

employee to whom authority has heretofore been delegated or to whom authority may hereafter be delegated to act in his stead.

[36 FR 23112, Dec. 3, 1971, as amended at 38 FR 3038, Feb. 1, 1973. Redesignated at 44 FR 61586, Oct. 26, 1979, and amended at 47 FR 21991, May 20, 1982; 67 FR 8468, Feb. 25, 2002]

§ 145.14 Blood testing.

Poultry must be more than 4 months of age when blood tested for an official classification: *Provided*, That turkey candidates under subpart D of this part may be blood tested at more than 12 weeks of age; game bird candidates under subpart E of this part may be blood tested when more than 4 months of age or upon reaching sexual maturity, whichever comes first; and ostrich, emu, rhea, and cassowary candidates under subpart F of this part may be blood tested when more than 12 months of age. Blood samples for official tests shall be drawn by an Authorized Agent or State Inspector and tested by an authorized laboratory, except that the stained antigen, rapid whole-blood test for pullorum-typhoid may be conducted by an Authorized Agent or State Inspector. For Plan programs in which a representative sample may be tested in lieu of an entire flock, the minimum number tested shall be 30 birds per house, with at least 1 bird taken from each pen and unit in the house. The ratio of male to female birds in representative samples of birds from meat-type chicken, waterfowl, exhibition poultry, and game bird flocks must be the same as the ratio of male to female birds in the flock. In houses containing fewer than 30 birds, all birds in the house must be tested.

(a) *For Pullorum-Typhoid*. (1) The official blood tests for pullorum-typhoid shall be the standard tube agglutination test, the microagglutination test, the enzyme-linked immunosorbent assay test (ELISA), or the rapid serum test for all poultry; and the stained antigen, rapid whole-blood test for all poultry except turkeys. The procedures for conducting official blood tests are set forth in §§ 147.1, 147.2, 147.3, and 147.5 of this chapter and referenced in footnote 3 of this section or in literature provided by the producer. Only antigens approved by the Department and

of the polyvalent type shall be used for the rapid whole-blood and tube agglutination tests. Each serial of tube antigen shall be submitted by the antigen producer to the Department for approval upon manufacture and once a year thereafter as long as antigen from that serial continues to be made available for use. All microtest antigens and enzyme-linked immunosorbent assay reagents shall also be approved by the Department.¹

(2) [Reserved]

(3) There shall be an interval of at least 21 days between any official blood test and any previous test with pullorum-typhoid antigen.

(4) [Reserved]

(5) The official blood test shall include the testing of a sample of blood from each bird in the flock: *Provided*, That under specified conditions (see applicable provisions of §§ 145.23, 145.33, 145.43, 145.53 and 145.63) the testing of a portion or sample of the birds may be used in lieu of testing each bird.

(6) When reactors are found in serum or blood from any flock, or *S. pullorum* or *S. gallinarum* organisms are isolated by an authorized laboratory from baby poultry, or from fluff samples produced by hatching eggs, the infected flock shall qualify for participation in the Plan with two consecutive negative results to an official blood test named in paragraph (a)(1) of this section. A succeeding flock must be qualified for participation in the Plan's pullorum-typhoid program with a negative result to an official blood test named in paragraph (a)(1) of this section. Testing to qualify flocks for Plan participation must include the testing of all birds in infected flocks and succeeding flocks for a 12-month period, and shall be performed or physically supervised by a State Inspector; *Provided*, That at the discretion of the Official State Agency, a sample of at least 500 birds, rather than all birds in the flock, may be tested by the State Inspector if it is agreed upon by the Official State Agency, the

¹The criteria and procedures for Department approval of antigens and reagents may be obtained from the Animal and Plant Health Inspection Service, Veterinary Services, Center for Veterinary Biologics, 510 South 17th Street, Suite 104, Ames, IA 50010-8197.

flockowner, and the Administrator. If the State Inspector determines that a primary breeding flock has been exposed to *S. pullorum* or *S. gallinarum*,² the Official State Agency shall require:

(i) The taking of blood samples—performed by or in the presence of a State Inspector—from all birds on premises exposed to birds, equipment, supplies, or personnel from the primary breeding flock during the period when the State Inspector determined that exposure to *S. pullorum* or *S. gallinarum* occurred.²

(ii) The banding of all birds of these premises—performed or physically supervised by a State Inspector—in order to identify any bird that tests positive; and

(iii) The testing of blood samples at an authorized laboratory using an official blood test named in paragraph (a)(1) of this section.

(7) All domesticated fowl, except waterfowl, on the farm of the participant shall either be properly tested to meet the same standards as the participating flock or these birds and their eggs shall be separated from the participating flock and its eggs.

(8) All tests for pullorum-typhoid in flocks participating in or candidates for participation in the Plan shall be reported to the Official State Agency within 10 days following the completion of such tests. All reactors shall be considered in determining the classification of the flock.

