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HEALTH & CONSUMERS DIRECTORATE-GENERAL

Unit 04 - Veterinary Control Programmes

SANCO/12940/2010

*Programmes for the eradication, control and monitoring of certain
animal diseases and zoonoses*

**Survey programme for Avian Influenza in
poultry and wild birds**

Approved* for 2011 by Commission Decision 2010/712/EU

Estonia

* in accordance with Council Decision 2009/470/EC

Program for Eradication : ANNEX 4

Submission number	1272282972842-202
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Country Geographical English Name	Estonia

1. Identification of the programme	
Country Geographical English Name	Estonia
Disease	avian influenza in poultry and wild birds
Request co-financing from	2011
Request co-financing to	2011
1.1 Contact	
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2. Description of the surveillance programme in poultry

2.1 Objectives, general requirements and criteria

Information on any routine avian influenza in poultry and wild birds testing programmes in place: in accordance with the Infectious Animal Disease Control Act, the annual volume of avian influenza in poultry and wild birds testing is laid down by the State Program on Monitoring and Surveillance of Animal Infectious Diseases confirmed by the General Director of the Veterinary and Food Board. Instructions for avian influenza in poultry and wild birds monitoring have been confirmed by the Ministry of Agriculture by Regulation No 111, 25.06.2007, which also provides guidelines for the prevention and control avian influenza in poultry and wild birds and for the handling of products originating from suspected or infected birds. Avian influenza in poultry and wild birds protection is a part of active control programmes the National Infectious Animal Disease Control Programme.

Avian influenza has never been diagnosed in poultry or wild birds in Estonia.

2.2 Design and implementation

The monitoring and surveillance in the field of animal health is performed on the basis of the State Programme on Monitoring and Surveillance of Animal Infectious Diseases. This is an annual programme adopted with the decree of Director General of VFB on the basis of Animal Infectious Disease Control Act.

State Programme on Monitoring and Surveillance of Animal Infectious Diseases 2010.

Additionally to abovementioned flocks, samples are collected from other poultry herds having regard to Council Decision 2007/268/EC of 13 April 2007. The number of birds sampled from each holding shall be defined so as to ensure 95% probability of identifying at least one positive bird if the prevalence of sero-positive birds is >30% (the number of birds sampled from each flock is 9).

In the current legislation the diseases is notifiable by "The List of Notifiable Diseases and Diseases subject to Registration" approved by the Minister of Agriculture Regulation No. 34, 25.11.1999.

The regulation on requirements for controlling avian influenza in poultry and wild birds is approved by degree of Minister of Agriculture No 111, 25.06.2007.a.

2.2.1 Poultry holdings (except ducks and geese) to be sampled

Category	NUTS (2) (a)	Total number of holdings	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Method of laboratory analysis
Laying hens	Estonia	18	18	44	792	ELISA test
	Estonia	18	18	44	792	
	Total	18	18	44	792	

2.2.2 Duck and geese holdings to be sampled according to point C of Annex I to Decision 2007/268/EC Serological investigation

NUTS (2) (a)	Total number of duck and geese holdings	Total number of duck and geese holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Method of laboratory analysis
Estonia	0	0	0	0	0
Total	0	0	0	0	

2.3 Laboratory testing: description of the laboratory tests used

Laboratory tests are carried out in accordance with the diagnostic procedures for the confirmation and differential diagnostic of avian influenza set out in Annex VIII to Directive 2005/94/EEC. Virological samples will be tested individually by molecular detection (PCR) to determine the presence of H5/H7 virus and analyses of the cleavage site to establish whether the isolate is high or low pathogenic. Estonia will provide the necessary validation data to the Community Reference Laboratory, in parallel to submitting the programme to the Commission for approval. All positive serological findings confirmed by the National Laboratories for avian influenza by an haemagglutination-inhibition test, using designated strains supplied by the Community Reference Laboratory.

3. Description of the surveillance programme in wild birds

3.1 Objectives, general requirements and criteria

Sampling of wild birds, particularly swans, ducks and geese for the presence of the AI virus is also carried out. This is most likely to detect pockets of LPAI in migratory birds. If H5 or H7 strains would be discovered, we would be forewarned about the possibility of transmission into domesticated birds and mutation into high pathogenic a strain. This is a measure for both peacetime and during an outbreak.

