test. Additionally, the second herd blood test must be within 120 days of the date of classification as a qualified herd; or

(2) Any certified brucellosis-free herd in a quarantined area which is negative to a herd blood test 120 days before or after designation of the area as a quarantined area.

(b) *Requalification.* In order to remain a qualified herd, a herd must be negative to successive requalifying herd blood tests. Each requalifying test shall be conducted not more than 120 days from the date of the preceding herd blood test. All cattle or bison

added to a qualified herd must be included in two successive herd blood tests of the qualified herd to qualify as cattle or bison from the qualified herd.

Quarantined area. An area that does not meet the criteria for classification as Class Free, Class A, Class B, or Class C.

*Quarantined feedlot.*¹ A confined area under State quarantine approved jointly by the State animal health official and the Veterinarian in Charge. Approval will be granted only after a State representative or APHIS representative inspects the confined area and determines that all cattle and bison are secure and isolated from contact with all other cattle and bison, that there are facilities for identifying cattle and bison, and that there is no possibility of brucellosis being mechanically transmitted from the confined area. The quarantined feedlot shall be maintained for feeding cattle and bison for slaughter, with no provisions for pasturing or grazing. All cattle and bison in a quarantined feedlot, except steers and spayed heifers, shall be treated as brucellosis exposed.

(a) All cattle and bison, except steers and spayed heifers, leaving the quarantined feedlot must (1) Be accompanied by a permit and move directly to a recognized slaughtering establishment; or (2) Be "S" branded and accompanied by an "S" brand permit and move directly to an approved intermediate handling facility and then directly to another quarantined feedlot or a recognized slaughtering establishment; or (3) Be accompanied by a permit issued by the State animal health official and move directly to another quarantined feedlot; or (4) After being "S" branded at the quarantined feedlot, be accompanied by an "S" brand permit and move directly to a specifically approved stockyard approved to receive brucellosis exposed cattle and bison and then directly to a recognized slaughtering establishment or another quarantined feedlot; or (5) After being "S" branded at the quarantined feedlot, be accompanied by an "S" brand

¹ A list of quarantined feedlots in any State may be obtained from the State animal health official, a State representative, or an APHIS representative.

permit and move directly to a specifically approved stockyard approved to receive brucellosis exposed cattle and bison and then directly to an approved intermediate handling facility and then directly to another quarantined feedlot or a recognized slaughtering establishment. However, finished fed cattle moving directly to a recognized slaughtering establishment are exempt from the permit/"S" brand permit requirement.

(b) The State animal health official and the Veterinarian in Charge shall establish procedures for accounting for all cattle and bison entering or leaving quarantined feedlots.

Quarantined pasture. A confined grazing area under State quarantine approved by the State animal health official, Veterinarian in Charge and the Administrator. A justification of the need for the quarantined pasture must be prepared by the State animal health official and/or Veterinarian in Charge and submitted to the Administrator. An intensified brucellosis eradication effort which produces large numbers of brucellosis exposed cattle or bison or official adult vaccinates needing the grazing period to reach slaughter condition would be an acceptable justification. Approval will be granted only after a State representative or APHIS representative inspects the confined grazing area and determines that all cattle and bison are secure and isolated from contact with all other cattle and bison, that there are facilities for identifying the cattle and bison, and that there is no possibility of brucellosis being mechanically transmitted from the confined grazing area. The quarantined pasture shall be for utilizing available forage for growth or to improve flesh condition of cattle or bison. No cattle or bison may be moved interstate into these quarantined pastures, which shall be restricted for use by cattle or bison originating within the State. All cattle or bison shall be of the same sex, except that neutered cattle and bison may share the quarantined pasture. All cattle and bison, except steers and spayed heifers, must be "S" branded upon entering the quarantined pasture. All cattle and bison, except steers and spayed heifers, leaving the quarantined pasture must move

directly to a recognized slaughtering establishment or quarantined feedlot, or directly to an approved intermediate handling facility and then directly to a recognized slaughtering establishment, or directly to an approved intermediate handling facility and then directly to a quarantined feedlot and then directly to a recognized slaughtering establishment. The movement shall be in accordance with established procedures for handling brucellosis exposed cattle and bison, including issuance of "S" brand permits prior to movement. The State animal health official and Veterinarian in Charge shall establish procedures for accounting for all cattle and bison entering and leaving the quarantined pasture. All brucellosis exposed cattle and bison must vacate the premises on or before the expiration of approval, which may not last longer than 10 months.

Recognized slaughtering establishment.² Any slaughtering establishment operating under the provisions of the Federal Meat Inspection Act (21 U.S.C. 601 *et seq.*) or a State meat inspection act.

Rodeo bulls. Male cattle kept solely for performance at rodeos.

"S" branded. Branding with a hot iron the letter "S" high on the left hip near the tailhead and at least 5 by 5 centimeters (2 by 2 inches) in size.

