

## 1990 No. 50

## ANIMALS

**Poultry Breeding Flocks and Hatcheries (Registration and Testing etc.) Order (Northern Ireland) 1990**

*Made* . . . . . 14th February 1990

*Coming into operation—*

*Articles 3 and 4* . . . . . 2nd April 1990

*Remainder* . . . . . 16th February 1990

The Department of Agriculture, in exercise of the powers conferred on it by Articles 5(1), 19(h) and (i), 44 and 60(1) of the Diseases of Animals (Northern Ireland) Order 1981(a) and of every other power enabling it in that behalf, hereby makes the following Order:

*Citation and commencement*

1.—(1) This Order may be cited as the Poultry Breeding Flocks and Hatcheries (Registration and Testing etc.) Order (Northern Ireland) 1990 and, except for Articles 3 and 4, shall come into operation on 16th February 1990.

(2) Articles 3 and 4 shall come into operation on 2nd April 1990.

*Interpretation*

2.—(1) In this Order—

“approved disinfectant” means a disinfectant approved by the Department under the Diseases of Animals (Approval of Disinfectants) Order (Northern Ireland) 1972(b);

“authorised laboratory” means a laboratory in Northern Ireland authorised in writing by the Department for the purposes of this Order;

“breeding flock” means any flock of poultry consisting of not less than 25 birds which are kept (or are being reared) for the production of hatching eggs or birds for (in either case) sale or supply for breeding purposes or for the production of eggs or for meat;

“the Breeding Flocks Register” means the register kept by the Department under Article 3(2);

“chicks” means poultry less than 72 hours old which have not been fed;

“chick box liner” means any material used to line a box or other container in which chicks are transported from a hatchery to any rearing premises;

(a) S.I. 1981/1115 (N.I. 22) as amended by S.I. 1984/702 (N.I. 2) Art. 17

(b) S.R. & O. (N.I.) 1972 No. 16 as amended by S.R. 1975 No. 69

“composite faeces sample” means a sample of faeces consisting of a number of individual samples of faeces, calculated in accordance with the appropriate provisions of Part I of Schedule 3, each of which weighs not less than 1 gram and is taken from a site selected at random to represent the house or group of houses on the premises from which it is taken;

“hatching eggs” means eggs intended for incubation;

“the Hatcheries Register” means the register kept by the Department under Article 4(2);

“hatchery” means any premises, with a total incubator capacity of not less than 1,000 eggs, on which the eggs of poultry are incubated or hatched and from which chicks are sold or supplied;

“house” means—

(a) a building (including a shed); or

(b) a part of a building separated from other parts of that building by a solid partition and having its own ventilation system;

“inspector” includes a veterinary inspector;

“laboratory” means any laboratory in Northern Ireland which has the necessary facilities and personnel for carrying out tests on samples mentioned in Parts I and II of Schedule 3 in accordance with the provisions of Part III of that Schedule;

“poultry” means domestic fowls, turkeys, geese or ducks;

“rearing premises” means any premises on which chicks are placed for rearing as replacement breeding stock;

“registered”, in relation to any person, means the entry in respect of any premises of that person’s name in a register kept under this Order;

“sanitised”, in relation to any egg, means—

(a) fumigated with formaldehyde;

(b) sprayed with or immersed in an egg shell disinfectant in accordance with the manufacturer’s instructions; or

(c) made hygienic by any other method approved by the Department; and

“vermin” means rats, mice, flies or cockroaches.

(2) Until the coming into operation of Articles 3 and 4 any reference in this Order to a person who is registered in the Breeding Flocks Register or in the Hatcheries Register in respect of any premises shall be a reference to a person who is keeping a breeding flock on any premises or (as the case may be) to a person who is using any premises as a hatchery and whose name would be required to be entered in the Breeding Flocks Register or in the Hatcheries Register in respect of those premises in accordance with Article 3 or 4 if those Articles were in operation.

(3) Any reference in this Order to the supply of any hatching eggs, chicks or birds shall be deemed to include the transfer of them from one premises to any other premises (whether or not in the same ownership or occupation) for breeding purposes or for the production of eggs or for meat.

(4) After 1st June 1990 any reference in this Order to a laboratory shall be a reference to an authorised laboratory.

### *Registration of breeding flocks*

3.—(1) Subject to paragraph (9), a person shall not keep a breeding flock on any premises unless his name is for the time being registered in the Breeding Flocks Register in respect of the premises on which the flock is kept.

(2) The Department shall, for the purposes of paragraph (1), keep a register of persons as being persons entitled to keep a breeding flock on any premises in respect of which they are registered.

(3) Where a person applies in writing to the Department to be registered in the Breeding Flocks Register in respect of any premises, the Department shall, subject to paragraphs (4) and (5), so register him and shall issue to him a certificate of such registration.

(4) The Department shall refuse to register any person in the Breeding Flocks Register in respect of any premises unless all the particulars specified in Part I of Schedule 1 are notified to it in writing.

(5) The Department shall refuse to register any person in the Breeding Flocks Register in respect of any premises if an inspector is not permitted to enter the premises as required by paragraph 3 of Part I of Schedule 2 or if, as a result of an inspection carried out on the premises, it is satisfied that the requirements specified in paragraph 1 of that Part are not complied with by the applicant.

(6) The registration of a person in the Breeding Flocks Register in respect of any premises and any renewal of that registration shall expire after a period of one year from the date of the application therefor.

(7) A person who is registered for the time being in the Breeding Flocks Register in respect of any premises may, at any time before the date his registration expires, apply in writing to the Department for that registration to be renewed in respect of those premises.