(9) Poultry from flocks undergoing qualification testing for participation in the Plan, that have a positive reaction to an official blood test named in paragraph (a)(1) of this section, shall be evaluated for pullorum-typhoid infection. The Official State Agency shall select one or more of the following procedures to be used in each circumstance, based on a cost-benefit analysis involving evaluation of such factors as: the value of the reactors and flocks at risk; the necessity for

preserving birds from scarce genetic lines; the need for a quick determination of disease existence; and the cost for each retesting option versus the total availability of funds (when the state provides retesting subsidies):

(i) Reactors shall be submitted to an authorized laboratory for bacteriological examination. If there are more than 4 reactors in a flock, a minimum of 4 reactors shall be submitted to the authorized laboratory; if the flock has 4 or fewer reactors, all of the reactors must be submitted. The approved procedure for bacteriological examination is set forth in §147.11 of this chapter. When reactors are submitted to the authorized laboratory within 10 days from the date of reading an official blood test named in paragraph (a)(1) of this section, and the bacteriological examination fails to demonstrate pullorum-typhoid infection, the Official State Agency shall presume that the flock has no pullorum-typhoid reactors.

(ii) The serum specimen that produced the positive reaction shall be retested at an authorized laboratory in accordance with procedures set forth in §147.1 of this chapter for the standard tube agglutination test, or in §147.5 of this chapter for the microagglutination test for pullorum-typhoid. If the reaction to this retest is positive in dilutions of 1:50 or greater for the standard tube agglutination test, or 1:40 or greater for the microagglutination test, additional examination of the bird and flock will be performed in accordance with paragraph (a)(9)(i) or (a)(9)(iii) of this section.

(iii) the reactors shall be retested within 30 days using an official blood test named in paragraph (a)(1) of this section. If this retest is positive, additional examination of the reactors and flock will be performed in accordance with paragraph (a)(9)(i) of this section. During the 30-day period, the flock must be maintained under a security system, specified or approved by the Official State Agency, that will prevent physical contact with other birds and assure that personnel, equipment, and supplies that could be a source of pullorum-typhoid spread are sanitized.

²In making determinations of exposure, the State Inspector shall evaluate both evidence proving that exposure occurred and circumstances indicating a high probability of contacts with: infected wild birds; contaminated feed or waste; or birds, equipment, supplies, or persons from or exposed to flocks infected with *S. pullorum* or *S. gallinarum*.

(10) Any drug, for which there is scientific evidence of masking the test reaction or hindering the bacteriological recovery of Salmonella organisms, shall not be fed or administered to poultry within 3 weeks prior to a test or bacteriological examination upon which a Salmonella classification is based.

(11) When suitable evidence, as determined by the Official State Agency or the State Animal Disease Control Official, indicates that baby or started poultry produced by participating hatcheries are infected with organisms for which the parent flock received an official control classification and this evidence indicates that the infection was transmitted from the parent flock, the Official State Agency may, at its discretion, require additional testing of the flock involved. If infection is found in the parent flock, its classification shall be suspended until the flock is re-qualified under the requirements for the classification. Furthermore, the Official State Agency may require that the hatching eggs from such flocks be removed from the incubator and destroyed prior to hatching. When Salmonella organisms are isolated from a specimen which originated in a participating hatchery, the Official State Agency shall attempt to locate the source of the infection. The results of the investigation and the action taken to eliminate the infection shall be reported by the Official State Agency to the Service.

(b) *For M. gallisepticum and M. synoviae:* (1) The official blood tests for *M. gallisepticum* and *M. synoviae* shall be the serum plate agglutination test, the tube agglutination test, the hemagglutination inhibition (HI) test, the microhemagglutination inhibition test, the enzyme-linked immunosorbent assay (ELISA) test³ or

³Procedures for the enzyme-linked immunosorbent assay (ELISA) test are set forth in the following publications:

A.A. Ansari, R.F. Taylor, T.S. Chang, "Application of Enzyme-Linked Immunosorbent Assay for Detecting Antibody to Mycoplasma gallisepticum Infections in Poultry," *Avian Diseases*, Vol. 27, No. 1, pp. 21-35, January-March 1983; and

H.M. Opitz, J.B. Duplessis, and M.J. Cyr, "Indirect Micro-Enzyme-Linked

a combination of two or more of these tests. The HI test, the microhemagglutination inhibition test, and the ELISA test shall be used to confirm the positive results of other serological tests. HI titers of 1:40 or less may be interpreted as equivocal, and final judgment may be based on further samplings and/or culture of reactors.

(2) The tests shall be conducted using *M. gallisepticum* or *M. synoviae* antigens approved by the Department or the Official State Agency and shall be performed in accordance with the recommendations of the producer of the antigen.