"S" brand permit. A document prepared at the point of origin which lists the points of origin and destination, the number of animals covered, the purpose of movement, and one of the following: The official eartag number, individual animal registered breed association registration tattoo, individual animal registered breed association registration brand, individual animal registered breed association registration number, United States Department of Agriculture backtag (when applied serially, only the beginning and the ending numbers need be recorded), or similar individual identification. If the document is prepared at a quarantined feedlot, it shall be prepared by

²A list of recognized slaughtering establishments in any State may be obtained from an APHIS representative, the State animal health official, or a State representative.

an accredited veterinarian, a State representative, or an individual designated for that purpose by the State animal health official. If the document is prepared at any other point of origin, it shall be prepared by an accredited veterinarian, State representative, or APHIS representative. (A new “S” brand permit is required for each change in destination. However, “S” brand permits accompanying cattle or bison to approved intermediate handling facilities may list either the approved intermediate handling facility, a quarantined feedlot, or a recognized slaughtering establishment as the point of destination. If the “S” brand permit lists a quarantined feedlot or a recognized slaughtering establishment as the point of destination, the “S” brand permit must list the approved intermediate handling facility as a temporary stopping point, and no additional “S” brand permit is required for the subsequent movement of the cattle or bison from the approved intermediate handling facility to the quarantined feedlot or to the recognized slaughtering establishment. Subsequent movements from the quarantined feedlot shall be subject to requirements set forth in the definition of “quarantined feedlot” in this section.)

Sow. A female swine which is parturient or postparturient.

*Specifically approved stockyard.*³ Premises where cattle or bison are assembled for sale or sale purposes and which meet the standards set forth in §71.20 of this chapter and are approved by the Administrator.

State. Any State, the District of Columbia, Puerto Rico, the Virgin Islands of the United States, Guam, the Northern Mariana Islands or any other territory or possession of the United States.

State animal health official. The State official responsible for livestock and poultry disease control and eradication programs.

State representative. An individual employed in animal health work by a

State or a political subdivision thereof and authorized by such State or political subdivision to perform the function involved under a memorandum of understanding with the United States Department of Agriculture.

Successfully closed case. Follow up of an MCI reactor traceback with an epidemiologic investigation which results in brucellosis testing or quarantine of the herd of origin, or a determination by a designated brucellosis epidemiologist that justification exists for not testing or quarantining the herd of origin.

Swine brucellosis. The communicable disease of swine caused by *Brucella suis* (*B. suis*) biovar 1 or 3.

Test-eligible cattle and bison. For purposes of interstate movement, test-eligible cattle and bison are:

(a) Cattle and bison which are not official vaccinates and which have lost their first pair of temporary incisors (18 months of age or over), except steers and spayed heifers;

(b) Official calfhood vaccinates 18 months of age or over which are parturient or postparturient;

(c) Official calfhood vaccinates of beef breeds or bison with the first pair of permanent incisors fully erupted (2 years of age or over); and

(d) Official calfhood vaccinates of dairy breeds with partial eruption of the first pair of permanent incisors (20 months of age or over).

United States Department of Agriculture backtag. A backtag issued by APHIS that provides unique identification for each animal.

Validated brucellosis-free herd. (a) A swine herd not known to be infected with swine brucellosis, located in a validated brucellosis-free State; or

(b) A swine herd in a State that has not been validated as brucellosis-free, provided the herd meets the conditions for validation, as follows:

(1) *Validation.* A swine herd may be validated as brucellosis-free if it has been found brucellosis negative after either a complete-herd test (CHT) or an incremental CHT. The incremental CHT may be conducted by testing all breeding swine 6 months of age or older with negative results within 365 days, either in four 25-percent increments, with those tests being conducted on

³Notices containing lists of specifically approved stockyards are published in the FEDERAL REGISTER. Lists of specifically approved stockyards also may be obtained from the State animal health official, State representatives, or APHIS representatives.

the 90th, 180th, 270th, and 360th days of the testing cycle, or in 10-percent increments every 25–35 days until 100 percent of those swine have been tested. In cases where unforeseen circumstances warrant such action, the Administrator may approve an extension of up to 15 days of the date on which a test under the 25-percent incremental herd test is to be conducted, thus allowing a test to be conducted no later than the 105th, 195th, 285th, or 375th day of the testing cycle. No swine may be tested twice during the testing cycle to comply with either the 25 percent requirement or the 10 percent requirement. No further testing is required once 100 percent of the breeding swine have been tested. After all breeding swine have tested brucellosis negative, a herd may be validated as brucellosis-free. Unless the Administrator has approved an alternative testing schedule, which might extend the testing cycle, a herd retains validated brucellosis-free status for a maximum of 365 days.

(2) *Maintaining validation.* Validation may be continuously maintained if a complete herd test (CHT) is performed once every 365 days, with negative results, or an incremental CHT is performed. The incremental CHT may be conducted by testing all breeding swine 6 months of age or older, with negative results, within 365 days in either four 25-percent increments, with those tests being conducted on the 90th, 180th, 270th, and 360th days of the testing cycle, or in 10-percent increments every 25–35 days until 100 percent of those swine have been tested. In cases where unforeseen circumstances warrant such action, the Administrator may approve an alternative testing schedule under which the 25 percent or 10 percent incremental CHT would be completed, with negative results, within 420 days, during which time the herd's validated brucellosis-free status would be continued. No swine may be tested twice during the testing cycle to comply with these requirements. No further testing is required once 100 percent of the breeding swine have been tested.