(8) On receipt of an application under paragraph (7) the Department shall renew the applicant's registration in respect of the premises to which the application relates unless, as a result of an inspection carried out on the premises by an inspector, it is satisfied that the applicant has failed to comply with any of the requirements specified in Part I of Schedule 2 relating to the keeping of a breeding flock on those premises.

(9) The provisions of paragraph (1) shall not apply in the case of a breeding flock consisting of birds which are kept solely for the production of hatching eggs or chicks for use (in either case) in the manufacture of vaccines or for research or other scientific purposes.

### *Registration of hatcheries*

4.—(1) Subject to paragraph (9), a person shall not use any premises as a hatchery unless his name is for the time being registered in the Hatcheries Register in respect of those premises.

(2) The Department shall, for the purpose of paragraph (1), keep a register of persons as being persons entitled to use as a hatchery any premises in respect of which they are registered.

(3) Where a person applies in writing to the Department to be registered in the Hatcheries Register in respect of any premises the Department shall, subject to paragraphs (4) and (5), so register him and shall issue to him a certificate of such registration.

(4) The Department shall refuse to register any person in the Hatcheries Register in respect of any premises unless all particulars specified in Part II of Schedule 1 are notified to it in writing.

(5) The Department shall refuse to register any person in the Hatcheries Register in respect of any premises if an inspector is not permitted to enter the premises as required by paragraph 3 of Part II of Schedule 2 or if, as a result of an inspection carried out on the premises by an inspector, it is satisfied that any of the requirements specified in paragraph 1 of that Part are not complied with by the applicant.

(6) The registration of a person in the Hatcheries Register in respect of any premises and any renewal of that registration shall expire after a period of one year from the date of the application therefor.

(7) A person who is registered for the time being in the Hatcheries Register in respect of any premises may, at any time before the date his registration expires, apply in writing to the Department for that registration to be renewed in respect of those premises.

(8) On receipt of an application under paragraph (7), the Department shall renew the applicant's registration in respect of the premises to which the application relates unless, as a result of an inspection carried out on the premises by an inspector, it is satisfied that the applicant has failed to comply with any of the requirements specified in Part II of Schedule 2 relating to the use of those premises as a hatchery.

(9) The provisions of paragraph (1) shall not apply in the case of any premises used solely for the incubation or hatching of eggs from which chicks are sold or supplied for use in the manufacture of vaccines or for research or other scientific purposes.

#### *Duties of registered persons in respect of breeding flocks and hatcheries*

5. A person who is registered in respect of any premises in the Breeding Flocks Register or in the Hatcheries Register shall ensure that the requirements specified in Part I of Schedule 2 relating to the keeping of a breeding flock on those premises or, as the case may be, the requirements specified in Part II of that Schedule relating to the use of those premises as a hatchery are complied with.

#### *Taking of samples from breeding flocks for bacteriological testing for salmonella*

6. A person who is registered in the Breeding Flocks Register in respect of any premises on which a breeding flock is kept by him shall ensure that—

- (a) in respect of the flock the samples specified in Part I of Schedule 3 are taken in such manner and at such times as are so specified;
- (b) such samples are identified in such a manner as to enable the laboratory to which they are submitted to know what type of samples they are, the name of the person entered in the Breeding Flocks

Register in respect of the premises on which they were taken, the address of those premises and the house (if any) on those premises from which they were taken;

- (c) such samples (other than those required to be taken under the supervision of an inspector) are submitted, within 48 hours of being taken, or, in the case of samples required to be taken over a period of 4 consecutive days, within 48 hours of the end of that period, to a laboratory for testing for the presence of salmonella in accordance with an appropriate bacteriological method set out in Part III of Schedule 3; and
- (d) in the case of samples required to be taken under the supervision of an inspector they are given to him after being so taken for testing for salmonella by the Department in accordance with such a bacteriological method.

*Taking of blood samples from domestic fowls in breeding flocks for serological testing for Salmonella pullorum*

7. A person who is registered in the Breeding Flocks Register in respect of any premises on which a breeding flock containing any domestic fowls is kept by him shall ensure that—

- (a) blood samples are taken from the fowls in such manner as is specified in Part I of Schedule 4 and at such times as are so specified; and
- (b) such samples are tested in accordance with the serological method set out in Part II of that Schedule, by or under the supervision of an inspector for the presence of *Salmonella pullorum*.

*Taking of samples from hatcheries for bacteriological testing for salmonella*

8. A person who is registered in the Hatcheries Register in respect of any premises used by him as a hatchery shall ensure that—

- (a) the samples specified in Part II of Schedule 3 are taken from poultry in the hatchery in such manner and at such times as are so specified;
- (b) those samples are identified in such a manner as to enable the laboratory to which they are submitted to know what type of samples they are, the name of the person entered in the Hatcheries Register in respect of the premises on which they were taken, the address of those premises and the address of the premises which supplied the hatching eggs to the hatchery from which the samples were obtained;
- (c) such samples (other than those required to be taken under the supervision of an inspector) are submitted, within 48 hours of being taken, to a laboratory for testing for the presence of salmonella in accordance with an appropriate bacteriological method set out in Part III of Schedule 3; and
- (d) in the case of samples required to be taken under the supervision of an inspector, they are given to him after being so taken, for testing by the Department for salmonella in accordance with such a bacteriological method.

