



EUROPEAN COMMISSION  
HEALTH & CONSUMERS DIRECTORATE-GENERAL  
Unit 04 - Veterinary Control Programmes

**SANCO/3869/2008**

*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 2009 by Commission Decision 2008/897/EC**

**Cyprus**

\* in accordance with Commission Decision 90/424/EEC





**REPUBLIC OF CYPRUS**

**CO-FINANCING REQUEST**

**ACCORDING TO SANCO/10522/2007 REV. 2**

**AVIAN INFLUENZA SURVEILLANCE PROGRAMME  
IN POULTRY AND WILD BIRDS**

**FOR THE YEAR  
2009**

**MINISTRY OF AGRICULTURE,  
NATURAL RESOURCES AND ENVIRONMENT**

**VETERINARY SERVICES**

## 'ANNEX IV

### **Standard requirements for the submission of national surveillance programmes for avian influenza in poultry and wild birds as referred to in Article 1(d)**

#### **1. Identification of the programme**

Member State: Cyprus  
Disease: Avian Influenza  
Year of implementation: 2009  
Reference of this document:  
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Date sent to the Commission: 29/04/2008

#### **2. Description of the surveillance programme in poultry**

##### **2.1 Objectives, general requirements and criteria**

The surveillance programme for Avian Influenza in poultry aims at the early detection of an AI virus infection in poultry farms. In particular the programme aims at achieving an early detection of subclinical infections with LPAI of subtypes H5 and H7 so as to be able to prevent possible mutation of those viruses to HPAI.

The programme will be implemented from 1<sup>st</sup> January 2009 until 31 December 2009.

All samples are to be tested in the NRL of Cyprus and in case of positive results, samples will be sent to the CRL for confirmation.

##### **2.2 Design and Implementation**

Samples are to be taken from chickens (breeders and layers), turkeys, ducks, quails, ostriches and wild birds according to Commission Decision 2007/268/EC.

##### **Sampling**

Blood sampling for serological examination will be collected from 10 birds (except ducks and quails) per holding or in cases of holdings consisting of more than one shed from 5 birds per shed. Blood samples from chickens (breeders and layers), turkeys, partridges and ducks will be collected on the farm. Blood samples from quails and ostriches will be collected at the slaughterhouse.

All holdings of each species will be included in the sampling frame for serological examination.

##### **Sampling scheme in breeding flocks**

In Cyprus there are only 4 breeding companies which have in total 18 breeding holdings and 4 hatcheries. Out of the 18 breeding holdings, 14 house parent stock for broilers and 4 for

layers. There are in total 49 sheds housing parent stock for broilers and 4 sheds housing parent stock for layers. The number of samples from breeding flocks is  $(49*5) + (4*10) = 285$  samples.

#### Sampling scheme in broilers

Broiler flocks are not included in the sampling frame for the surveillance on Avian Influenza.

#### Sampling scheme in layers

There is an average of 4 sheds per holding of laying hens. The total number of blood samples to be collected from conversional layer farms is  $4*29*5=580$  samples

Surveillance on the three free range laying holdings will consist of 5 blood samples per shed collected every two months, a total number of blood samples to be collected  $(5*5*6)+(5*3*6)+(5*1*6)=270$  samples.

#### Sampling scheme in turkey holdings

There are no breeding farms for turkeys in Cyprus. There are 10 holdings for fattening turkeys either on a yearly or a seasonal basis, from September to December for slaughter for Christmas. There is an average of 2 sheds per holding of turkeys. The total number of blood samples to be collected from turkeys is  $2*10*5=100$  samples.

#### Sampling scheme in partridges

There are 6 holdings for partridges with an average of 2 sheds per holding. Therefore the total number of blood samples to be collected from partridges will be  $2*6*5=60$  samples.

#### Sampling scheme in ostrich farms

There is only one slaughterhouse for ostriches situated in Agios Ioannis Maloundas in Cyprus and the Veterinary officer in charge will be responsible to collect 10 blood samples per holding. Blood sampling from reproductive ostrich farms will be conducted on the farms between October and January, when ostriches are not in lay (80 blood samples).

#### Sampling scheme in duck holdings

There is only one duck holding. 60 blood samples will be taken, equally distributed on quarterly basis, namely 15 samples per quarter.

