

901:1-5-01

**Definition of "brucellosis test".**

(A) As used in regulations 901:1-5-01 through 901:1-5-11 "brucellosis test" means one of the following approved tests, conducted by a licensed-accredited veterinarian or by a laboratory approved by or operated by the department of agriculture:

- (1) Standard plate agglutination test;
- (2) Standard tube agglutination test;
- (3) Acidified plate antigen test;
- (4) Rivanol precipitation plate antigen test;
- (5) Serial dilution milk ring test;
- (6) Complement fixation test;
- (7) Standard buffered brucella antigen card test;
- (8) Mercaptoethanol agglutination test.

(B) A licensed-accredited veterinarian, outside an approved laboratory, shall use:

- (1) The standard plate agglutination method or the standard buffered brucella antigen card test;
- (2) The standard buffered brucella antigen card test only if he has received prior written authorization from the department;
- (3) The following amounts of blood serum and brucella plate antigen when conducting the standard plate agglutination test:

Blood Serum	Brucella Plate Antigen	Equivalent Dilution
0.08 cc	0.03 cc	1/25
0.04 cc	0.03 cc	1/50
0.02 cc	0.03 cc	1/100
0.01 cc	0.03 cc	1/200

Dilution readings shall be made eight minutes following the mixing of the blood serum and antigen.

(C) Regardless of the standard plate or standard tube agglutination test results, the department may classify animals as positive based upon any one of the following test results:

	Not Official Brucellosis Vaccinate	Official Brucellosis Vaccinate
(1) Rivanol	+ 1/25	+ 1/50
(2) A.P.A.	+ 3.75 ph	+ 3.25 ph
(3) Serial Dilution (BRT)	+ 1/16	+ 1/32
(4) Complement fixation	+ 1/20	+ 1/40
(5) Merceptoethanol	+ 1/25	+ 1/50

(D) The department shall classify any animal from which a *Brucella* sp. organism is isolated by bacteriological techniques as positive regardless of brucellosis test results or brucellosis vaccination status.

(E) Animals, other than swine, tested by either the standard plate or the standard tube agglutination method shall be classified as follows except that the department may reclassify positive animals to suspect pending further tests and examination.

Test Dilutions				
1/50	1/100	1/200	Not Official Brucellosis Vaccinate	Official Brucellosis Vaccinate
-	-	-	Susp.	Neg.
+	-	-	Susp.	Neg.
+	-	-	Susp.	Susp.
+	+	-	Pos.	Susp.
+	+	-	Pos.	Susp.
+	+	+	Pos.	Pos.

(F) Swine and herds of swine shall be classified as follows:

(1) "Positive" swine means:

- (a) Any swine disclosing a complete agglutination reaction in the blood titer dilution of 1:100 or higher;
  - (b) Any swine in an infected herd or herd of unknown status having a complete reaction in the 1:25 dilution or higher; or
  - (c) Any swine disclosing a positive card test reaction.
- (2) "Negative" swine means:
- (a) Any swine from an infected herd or herd of unknown status that:
    - (i) Discloses no reaction or less than complete agglutination in the blood titer dilution of 1:25;
    - (ii) Discloses a negative card test reaction;
  - (b) Any swine from a validated or negative herd that:
    - (i) Discloses no reaction or less than complete agglutination in the blood titer dilution of 1:100;
    - (ii) Discloses a negative card test reaction.
- (3) "Suspect" swine means any swine not classed as positive or negative to a brucellosis test.
- (4) "Infected herd" means any herd in which one or more swine show:
- (a) A complete agglutination reaction in the blood titer dilution of 1:100 or higher;
  - (b) A positive reaction to the card test.
- (5) "Negative herd" means any herd in which no swine:
- (a) Have agglutination reactions higher than incomplete at the 1:100 dilution;
  - (b) Are found positive to the card test.
- (G) Swine classed as positive or suspect shall be identified by an ear tag or such other method as approved by the department.
- (H) No person shall move swine classed as positive or suspect, or exposed to brucellosis, without prior written permission from the department.

Five Year Review (FYR) Dates: 9/6/2018 and 09/06/2023

CERTIFIED ELECTRONICALLY

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Certification

09/06/2018

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Date

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