3.2 Design and implementation

For more successful sampling of wild birds for future we have designed collaboration and coordination between veterinary authorities, epidemiologists, laboratory experts and ornithological institutions. Experience of other countries with the previous surveys has shown that the virus isolation rate is extremely low, therefore sampling shall focus on the wild birds migrating south during autumn and early winter. Samples are taken from different species of free-living birds. Waterfowl 70% and shorebirds 20% and other wild birds 10% shall be the main sampling targets. Swabs containing faeces, or carefully collected fresh faeces will be taken from wild birds trapped, hunted and found freshly dead. Pool up to 5 samples collected from the birds of the same species could be made.



3.2.1 WILD BIRDS - Investigation according to the surveillance programme for avian influenza in wild birds set out in Annex II to Decision 2007/268/EC

NUTS (2) code/region (a)	Wild birds to be sampled	Total number of birds to be sampled	Estimated total number of samples to be taken for active surveillance	Estimated total number of samples to be taken for passive surveillance
Estonia	143	143	43	100
Total	#SYNTAX	143	43	100

3.3 Laboratory testing: description of the laboratory tests used

Laboratory tests are carried out in accordance with the diagnostic procedures for the confirmation and differential diagnostic of avian influenza set out in Annex VIII to Directive 2005/94/EEC. Virological samples will be tested individually by molecular detection (PCR) to determine the presence of H5/H7 virus and analyses of the cleavage site to establish whether the isolate is high or low pathogenic. Estonia will provide the necessary validation data to the Community Reference Laboratory, in parallel to submitting the programme to the Commission for approval. All positive serological findings confirmed by the National Laboratories for avian influenza by an haemagglutination-inhibition test, using designated strains supplied by the Community Reference Laboratory.

4. Description of the epidemiological situation of the disease in poultry during the last five years

Avian influenza has not been reported in poultry since 2005. All numbers of samples and flocks of poultry have been examined with negative results.

4.1.1 Designation of the central authority in charge of supervising and coordinating the departments responsible for implementing the programme

This process is performed by fully state operated veterinary service. Activities are co-ordinated by Veterinary and Food Board (VFB). VFB is having the central competence on veterinary and food control matters. Samples are collected by veterinary officials of local veterinary centre or authorised veterinarians. Abovementioned officials are also responsible for filling in accompanying document and sampling report, informing the laboratory about arrival of samples, packaging of them and sending into laboratory. Samples are sending by fast mail or courier to the Estonian Veterinary and Food Laboratory (VFL). Generally, all samples collected in the frames of this study are investigated in Tallinn laboratory of Veterinary and Food Laboratory (Väike-Paala 3, Tallinn 11415, phone +372 603 58 10, fax +372 603 58 11, E-mail: tallinn@vetlab.ee). PCR methodology is enforced in Central Laboratory of Veterinary and Food Laboratory in Tartu (Kreutswaldi 30, Tartu 51006, phone +372 7 386 100, fax +372 7 386 102 E-mail: info@vetlab.ee). All positive results (both serological and virological) shall be sent to the Community Reference Laboratory for collation. All positive findings shall be retrospectively investigated at the holding and the conclusions of this investigation shall be reported to the Commission and the Community Reference Laboratory. Blood samples for serological examination are collected from all species of poultry including those reared in free-range systems, from at least 9 birds per holding, and from the different sheds, if more than one shed is present on a holding. Blood samples for serological examination are collected for investigation of Newcastle disease from 0,5 % of parent stock of laying hens herds and breeding herds birds. Sampling is covering a period appropriate to production period. Every third sample is also investigated for Avian Influenza.

4.1.2 System in place for the registration of holdings

All poultry holdings in Estonia are covered by State Programme on Monitoring and Surveillance of Animal Infectious Diseases and therefore also by the programme. Since 2000, all laying hens holdings in Estonia are registered in the Central register of Agriculture Animals.