#### Sampling scheme for quails:

There is one quail holding. 60 blood samples will be taken, equally distributed on quarterly basis, namely 15 samples per quarter.

#### Sampling scheme in backyard poultry

Blood samples from backyard poultry will be collected from high risk areas in Cyprus (about 210 blood samples to be tested).

Table 2.2.1 POULTRY HOLDINGS<sup>(a)</sup> (except ducks and geese) TO BE SAMPLED

Serological investigation according to point B of Annex I to Commission Decision 2007/268/EC<sup>1</sup> on holdings of broilers (only when at risk)/fattening turkeys/~~chicken breeders/turkey breeders/laying hens/free range laying hens/retites/farmed feathered game (pheasants, partridges, quails...)/backyard flocks/others (delete as appropriate)~~

PLEASE USE ONE FORM PER POULTRY CATEGORY

NUT (2) code <sup>(b)</sup>	Total number of holdings <sup>(c)</sup>	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
	18	18	(5 per shed)	285	HI test
<b>Total</b>	<b>18</b>	<b>18</b>		<b>285</b>	

Serological investigation according to point B of Annex I to Commission Decision 2007/268/EC<sup>1</sup> on holdings of broilers (only when at risk)/fattening turkeys/~~chicken breeders/turkey breeders/laying hens/free range laying hens/retites/farmed feathered game (pheasants, partridges, quails...)/backyard flocks/others (delete as appropriate)~~

PLEASE USE ONE FORM PER POULTRY CATEGORY

NUT (2) code <sup>(b)</sup>	Total number of holdings <sup>(c)</sup>	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis
	29	29	(5 per shed)	580	HI test
<b>Total</b>	<b>29</b>	<b>29</b>		<b>580</b>	

Serological investigation according to point B of Annex I to Commission Decision 2007/268/EC<sup>1</sup> on holdings of broilers/only when at risk/fattening turkeys/chicken breeders/turkey breeders/laying hens/free range laying hens/rattles/farmed feathered game pheasants, partridges, quails/~~backyard flocks~~/~~others [delete as appropriate]~~

PLEASE USE ONE FORM PER POULTRY CATEGORY

NUT (2) code <sup>(a)</sup>	Total number of holdings <sup>(c)</sup>	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis.
	3	3	(5 per shed every two months)	270	HI test
Total	3	3	-	270	-

Serological investigation according to point B of Annex I to Commission Decision 2007/268/EC<sup>1</sup> on holdings of broilers/only when at risk/fattening turkeys/chicken breeders/turkey breeders/laying hens/free range laying hens/rattles/farmed feathered game pheasants, partridges, quails/~~backyard flocks~~/~~others [delete as appropriate]~~

PLEASE USE ONE FORM PER POULTRY CATEGORY

NUT (2) code <sup>(a)</sup>	Total number of holdings <sup>(c)</sup>	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis.
	10	10	10	100	HI test
Total	10	10	-	100	-

<sup>1</sup> OJ L 115, 3.5.2007, p. 3.

Serological investigation according to point B of Annex I, to Commission Decision 2007/268/EC<sup>1</sup> on holdings of broilers/only when at-risk/fattening turkeys/chicken-breeders/turkey-breeders/laying-hens/free-range laying-hens/ratites/farmed-feathered-game (pheasants, partridges, quails...)/backyard flocks\*/others [delete as appropriate]

**PLEASE USE ONE FORM PER POULTRY CATEGORY**

NUT (2) code <sup>(b)</sup>	Total number of holdings <sup>(c)</sup>	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis.
	8	8	10	80	HI test
<b>Total</b>	<b>8</b>	<b>8</b>	-	<b>80</b>	-

Serological investigation according to point B of Annex I, to Commission Decision 2007/268/EC<sup>1</sup> on holdings of broilers/only when at-risk/fattening turkeys/chicken-breeders/turkey-breeders/laying-hens/free-range laying-hens/ratites/farmed-feathered game (pheasants, partridges, quails...)/backyard flocks\*/others [delete as appropriate]

**PLEASE USE ONE FORM PER POULTRY CATEGORY**

NUT (2) code <sup>(b)</sup>	Total number of holdings <sup>(c)</sup>	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis.
	6	6	(5 per shed)	60	HI test
<b>Total</b>	<b>6</b>	<b>6</b>	-	<b>60</b>	-