*Bacteriological testing of samples from breeding flocks and hatcheries and reporting of results of tests*

**9.**—(1) The person in charge of a laboratory which accepts for testing a sample which has been submitted to it under Article 6(c) or 8(c), shall ensure that—

- (a) the sample is tested for the presence of salmonella in accordance with an appropriate bacteriological method set out in Part III of Schedule 3;
- (b) the result of such a test is reported in writing as soon as practicable to the person who submitted the sample; and
- (c) where, as a result of an examination carried out in accordance with such a bacteriological method, a culture of salmonella is isolated from the sample, that a subculture is sent to the Department at the Veterinary Research Laboratory, Stoney Road, Stormont, Belfast or at its Food and Agricultural Microbiology Research Division, Newforge Lane, Belfast.

(2) Where a person to whom a report is made under paragraph (1)(b) is not the person registered in the Breeding Flocks Register or the Hatcheries Register (as the case may be) in respect of the premises on which the sample was taken, he shall immediately pass that report to the person so registered.

*Tampering with samples*

**10.**—(1) A person shall not treat or otherwise tamper with any sample which has been taken for the purposes of this Order.

(2) For the purposes of this Article a person shall be deemed to have treated a sample if he does anything in relation to it which is likely to affect the result of any test required to be carried out on it under this Order.

*Keeping of records*

**11.**—(1) A person who is registered in the Breeding Flocks Register in respect of any premises shall—

- (a) in respect of each sample taken under and in accordance with Article 6(a), keep a record containing the information specified in Part I of Schedule 5 in relation to that sample;
- (b) keep a record of the result of any test carried out under and in accordance with Article 6(c) on such a sample which has been reported or passed to him in accordance with Article 9;
- (c) in respect of each sample taken under and in accordance with Article 7(a) keep a record containing the information specified in Part II of Schedule 5 in relation to such a sample; and
- (d) keep a record containing the information specified in Part III of Schedule 5 of the movement of any poultry, chicks or eggs onto and off the premises on which the breeding flock is kept.

(2) A person who is registered in the Hatcheries Register in respect of any premises shall—

- (a) in respect of each sample taken under and in accordance with Article 8(a) keep a record containing the information specified in Part I of Schedule 5 in relation to that sample.

- (b) keep a record of the result of any test carried out under and in accordance with Article 8(c) on such a sample and which has been reported or passed to him in accordance with Article 9; and
  - (c) keep a record containing the information specified in Part IV of Schedule 5 of the movement of any eggs onto and off the premises used as a hatchery and of the movement of any chicks off such premises.
- (3) A person shall—
- (a) retain any record he is required to keep under paragraphs (1) and (2) for a period of one year from the date on which the sample was taken, or from the date of the test or from the date on which the movement took place (as the case may be); and
  - (b) produce any such record to an inspector on demand at any reasonable time during that period and allow him to take a copy of it or an extract from it.

*Prohibition on vaccination*

**12.** A person shall not vaccinate any poultry with any vaccine which is likely to affect the result of any test carried out under this Order on any sample taken from the poultry.

*Inspection of premises*

**13.** The Department may, before registering any person in the Breeding Flocks Register or in the Hatcheries Register in respect of any premises, or before renewing the registration of a person in either of those registers in respect of any premises, carry out such inspections, examinations and tests as it considers necessary for the purpose of ascertaining whether any of the grounds referred to in this Order exist for the Department to refuse to so register him or to renew any such registration,

Sealed with the Official Seal of the Department of Agriculture on 14th February 1990.

(L.S.)

*P. T. Toal*

Assistant Secretary

PART I

PARTICULARS TO BE NOTIFIED TO THE DEPARTMENT FOR THE  
PURPOSES OF ARTICLE 3(4)

- (i) The name, address and telephone number (if any) of the applicant.
- (ii) The address and telephone number (if any) of the premises on which the flock is to be kept.
- (iii) The name of the person (if not the applicant) in charge of the premises on which the flock is to be kept.
- (iv) The species of birds in the flock.
- (v) The approximate number of birds in the flock.

PART II

Article 4(4)

PARTICULARS TO BE NOTIFIED TO THE DEPARTMENT FOR THE  
PURPOSES OF ARTICLE 4(4)

- (i) The name, address and telephone number (if any) of the applicant.
- (ii) The address and telephone number (if any) of the premises which are to be used as a hatchery.
- (iii) The name of the person (if not the applicant) in charge of the premises which are to be used as a hatchery.
- (iv) The incubator capacity of the premises which are to be used as a hatchery and the species of birds to be hatched there.



## PART I

## REQUIREMENTS RELATING TO THE KEEPING OF A BREEDING FLOCK

1. A person who is registered in the Breeding Flocks Register (in this Part called “a registered person”) or who has applied for such registration in respect of any premises on which a breeding flock is kept by him shall ensure that the premises are located and constructed or adapted so as to be suitable for all operations carried out on those premises in connection with the flock and so as to enable the provisions of paragraph 2 to be complied with on those premises.