4.1.3 Data on vaccination carried out

no vaccination against avian influenza in Estonia

5. Description of the epidemiological situation of the disease in wild birds during the last five years

Avian influenza has not been reported in wild birds since 2005. All numbers of samples have been examined with negative results.

5.1 Measures included in the programme for surveillance in wild birds

5.1.1 Designation of the central authority in charge of supervising and coordinating the departments responsible for implementing the programme

This process is performed by fully state operated veterinary service. Activities are co-ordinated by Veterinary and Food Board (VFB). VFB is having the central competence on veterinary and food control matters.
 Serological surveys for LPAI subtypes H5 and H7 in poultry aim at:
 Detecting subclinical infections with LPAI of subtypes H5 and H7 thereby complementing early detection systems and subsequently preventing possible mutation of these viruses to HPAI.
 Detecting infections of LPAI H5 and H7 subtypes in specifically targeted poultry populations at specific risk for infection due to their husbandry system or species specific susceptibility.
 Proving that a certain country, region or compartment is free of infection in the frame of intra-Community and international trade according to OIE rules.

5.1.2 Description and delimitation of the geographical and administrative areas in which the programme is to be applied

Avian influenza in wild birds programme is active in all 15 counties.

5.1.3 Estimation of the local and/or migratory wildlife population

Estimation of the population of the concerned wild species
 Species:Anserinae-254000
 Species:Anatinae-450000
 Species:Charadrii-410000
 Species:Larii- 430000

6. Measures in place as regards the notification of the disease

Supervisory officials, authorised veterinarians, veterinarians, veterinary laboratories and other persons shall promptly notify a local office of the Veterinary and Food Board of suspicion or a diagnosis of an infectious animal disease subject to notification. In the case of suspicion of an infectious animal disease subject to notification, a veterinarian is required to notify immediately a supervisory official or authorised veterinarian, and the keeper of the animals. The requirements for the content and format of a notice of an infectious animal disease to be submitted to the head of a local office of the Veterinary and Food Board and the procedure for submission of the notice shall be established by the Director General of the Veterinary and Food Board. The head of a local office of the Veterinary and Food Board is required to notify promptly the Director General of the Veterinary and Food Board, or in his or her absence the Deputy Director General, and the heads of the local offices of the Veterinary and Food Board in neighbouring areas of suspicion and a diagnosis of an infectious animal disease subject to notification. The Veterinary and Food Board shall notify international veterinary organisations and the veterinary services of neighbouring states of the outbreak of an infectious animal disease subject to international notification within twenty-four hours after the disease is officially diagnosed at the primary outbreak site, and of new outbreak sites not later than on the first working day of each week.

7. Costs

7.1.1 Poultry

Poultry
 The price of one analysis Serological pre-screening ELISA is 3,75EUR and
 Serological pre-screening HAI TEST is 2,88EUR

7.1.2 Wild birds

The price of one analysis Virus isolation test is 63,49 EUR and
 RT-PCR test is 46,06EUR.

7.2 Summary of the costs			
7.2.1 Poultry surveillance			
Methods of laboratory analysis	Number of tests to perform per method	Unitary test cost (per method) in €	Total cost (€)
ELISA test	800	3.75	3,000.00
agar gel immune diffusion test	0	0.00	0.00
Haemagglutination-inhibition-test (HI) for H5 (specify number of tests for H5)	50	2.88	144.00
Haemagglutination-inhibition-test (HI) for H7 (specify number of tests for H7)	50	2.88	144.00
Virus isolation test	0	0.00	0.00
PCR test	50	46.06	2,303.00
NA	0	0.00	0.00
Total	950	55.57	5,591.00

7.2.2 Wild bird surveillance			
Methods of laboratory analysis	Number of tests to perform per method	Unitary test cost (per method) in €	Total cost (€)
Haemagglutination-inhibition-test (HI) for H5/H7	70	2.88	201.60
Virus isolation test	50	63.49	3,174.50
PCR test	143	46.06	6,586.58
Other please specify here	0	0.00	0.00
NA	0	0.00	0.00
Total	263	112.43	9,962.68