Serological investigation according to point B of Annex I to Commission Decision 2007/268/EC<sup>1</sup> on holdings of broilers (only when at risk)/fattening turkeys/chicken breeders/turkey breeders/laying hens/free-range laying hens/rattles/farmed feathered game (pheasants, partridges, quails...)/backyard flocks\*/others (delete as appropriate)

PLEASE USE ONE FORM PER POULTRY CATEGORY

NUT (2) code <sup>(b)</sup>	Total number of holdings <sup>(c)</sup>	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis.
	1	1	60	60	HI test
<b>Total</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>60</b>	<b>-</b>

Serological investigation according to point B of Annex I to Commission Decision 2007/268/EC<sup>1</sup> on holdings of broilers (only when at risk)/fattening turkeys/chicken breeders/turkey breeders/laying hens/free-range laying hens/rattles/farmed feathered game (pheasants, partridges, quails...)/backyard flocks\*/others (delete as appropriate)

PLEASE USE ONE FORM PER POULTRY CATEGORY

NUT (2) code <sup>(b)</sup>	Total number of holdings <sup>(c)</sup>	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis.
	8,530	-	-	210	HI test
<b>Total</b>	<b>8,530</b>	<b>-</b>	<b>-</b>	<b>210</b>	<b>-</b>

Serological investigation according to point B of Annex I to Commission Decision 2007/258/EC<sup>1</sup> on holdings of broilers/when at risk/fattening turkeys/chicken-breeders/turkey-breeders/laying-hens/free-range-laying-hens/rattles/farmed-feathered-game (pheasants, partridges, quails, ...)/backyard flocks<sup>2</sup>/others. ~~delete as appropriate~~

Imported companion birds in quarantine and zoo birds

**PLEASE USE ONE FORM PER POULTRY CATEGORY**

NUT (2) code <sup>(b)</sup>	Total number of holdings <sup>(c)</sup>	Total number of holdings to be sampled	Number of samples per holding	Total number of tests to be performed per method	Methods of laboratory analysis.
	-			30	Virus isolation
<b>Total</b>	-			<b>30</b>	-

(a) Holdings or herds or flocks or establishments as appropriate.

(b) Refers to the location of the holding of origin. In case NUTS (Nomenclature of Territorial Units for Statistics) 2 can not be used, coordinates (long/lat to write out) are requested.

(c) Total number of holdings of one category of poultry in concerned NUTS 2 region.

**Table 2.2.2. DUCK AND GEESE HOLDINGS TO BE SAMPLED<sup>(a)</sup> according to point C of Annex I to Decision 2007/268/EC**

**Serological investigation**

NUT (2) codes <sup>(b)</sup>	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	Methods of laboratory analysis.
	1	1	60	60	HI test
<b>Total</b>	<b>1</b>	<b>1</b>	<b>60</b>	<b>60</b>	-

(a) Holdings or herds or flocks or establishments as appropriate

(b) Refers to the location of the holding of origin. In case NUTS 2 code can not be used, coordinates (long/lat - to write out) are requested

## **2.3 Laboratory testing: description of the laboratory tests used**

According to Part D of Annex I of Commission Decision 2007/268/EC.

### **3. Description of the surveillance programme in wild birds:**

#### **3.1 Objectives, general requirements and criteria**

The surveillance programme for Avian Influenza in wild birds aims at the early detection of LPAH and HPAI viruses in wild birds in order to prevent the introduction of the infection in poultry.

#### **3.2 Design and implementation**

Samples for virus isolation will be collected from wild birds in high risk areas.

##### **Sampling scheme in Wild Birds in Cyprus**

Game fund is a governmental service that cooperates with veterinary services and provides dead or injured wild birds that can be sampled for the A.I. program. The samples will be either a) oropharyngeal and/or cloacal swabs from injured birds, or b) faeces, cloacal swabs, tracheal/oropharyngeal swabs or tissues (brain, heart, lung, kidney and intestines) from dead birds. For sampling purposes, hunters' organizations have also been informed. It must be noted that the presence in Cyprus of birds listed in part D of Annex II of Commission Decision 2007/268/EC depends mainly on the weather conditions in the island during the winter. It can not be ensured that samples from all the species of these wild birds will be collected. It must also be noted that according to the Game Fund's data the Bean Goose (*Anser fabalis*) does not pass from Cyprus.