2. A registered person shall ensure that on the premises on which the breeding flock is kept—

- (a) effective measures are taken so as to ensure that—
  - (i) poultry houses and buildings or parts of buildings used to store eggs are not infested by vermin; and
  - (ii) poultry houses in which poultry are housed permanently throughout their rearing or laying periods are not accessible to any other birds at any time;
- (b) domestic animals are not permitted access to poultry houses;
- (c) footpaths containing an approved disinfectant are maintained outside each house and the disinfectant is renewed as necessary and, in any event, at least once every 7 days;
- (d) a person does not enter a poultry house unless he is wearing both overall clothing and boots and that—
  - (i) the clothing is either disposable or capable of being laundered or cleansed and disinfected; and
  - (ii) the boots are capable of being cleansed and disinfected;
- (e) a person does not leave a poultry house without immediately cleansing and disinfecting his boots and washing his hands;
- (f) after all poultry have been removed from a poultry house, all manure is removed from it and the house is cleansed and disinfected with an approved disinfectant;
- (g) eggs are collected from the flock at least twice a day or, in the case of a flock consisting of ducks or geese, at least once a day;
- (h) all broken, leaking, dirty and dented eggs are collected in separate containers from other eggs;
- (i) no broken, leaking, dirty or dented eggs are incubated;
- (j) all eggs intended for incubation are sanitised;
- (k) all eggs which have been sanitised are stored in clean, dust-free rooms to which no birds are permitted access and which are used exclusively for this purpose and kept at a temperature of 13°C–15°C (55°–60°F) and at a relative humidity of 70–80%; and
- (l) any equipment used for catching, and any vehicle and equipment used for carrying, poultry is cleansed and disinfected with an approved disinfectant before each occasion on which it is so used.

3. A registered person and a person who has applied for registration in the Breeding Flocks Register shall ensure that an inspector is permitted, on demand at

any reasonable time, to enter the premises on which the flock is kept in order to ascertain whether the requirements specified in paragraph 1 or 2 are being complied with on the premises.

## PART II

Articles 4(5) and (8)  
and 5

## REQUIREMENTS RELATING TO THE USE OF ANY PREMISES AS A HATCHERY

1.—(1) A person who is registered in the Hatcheries Register (in this Part called “a registered person”) or who has applied for such registration in respect of any premises used by him as a hatchery shall ensure that the premises are located and constructed or adapted so as to be suitable for all operations carried out on those premises and so as to enable the provisions of paragraph 2 to be complied with on those premises.

(2) Without prejudice to the generality of sub-paragraph (1) a person referred to in that sub-paragraph shall ensure that any such premises are constructed so that—

- (a) a one-way system for the movement of eggs and chicks is operated; and
- (b) a separate ventilation system exists for each work area; or
- (c) the airflow is in the same direction as the movement of eggs and chicks.

2. A registered person shall ensure that on the premises used as a hatchery—

- (a) broilers and stock intended for the production of eggs for human consumption are hatched separately from each other;
- (b) pedigree, grandparent and parent stock are hatched separately from each other and from stock intended for the production of eggs for human consumption or for meat;
- (c) eggs of different species of birds are hatched separately from each other;
- (d) eggs are sanitised before incubation;
- (e) chick sexing tables and equipment are cleansed and disinfected between hatches, using an approved disinfectant;
- (f) any equipment which is to be returned to individual premises on which breeding flocks are kept is cleansed and disinfected with an approved disinfectant before it is so returned;
- (g) any vehicle used for carrying eggs or chicks or any equipment used in connection with them is cleansed and disinfected with an approved disinfectant before each occasion on which it is so used;
- (h) hatching rooms, take-off rooms, sexing rooms, holding rooms and despatch rooms are cleansed and disinfected between hatches, and that all other rooms are cleansed and disinfected with an approved disinfectant each week; and
- (i) any equipment used for vaccinating birds is cleansed and disinfected with an approved disinfectant, or otherwise sterilised between hatches according to the manufacturer’s instructions.

3. A registered person and a person who has applied for registration in the Hatcheries Register shall ensure that an inspector is permitted, on demand at any reasonable time, to enter the premises used as a hatchery in order to ascertain whether the requirements specified in paragraphs 1 and 2 are being complied with on the premises.

## PART I

## SAMPLES TO BE TAKEN FROM BREEDING FLOCKS FOR BACTERIOLOGICAL TESTING

1. In respect of each breeding flock, the samples to be taken shall be as follows:—
- (a) all chick box liners, up to a maximum of 10, for every 500 chicks delivered from each hatchery to any rearing premises on any day, such samples to be taken on the day of the arrival of the chicks there.
  - (b) the carcasses of all chicks, up to a maximum of 60, from each hatchery which are dead on arrival at any rearing premises, such samples to be taken on the day of arrival of the chicks there;
  - (c) the carcasses of all birds, up to a maximum of 60, which die or are culled within 4 days of their arrival at any rearing premises or, in the case of birds hatched on any rearing premises, within 4 days of being hatched;
  - (d) the carcasses of all birds, up to a maximum of 60, which die or are culled over a period of 4 consecutive days when between 3 and 5 weeks of age (the samples to be taken over such period). However, if the total number of such carcasses taken during such period is less than the appropriate number of samples specified in the second column of the table in paragraph 4 the shortfall shall be made up by—
    - (i) a composite faeces sample consisting of a number of individual samples equivalent to that shortfall; or
    - (ii) a number of cloacal swabs, taken at the rate of one swab from each bird, equivalent to that shortfall;
  - (e) the carcasses of all birds at grandparent level and above, up to a maximum of 60, which die or are culled over a period of 4 consecutive days when between 8 and 12 weeks of age (the samples to be taken over such period). However, if the total number of carcasses taken during such period is less than the appropriate number of samples specified in the second column of the table in paragraph 4 the shortfall shall be made up by—
    - (i) a composite faeces sample consisting of a number of individual samples equivalent to that shortfall; or
    - (ii) a number of cloacal swabs, taken at the rate of one swab from each bird, equivalent to that shortfall;
  - (f) (i) the carcasses of all birds, up to a maximum of 60, which die or are culled over a period of 4 consecutive days (the samples to be taken over the 4 day period) at the following stages, whichever comes later in the life-span of the birds: either 3 to 5 weeks before the surviving birds are transferred to laying accommodation, or when they have attained the following ages:
    - (a) in the case of domestic fowls, 16 to 22 weeks;
    - (b) in the case of ducks, 18 to 22 weeks;
    - (c) in the case of turkeys, 26 to 30 weeks; and
    - (d) in the case of geese, 30 to 36 weeks.