(3) When reactors to the test for which the flock was tested are submitted to a laboratory as prescribed by the Official State Agency, the criteria found in §147.6 of this chapter shall be used in determining the final status of the flock.

(4) Any drug, for which there is scientific evidence of masking the test reaction or hindering the bacteriological recovery of mycoplasma organisms, shall not be fed or administered to poultry within three weeks prior to a test or bacteriological examination upon which a Mycoplasma classification is based.

(c) *For M. meleagridis.* The official blood tests for *M. meleagridis* are specified in §145.43(d)(2).

(d) *For avian influenza.* The official blood tests for avian influenza are the agar gel immunodiffusion (AGID) test and the enzyme-linked immunosorbent assay (ELISA).

(1) The AGID test must be conducted on all ELISA-positive samples. Positive tests by AGID or ELISA must be further tested by Federal Reference Laboratories. Final judgment may be based upon further sampling or culture results.

(2) The tests must be conducted using antigens or test kits approved by the Department and the Official State

Immunosorbent Assay for the Detection of Antibodies to Mycoplasma synoviae and *M. gallisepticum*," *Avian Diseases*, Vol. 27, No. 3, pp. 773-786, July-September 1983; and

H.B. Ortmyer and R. Yamamoto, "Mycoplasma Meleagridis Antibody Detection by Enzyme-Linked Immunosorbent Assay (ELISA)," *Proceedings, 30th Western Poultry Disease Conference*, pp. 63-66, March 1981.

§ 145.21

Agency and must be performed in accordance with the recommendations of the producer or manufacturer.

(Approved by the Office of Management and Budget under control number 0579-0007)

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EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §145.14, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

Subpart B—Special Provisions for Egg Type Chicken Breeding Flocks and Products

§ 145.21 Definitions.

Except where the context otherwise requires, for the purposes of this subpart the following terms shall be construed, respectively, to mean:

Chicks. Newly hatched chickens.

Egg type chicken breeding flocks. Flocks that are composed of stock that has been developed for egg production and are maintained for the principal purpose of producing chicks for the ultimate production of eggs for human consumption.

Started chickens. Young chickens (chicks, pullets, cockerels, capons) which have been fed and watered and are less than 6 months of age.

[36 FR 23112, Dec. 3, 1971, as amended at 38 FR 13707, May 24, 1973; 41 FR 48723, Nov. 5, 1976. Redesignated at 44 FR 61586, Oct. 26, 1979, and amended at 59 FR 12798, Mar. 18, 1994; 65 FR 8017, Feb. 17, 2000]

§ 145.22 Participation.

Participating flocks of egg type chickens, and the eggs and chicks produced from them, shall comply with the applicable general provisions of subpart A of this part and the special provisions of this subpart B.

(a) The minimum weight of hatching eggs sold shall be $1\frac{1}{2}$ ounces each, except as otherwise specified by the purchaser of the eggs.

(b) Mediterranean breed eggs shall be reasonably free from tints.

(c) Started chickens shall lose their identity under Plan terminology when not maintained by Plan participants under the conditions prescribed in §145.5(a).

9 CFR Ch. I (1-1-03 Edition)

(d) Hatching eggs produced by primary breeding flocks shall be fumigated (see §147.25 of this chapter) or otherwise sanitized.

(e) Any nutritive material provided to chicks must be free of the avian pathogens that are officially represented in the Plan disease classifications listed in §145.10.

[36 FR 23112, Dec. 3, 1971, as amended at 40 FR 1501, Jan. 8, 1975. Redesignated at 44 FR 61586, Oct. 26, 1979, and amended at 49 FR 19802, May 10, 1984; 57 FR 57341, Dec. 4, 1992; 65 FR 8017, Feb. 17, 2000]

§ 145.23 Terminology and classification; flocks and products.

Participating flocks, and the eggs and chicks produced from them, which have met the respective requirements specified in this section may be designated by the following terms and the corresponding designs illustrated in §145.10:

(a) [Reserved]

(b) *U.S. Pullorum-Typhoid Clean.* A flock in which freedom from pullorum and typhoid has been demonstrated to the official State agency under the criteria in one of the following paragraphs (b)(1) through (5) of this section: *Provided*, That a flock qualifying by means of a blood test shall be tested within the past 12 months, except that the retesting of a participating flock which is retained for more than 12 months shall be conducted a minimum of 4 weeks after the induction of molt. (See §145.14 relating to the official blood test where applicable.)

(1) It has been officially blood tested with no reactors.

(2) It is a multiplier breeding flock, or a breeding flock composed of progeny of a primary breeding flock which is intended solely for the production of multiplier breeding flocks, and meets the following specifications as determined by the Official State Agency and the Service:

(i) The flock is located in a State where all persons performing poultry disease diagnostic services within the State are required to report to the Official State Agency within 48 hours the source of all poultry specimens from which *S. pullorum* or *S. gallinarum* is isolated;