##### **Active surveillance**

In Cyprus there are no stations for capturing and ringing of wild birds and therefore the number of live birds submitted for testing is expected to be limited. Active surveillance will consist of faecal samples collected between October and February from high risk areas such as Achna dam and salt lakes in Larnaca and Acrotiri. During the rest of the year the temperatures in Cyprus are high and faecal samples get dry fast and are not appropriate for testing. Two pooled faecal samples will be collected per high risk area every week between October and February. Therefore, during the five month period we expect to collect and test  $2 \times 5 \times 4 \times 3 = 120$  samples. However, based on the experience of the previous year, in case the draught continues migration of birds might be low and it might not be possible to collect all those samples.

##### **Passive surveillance**

Birds found dead in high risk areas will be collected and examined for AI virus. Based on the experience of previous years, it is expected to examine around 150 birds of the species that are considered of high risk for transmitting the virus.

Samples from imported companion birds in quarantine and zoo birds (about 30 samples will be tested for virus isolation).

**Table 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**

NUT (2) code/region <sup>(a)</sup>	Wild birds to be sampled <sup>(b)</sup>	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
	Various species included those listed in Part D of Annex II of Commission Decision 2007/268/EC, depending on migration.	150	120	150
<b>Total</b>		<b>150</b>	<b>120</b>	<b>150</b>

(a) Refers to the place of collection of birds/samples. In case NUTS 2 code can not be used, region as defined in the programme by the Member State is requested

(b) General description of the wild birds are intended to be sampled in the framework of the active and passive surveillance.

### **3.3 Laboratory testing: description of the laboratory tests used**

According to Chapter V of Commission Decision 2006/437/EC

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

No avian influenza virus was detected in samples collected from poultry farms in the framework of the surveillance programmes carried out by the Veterinary Services during the last years.

##### **4.1 Measures included in the programme for poultry surveillance**

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

The Veterinary Services (VS) are subordinated to the Ministry of Agriculture Environment and Natural Resources. The VS are responsible for the application of the control program of Avian Influenza programme in poultry and wild birds.

The five District Veterinary Offices and the five Regional Veterinary Stations are responsible for the collection and transport of samples to the Laboratories of the Veterinary Services.

###### **4.1.2 System in place for the registration of holdings**

The central authority has registered officially all holdings with breeding flocks according to N. 88 (I)/1999 as amended by 281(I)/ 2004, and Directive 90/539/EEC and all holdings with laying flocks according to N. 118 (I)/2000 as amended by 276(I)/ 2004.

The rest of holdings have been identified by the Veterinary Services VS, however, no official registration of has been carried out yet.

###### **4.1.3 Data on vaccination**

No vaccination for avian influenza is applied in Cyprus

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

No HPAI virus was detected in wild birds sampled in the framework of the surveillance programmes. However H1N1 was detected in wild birds in August 2006.