However, if the total number of carcasses taken during such period is less than the appropriate number of samples specified in the second column of the table in paragraph 4 the shortfall shall be made up by—

— a composite faeces sample consisting of a number of individual samples equivalent to that shortfall; or

— a number of cloacal swabs, taken at the rate of one swab from each bird, equivalent to that shortfall;

(ii) a single composite sample of 50 grams of dust consisting of equal amounts of dust from each ventilation outlet in the house;

(g) in the case of birds whose eggs are hatched at a hatchery with a total incubator capacity of less than 1,000 eggs or whose eggs are not being hatched—

(i) a composite faeces sample consisting of the appropriate number of individual samples calculated in accordance with the table in paragraph 4, or

(ii) the appropriate number of cloacal swabs, calculated in accordance with the said table and taken at the rate of one swab from each bird;

such samples being taken within 1 week of the birds attaining 26 and 30 weeks of age and at 8 week intervals thereafter;

(h) after a house has been depopulated of poultry, and before it is restocked, the following samples shall be taken—

(i) an individual large cotton bud swab moistened with sterile Buffered Peptone Water (BPW)(a) from each fan housing;

(ii) an individual large cotton bud swab moistened with sterile BPW from—  
— each of the four corners of the house at floor level;  
— the centre of each of the four walls of the house at floor level; and  
— two crevices in the house;

(iii) each food weighing hopper or each food dispensing hopper within each house; and

(iv) in the case of any nest boxes which have been removed from a house, before they are put back in the house swabs moistened with sterile BPW shall be taken from the interior of such boxes at the rate of one in 20.

2. In the case of domestic fowls, the samples referred to in paragraph 1(f) other than the carcasses of birds, shall be taken under the supervision of an inspector.

3. Where any samples are taken over a period of 4 consecutive days, such samples shall be stored in a refrigerator at between 1°C and 4°C until they are despatched to a laboratory and, in the case of any other samples, where they cannot be despatched to a laboratory within 24 hours of being taken, they shall be stored in a refrigerator at that temperature until so despatched.

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(a) Buffered Peptone Water — Edell and Kampelmacher (1973) (Commercially available as Oxoid CM 509, Lab M46 or equivalent)

4. For the purposes of paragraphs 1(d), (e), (f) and (g) the appropriate number of samples to be taken shall be determined in accordance with the following table:—

<i>Number of birds kept in a house or on premises on which birds have free access to more than one house, number of birds in each group of houses on such premises</i>	<i>Appropriate number of samples to be taken from that house or group of houses on those premises</i>
1— 29	A number equal to the total number of birds up to a maximum of 20
30— 39	25
40— 49	30
50— 59	35
60— 89	40
90—199	50
200—499	55
500 or more	60

## PART II

## Article 8(a)

## SAMPLES TO BE TAKEN FROM HATCHERIES FOR BACTERIOLOGICAL TESTING

1. The samples to be taken shall comprise—

- (a) composite samples of meconium taken from 250 chicks every 7 days, one such sample being taken from those chicks hatched from eggs supplied to the hatchery from any particular premises; or
- (b) samples comprising—
- (i) the carcasses of all chicks which are dead in the shells of eggs supplied to the hatchery from any particular premises; and
  - (ii) the carcasses of all chicks hatched from eggs supplied to the hatchery from any particular premises and which have been culled,
- such samples being taken every 7 days, up to a maximum of 50 in total; and
- (c) the carcasses of all chicks (up to a maximum of 50) hatched from eggs supplied to the hatchery from any particular premises and which have been culled, such samples to be taken every 28 days under the supervision of an inspector.

2. Samples taken under paragraph 1(a) and (b) shall be taken, every 28 days, under the supervision of an inspector.

3. Where any samples cannot be submitted to a laboratory within 24 hours of being taken they shall be stored in a refrigerator at between 1°C and 4°C until so submitted.

## PART III

Articles 6(c) and (d)  
8(c) and (d) and 9

## BACTERIOLOGICAL METHODS FOR TESTING FOR SALMONELLA

1. Bacteriological method (Rappaports) for the detection of salmonella in chick box liners, cloacal swabs, composite faeces samples, meconium samples, carcasses, dust and environmental swabs (i.e. swabs taken from fan housings, walls, floors, crevices, food weighing and dispensing hoppers and nest boxes).

Samples submitted for testing for the presence of salmonella shall be examined in the following prescribed manner on consecutive days and, where a laboratory at which samples have been received for testing on any day is unable to commence such an examination on that day, the samples shall be stored in a refrigerator at between 1°C and 4°C until required for examination.