Validated brucellosis-free State. A State may apply for validated-free status when:

(a) Any herd found to have swine brucellosis during the 2-year qualification period preceding the application has been depopulated. More than one finding of a swine brucellosis-infected herd during the qualification period disqualifies the State from validation as brucellosis-free; and

(b) During the 2-year qualification period, the State has completed surveillance, annually, as follows:

(1) *Complete herd testing.* Subjecting all swine in the State that are 6 months of age or older and maintained for breeding purposes to an official swine brucellosis test; or

(2) *Market swine testing.* Subjecting 20 percent of the State's swine 6 months of age or older and maintained for breeding purposes to an official swine brucellosis test, and demonstrating successful traceback of at least 80 percent of market swine test (MST) reactors to the herd of origin. Blood samples may be collected from MST swine if the swine can be identified to their herd of origin, in accordance with § 71.19(b) of this subchapter. All MST reactor herds are subject to a CHT within 30 days of the MST laboratory report date, as determined by a designated epidemiologist; or

(3) *Statistical analysis.* Demonstrating, by a statistical analysis of all official swine brucellosis test results (including herd validation, MST, change-of-ownership, diagnostic) during the 2-year qualification period, a surveillance level equivalent or superior to CHT and MST testing programs discussed in this paragraph.

(c) To maintain validation, a State must annually survey at least 5 percent of its breeding swine, and demonstrate traceback to herd of origin of at least 80 percent of all MST reactors. A State must demonstrate its continuing ability to meet the criteria set forth in paragraph (c) of this definition within 36–40 months of receiving validated brucellosis-free State status to retain that status.

Veterinarian in Charge. The veterinary official of the Animal and Plant Health Inspection Service, United States Department of Agriculture, who is assigned by the Administrator to supervise and perform the official animal health work of the Animal and Plant

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Health Inspection Service in the State concerned.

Whole herd vaccination. The vaccination of all female cattle and female bison 4 months of age or over in a herd when authorized by the State animal health official and the Veterinarian in Charge, and conducted in accordance with the definitions of official adult vaccinate and official calfhood vaccinate.

(Approved by the Office of Management and Budget under control number 0579-0047)

[51 FR 32580, Sept. 12, 1986]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 78.1, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

§ 78.2 Handling of certificates, permits, and "S" brand permits for interstate movement of animals.

(a) Any certificate, permit, or "S" brand permit required by this part for the interstate movement of animals shall be delivered to the person moving the animals by the shipper or shipper's agent at the time the animals are delivered for movement and shall accompany the animals to their destination and be delivered to the consignee or the person receiving the animals.

(b) The APHIS representative, State representative, or accredited veterinarian issuing a certificate or permit required for the interstate movement of animals under this part, except for permits for entry and "S" brand permits, shall forward a copy thereof as follows:

(1) A copy of each certificate shall be forwarded to the State animal health official of the State of destination, or to the State animal health official of the State of origin for forwarding to the State of destination; or

(2) A copy of each permit shall be forwarded to the State animal health official of the State of destination.

(Approved by the Office of Management and Budget under control number 0579-0047)

[51 FR 32580, Sept. 12, 1986, as amended at 56 FR 54533, Oct. 22, 1991; 56 FR 58639, Nov. 21, 1991]

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§ 78.3 Handling in transit of cattle and bison moved interstate.

Cattle and bison moving interstate, except cattle and bison moved directly to a recognized slaughtering establishment, approved intermediate handling facility, or quarantined feedlot, shall be moved only in a means of conveyance which has been cleaned in accordance with §§ 71.5, 71.7, 71.10, and 71.11 of this chapter and, if unloaded in the course of such movement, shall be handled only in pens cleaned in accordance with the provisions of §§ 71.4, 71.7, 71.10, and 71.11 of this chapter.

§ 78.4 [Reserved]

Subpart B—Restrictions on Interstate Movement of Cattle Because of Brucellosis

§ 78.5 General restrictions.

Cattle may not be moved interstate except in compliance with this subpart.

§ 78.6 Steers and spayed heifers.

Steers and spayed heifers may be moved interstate without restriction under this subpart.

§ 78.7 Brucellosis reactor cattle.

(a) *Destination.* Brucellosis reactor cattle may be moved interstate only for immediate slaughter as follows:

(1) Directly to a recognized slaughtering establishment;

(2) Directly to an approved intermediate handling facility and then directly to a recognized slaughtering establishment; or

(3) From a farm of origin directly to a specifically approved stockyard approved to receive brucellosis reactors and then

(i) Directly to a recognized slaughtering establishment; or

(ii) Directly to an approved intermediate handling facility and then directly to a recognized slaughtering establishment.

(b) *Identification.* Brucellosis reactor cattle must be individually identified prior to moving interstate by attaching to the left ear a metal tag bearing a serial number and the inscription "U.S. Reactor," or a metal tag bearing a serial number designated by the