##### **5.1. Measures included in the programme for surveillance in wild birds**

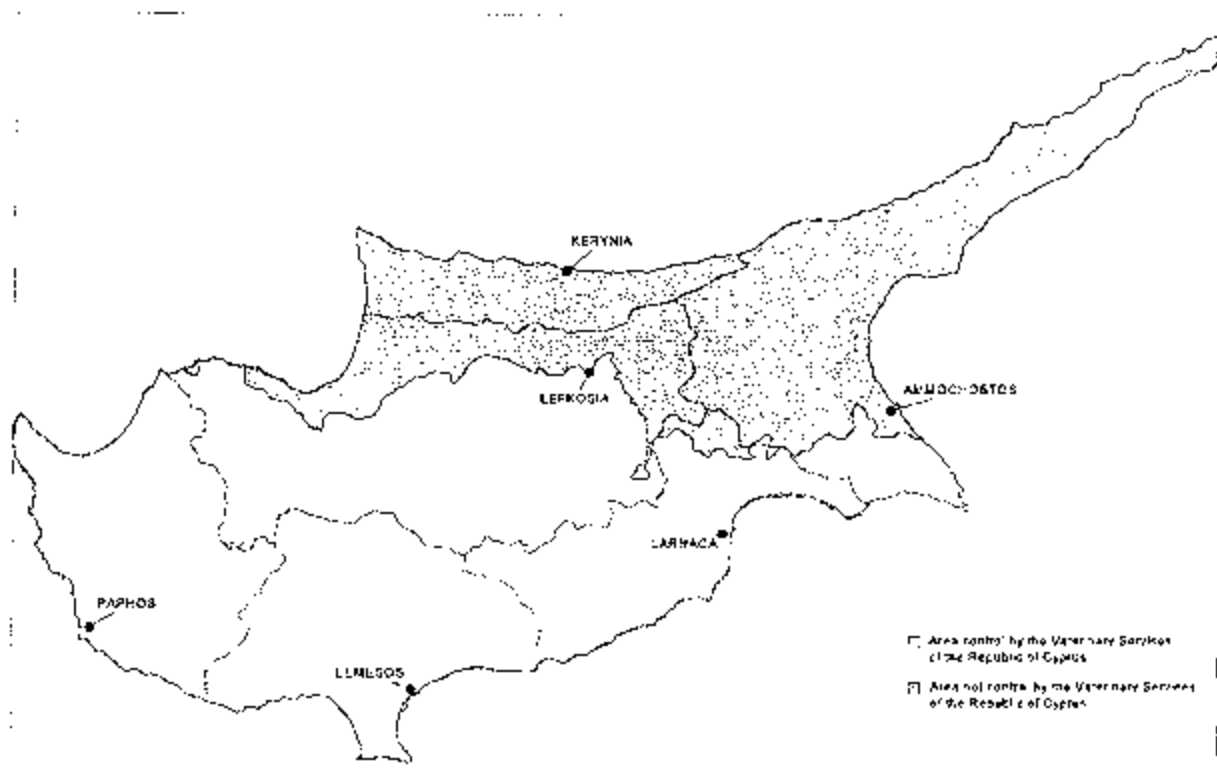
###### **5.1.1 Designation of the central authority in charge of supervising and coordinating the departments responsible for implementing the programme:**

The Veterinary Services (VS) are subordinated to the Ministry of Agriculture Environment and Natural Resources. The VS are responsible for the application of the control program of Avian Influenza programme in poultry and wild birds.

The five District Veterinary Offices and the five District Veterinary Stations are responsible for the collection and transport of samples to the Central Veterinary Laboratory (CVS).

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

The program is implemented in the area of Cyprus which is under the effective control of the Government of Cyprus.



### 5.1.3 Estimation of the local and/or migratory wildlife population

Monitoring of local and migratory wildlife population is performed by the Game Fund. According to its reports the number of migratory birds during 2007-2008 is considerably lower compared to previous years, due to the continuous draught in the area.

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

Any case of Avian Influenza should be notified according to Animal Health Laws of 2001 until 2007 (N. 109(I)/2001, N. 82(I)/2003, N. 116(I)/2007). Furthermore, any such case will be notified to the EU through ADNS and OIE according to the relevant legislation provisions.

## 7. Costs

### 7.1. Detailed analysis of the costs:

#### 7.1.1 Poultry

The cost of the surveillance programme for poultry consists of the cost of the tests performed on samples collected.

#### 7.1.2 Wild birds

The cost of the surveillance programme for wild birds consists of the cost of the tests performed on samples collected.

### 7.2 Summary of the costs

#### 7.2.1 Poultry surveillance

Measures eligible for co-financing surveillance in poultry			
Methods of laboratory analysis	Number of tests to perform per method	Unitary test cost (per method)	Total cost
Serological pre-screening <sup>2</sup>			
Haemagglutination-inhibition-test (HI) for H5/H7 <sup>3</sup>	1,705	€10	€17,050
Virus isolation test			
PCR test			
Other measures to be covered	Specify activities		
Sampling	1,705	€1	€1,705
Others			
<b>Total</b>			<b>€18,755</b>

<sup>2</sup> Specify the laboratory test to be used

<sup>3</sup> Specify number of tests for H5 and for H7



## 7.2.2 Wild bird surveillance

Measures eligible for co-financing surveillance wild birds				
Methods of laboratory analysis	Number tests to perform per method	Unitary test cost (per method)	Total cost	
Serological pre-screening				
Haemagglutination-inhibition-test (HI) for H5/H7				
Virus isolation test	300	€30	€9,000	
PCR test				
Other measures to be covered	Specify activities			
Sampling	300	€1	€300	
Others				
<b>Total</b>			<b>€9,300</b>	