### Day 1

- (a) Chick box liners: a one gram portion shall be taken from a soiled area on each liner and the portions from separate liners shall be bulked together and placed in Buffered Peptone Water (BPW)(a), at the rate of 1 gram of liner in 10 ml of BPW up to a maximum of 10 grams in 100 ml of BPW.
- (b) Composite faeces and meconium samples: the samples shall be thoroughly mixed and a sub-sample weighing not more than 10 grams shall be placed in BPW at the rate of 1 gm sample to 10 ml BPW to a maximum of 10 grams in 100 ml BPW.
- (c) Cloacal swabs: cloacal swabs shall be bulked together in batches and placed in BPW at the rate of 1 swab to 4 ml BPW up to a maximum of 30 swabs in 120 ml BPW.
- (d) Dust samples: the composite sample shall be thoroughly mixed and a sub-sample of 10 grams shall be placed in 225 ml of BPW.
- (e) Environmental swabs shall be bulked together in batches and placed in BPW at the rate of 1 swab to 10 ml BPW up to a maximum of 10 swabs in 100 ml BPW.
- (f) Carcasses of birds: the following organs shall be removed from the carcasses of birds—
  - (i) from chicks — samples of the yolk sac, liver and terminal intestines (to include portions of small intestines, large intestine and caecal tonsil),
  - (ii) from birds (other than chicks) — samples of liver and terminal intestines (to include portions of small intestines, large intestine and caecal tonsil).

The samples of organs taken from the carcasses of birds submitted shall then be bulked together and placed in BPW at the rate of 1 gram of bulked tissue in 10 ml BPW up to a maximum of 10 grams of tissue in 100 ml. BPW.

The inoculated BPW shall then be incubated at 37°C for 18–24 hours.

### Day 2

0.1 ml from the incubated BPW shall be inoculated into 10 ml of Rappaports Vassiliadis (RV) broth (b) and incubated at 42.5°C ± 0.5°C for 18–24 hours.

### Day 3

The RV broth shall be plated out on to 2 plates of Brilliant Green Agar (BGA)(d) using a 2.5 mm diameter loop. The BGA plates shall be inoculated with a droplet taken from the edge of the surface of the fluid and drawing the loop over the whole of one plate in a zigzag pattern and continuing to the second plate without recharging the loop. The space between the loop streaks shall be 0.5 cm – 1.0 cm. The plates shall be incubated at 37°C for 18–24 hours, and the RV broth reincubated at 42.5°C ± 0.5°C for a further 18–24 hours.

### Day 4

- (i) The plates of BGA shall be examined and a minimum of 3 colonies from the plates showing suspicion of salmonella growth shall be subcultured on to a blood agar plate and a MacConkey agar plate and into

biochemical composite media or equivalent. These media shall be incubated at 37°C for 18–24 hours.

- (ii) The reincubated RV broth shall be plated out, and the plates incubated, as described in Day 3.

### Day 5

- (i) The incubated plates and composite media or equivalent shall be examined and the findings recorded, discarding cultures which are obviously not salmonella. Slide serological tests shall be performed using salmonella polyvalent "O" (Groups A–S) and polyvalent "H" (phase 1 and 2) agglutinating sera on selected suspect colonies collected from the blood agar or MacConkey plates. If reactions occur with one or both sera, the colonies shall be typed to Group level by slide serology.
- (ii) The plates of BGA prepared at Day 4(ii) shall be examined and further action taken as described in Day 4(i) and Day 5(i).

2. Bacteriological Method (Selenite) for the detection of salmonella in chick box liners, cloacal swabs, composite faeces samples, meconium samples and carcasses.

Samples submitted for testing for the presence of salmonella shall be examined in the following prescribed manner on consecutive days and, where a laboratory at which samples have been received for testing on any day is unable to commence such an examination on that day, the samples shall be stored in a refrigerator at between 1°C and 4°C until required for examination.

### Day 1

- (a) Chick box liners: a one gram portion shall be taken from a soiled area on each liner and the portions from separate liners shall be bulked together and placed in Selenite F broth(c) at the rate of 1 gram of liner to 10 ml broth up to a maximum of 10 grams of liner in 100 ml broth.
- (b) Composite faeces and meconium samples: the sample shall be thoroughly mixed and a sub-sample weighing not more than 10 grams shall be placed in Selenite F broth at the rate of 1 gram of faeces to 10 ml broth up to a maximum of 10 grams of faeces in 100 ml broth.
- (c) Cloacal swabs: cloacal swabs shall be bulked together in batches and placed in Selenite F broth at the rate of 1 swab to 4 ml broth up to a maximum of 30 swabs in 120 ml broth.
- (d) Carcasses of birds: the following organs shall be removed from the carcasses of birds:—
- (i) from chicks — samples of the yolk sac, liver and terminal intestines (to include portions of small intestines, large intestine and caecal tonsil);
  - (ii) from birds (other than chicks) — samples of liver and terminal intestines (to include portions of small intestines, large intestine and caecal tonsil).

The samples of organs taken from the carcasses of birds submitted shall then be bulked together and placed in Selenite F broth at the rate of 1 gram of bulked tissue in 10 ml of broth up to a maximum of 10 grams of tissue in 100 ml broth.

The inoculated Selenite F broth shall then be incubated at 37°C for 18–24 hours.

### Day 2

- (i) The Selenite F broth shall be plated out on to 2 plates of Brilliant Green Agar (BGA) (d) using a 2.5 mm diameter loop. The BGA plates shall be

inoculated with a droplet taken from the edge of the surface of the fluid and drawing the loop over the whole of one plate in a zigzag pattern and continuing to the second plate without recharging the loop. The space between the loop streaks shall be 0.5 cm – 1.0 cm. The plates shall be incubated at 37°C for 18–24 hours.

- (ii) The Selenite F broth shall then be reincubated at 37°C for a further 18–24 hours.

### Day 3

- (i) The plates of BGA shall be examined and a minimum of 3 colonies from the plates showing suspicion of salmonella growth shall be subcultured on to a blood agar plate and a MacConkey agar plate and into biochemical composite media or equivalent.

These media shall be incubated at 37°C for 18–24 hours.

- (ii) The reincubated Selenite F broth shall be plated out and incubated as described in Day 2(i).

### Day 4

- (i) The incubated plates and composite media or equivalent shall be examined and the findings recorded, discarding cultures which are obviously not salmonella. Slide serological tests shall be performed using salmonella polyvalent "O" (Groups A–S) and polyvalent "H" (phase 1 and 2) agglutinating sera on selected suspect colonies collected from the blood agar or MacConkey plates. If reactions occur with one or both sera, the colonies shall be typed to Group level by slide serology.

- (ii) the plates of BGA prepared at Day 3(ii) shall be examined and further action taken as described in Day 3(i) and Day 4(i).

- (a) Buffered Peptone Water — Edel and Kampelmacher (1973) (Commercially available as Oxoid CM 509, Lab M46 or equivalent).

- (b) Rappaports Vassiliadis (RV) Broth — Vassiliadis et al (1976) (commercially available as Oxoid CM 669 or equivalent).

- (c) Selenite F Broth — Liefson (1936) (commercially available as Oxoid CM 395 and L121, Lab M44a and 44b or equivalent).

- (a), (b) and (c) should be reconstituted according to the manufacturer's instructions.

- (d) Brilliant Green Agar (Modified) — Edel and Kampelmacher (1969) (commercially available as Oxoid CM 329, Lab M34 or equivalent).

The agar should be reconstituted according to the manufacturer's instructions and poured into 9 cm diameter plates.

### References

- Liefson, E. (1936) *American Journal of Hygiene* 24, 423–432.
- Edel, W. & Kampelmacher, E. H. (1969) *Bulletin of the World Health Organisation* 41, 297–306.
- Edel, W. & Kampelmacher, E. H. (1973) *Bulletin of the World Health Organisation* 48, 167–174.
- Anon (1969) *ISO 6579 International Organisation for Standardisation*, Geneva.
- Vassiliadis, P., Pateraki, E., Papaiconomou, N., Papadakis, J. A., and Trichopoulos, D. (1976) *Annales de Microbiologie (Institut Pasteur)* 127B, 195–200.



## PART I

BLOOD SAMPLES TO BE TAKEN FOR SEROLOGICAL TESTING  
FOR SALMONELLA PULLORUM

1. Blood samples to be taken, by or under the supervision of an inspector, from domestic fowls between 3 and 5 weeks before they are transferred to laying accommodation or when they are between 16 and 22 weeks of age, whichever occurs later.

2. The number of birds from which blood samples shall be taken shall be as follows:—

- (a) in the case of birds at grandparent level and above, all birds; and
- (b) in the case of birds at parent level, a number calculated in accordance with the following table—

**Number of birds at parent level required to be sampled for testing for  
Salmonella pullorum**

<i>Number of birds kept in a house or, on premises on which birds have free access to more than one house, number of birds in each group of houses on such premises</i>	<i>Number of birds to be sampled in that house or in that group of houses on those premises</i>
300 or less	All birds up to 150
301— 400	160
401—4000	170
4001 or more	180

3. The samples shall comprise 0.02 ml of blood taken from a wing vein of a bird by pricking with a suitable needle.

## PART II

## Article 7(b)

## SEROLOGICAL METHOD FOR TESTING FOR SALMONELLA PULLORUM

4. The rapid plate whole blood test shall be used for the testing of blood samples for *Salmonella pullorum* which tests shall be carried out as follows:—

- (1) 0.02 ml of blood taken from a wing vein of a bird, after pricking with a suitable needle, shall be placed on a white ceramic tile using a loop of the appropriate size.
- (2) 0.04 ml of polyvalent crystal violet stained *Salmonella pullorum* antigen(a) shall be added to the blood and mixed with it.
- (3) The tile shall be rocked gently for 2 minutes after which time the test shall be read.

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(a) *S. pullorum* antigen must contain standard and variant strains of *S. pullorum* stained with crystal violet and standardised against international standard sera raised against the standard and variant strains (O.I.E. 1986)

- (4) All bleeding needles and loops must be washed in a normal saline solution(a) after each bird has been sampled and tested which solution must be renewed after every 200 birds have been sampled and tested.

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(a) Normal saline solution is prepared by dissolving saline tablets in water according to the manufacturer's instructions

**Reference:**

O.I.E. (1986) International Zoosanitary Code 5th Edition, 362-364 (updated May 1988 as International Animal Health Code, updated pages 45 to 47).

## PART I

## RECORDS OF SAMPLES TAKEN IN RESPECT OF A BREEDING FLOCK OR A HATCHERY

1. In respect of each sample taken under and in accordance with Articles 6(a) and 8(a) the following information shall be kept—

- (a) the date on which the sample was taken;
- (b) a description of the type of sample taken; and
- (c) in the case of samples taken in respect of a breeding flock, the identity of the house or group of houses from which the samples were taken and, in the case of samples taken from a hatchery, the address of the premises which supplied the hatching eggs to the hatchery from which the samples were obtained.

## PART II

Article 11(1)(c)

## RECORDS OF TESTS CARRIED OUT ON BLOOD SAMPLES FROM BREEDING FLOCKS

2. In respect of each sample taken under and in accordance with Article 7(a) the following information shall be kept—

- (a) the date of the test on the sample under Article 7(b);
- (b) the number of birds from which blood samples were so tested on that date; and
- (c) the number of birds giving a positive reaction to such tests for *Salmonella pullorum* carried out on that date.

## PART III

Article 11(1)(d)

RECORDS OF THE MOVEMENT OF POULTRY, CHICKS AND EGGS ONTO AND OFF  
ANY PREMISES ON WHICH A BREEDING FLOCK IS KEPT

3. In respect of the movement of any poultry, chicks or eggs onto or off the premises at which the breeding flock is kept, the following information shall be kept—

- (a) the date of the movement;
- (b) the number of poultry, chicks or eggs moved;
- (c) the identity of the house or group of houses in which any poultry, chicks or eggs moved onto the premises were placed or from which any poultry, chicks or eggs were moved off the premises;
- (d) in the case of any poultry, chicks or eggs moved onto the premises, the address from which they were brought there; and
- (e) in the case of any poultry, chicks or eggs moved off the premises, the address of the premises to which they were moved.

RECORDS OF THE MOVEMENT OF EGGS ONTO AND OFF, AND OF THE MOVEMENT  
OF CHICKS OFF, ANY PREMISES WHICH ARE USED AS A HATCHERY

4. In respect of the movement of eggs onto or off and the movement of chicks off any premises which are used as a hatchery, the following information shall be kept—

- (a) the date of the movement;
- (b) in the case of the movement of any eggs onto the premises, the address of the premises from which they were moved and the number of eggs moved; and
- (c) in the case of the movement of any eggs or chicks off the premises the address of the premises to which they were moved and the number of eggs or chicks moved.

## EXPLANATORY NOTE

(This note is not part of the Order.)

This Order prohibits a person from keeping a breeding flock on any premises or from using any premises as a hatchery unless his name is entered in the Breeding Flocks Register or in the Hatcheries Register in respect of those premises as the case may be. Such registration will remain in operation for a period of one year and will thereafter be renewed annually by the Department (on application made to it) unless, following an inspection carried out on the premises, it is satisfied that the registered person has failed to comply with certain specified requirements relating to the keeping of a breeding flock on the premises or to the use of the premises as a hatchery (Articles 3 and 4 and Schedules 1 and 2).

These prohibitions do not apply in the case of:

- (a) a breeding flock consisting of birds which are kept solely for the production of hatching eggs or chicks for use in the manufacture of vaccines or for research or other scientific purposes; or
- (b) any premises which are used solely for the incubation or hatching of eggs from which chicks are sold or supplied for such use or for any such purposes (Articles 3(9) and 4(9)).

The Order requires a registered person to ensure that samples are taken in respect of the breeding flock or hatchery and are submitted to a laboratory for testing for the presence of salmonella (other than samples taken under the supervision of an inspector which are required to be given to such inspector for testing for this purpose) (Articles 6 and 8 and Schedule 3).

A person registered in respect of a breeding flock containing any domestic fowls is also required to ensure that blood samples are taken from the fowls for testing, by or under the supervision of an inspector for *Salmonella pullorum* (Article 7 and Schedule 4).

The Order also requires the person in charge of a laboratory to which any sample taken in respect of a breeding flock or a hatchery has been submitted to ensure that the test is carried out in a required manner and that the result of the test is reported to the person who submitted the sample and who, if he is not the person registered in respect of the flock or hatchery in respect of which the sample was taken, is required to pass the report to the person so registered (Article 9).

The Order also contains provisions which—

- (1) prohibit any tampering with samples (Article 10);
- (2) require registered persons to keep records of samples taken and of the results of tests on samples and to keep records of the movement of poultry, chicks and eggs onto and off any premises on which a breeding flock is kept or which are used as a hatchery (Article 11); and

- (3) prohibit the vaccination of poultry with any vaccine which is likely to affect the result of any test carried out under the Order on any sample taken from the poultry (Article 12).

The provisions requiring the registration of a person who keeps a breeding flock on any premises or who uses any premises as a hatchery shall come into operation on 2nd April 1990. Prior to that date, the duties of a registered person under the Order shall be the duties of a person who is keeping a breeding flock on any premises or who is using any premises as a hatchery and whose name would be required to be entered in the Breeding Flocks Register or in the Hatcheries Register in respect of the premises if those provisions were in operation (Articles 1(2) and 2(2)).

Until 1st June 1990, samples (other than blood samples) taken under the Order are required to be tested at laboratories which have the necessary facilities and personnel for carrying out the tests in accordance with the Order and after that date the samples are required to be tested at laboratories authorised in writing by the Department for this purpose (Article 2(4)).

For the purposes of this Order "breeding flock" means any flock of poultry consisting of not less than 25 birds which are kept (or are being reared) for the production of hatching eggs or birds for sale or supply for breeding purposes, or for the production of eggs or for meat; and "hatchery" means any premises, with a total incubator capacity of not less than 1,000 eggs, on which the eggs of poultry are incubated or hatched and from which chicks are sold or supplied (Article 2(1)).

Any person who without lawful authority or excuse, proof of which shall lie on him, contravenes any provisions of the Order shall be guilty of an offence against the Diseases of Animals (Northern Ireland) Order 1981. The penalty, on summary conviction, is a fine at level 5 on the standard scale (currently £2,000) or in the case of an offence committed with respect to more than 5 animals, a fine at level 3 on the standard scale (currently £400) for each animal; or in the case of an offence committed in relation to carcasses or other inanimate things a fine at level 5 on the standard scale (currently £2,000) together with a further fine at level 3 on the standard scale (currently £400) in respect of every 508 kilogrammes in weight of the carcasses or other things after the first 508 kilogrammes.