



EUROPEAN COMMISSION
HEALTH & CONSUMERS DIRECTORATE-GENERAL

Unit G5 - Veterinary Programmes

SANCO/10769/2012

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

Survey programme for Avian Influenza (AI)

Approved* for 2012 by Commission Decision 2011/807/EU

Cyprus

* in accordance with Council Decision 2009/470/EC

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

1. Identification of the programme

Member state : KYPROS

Disease : avian influenza in poultry and wild birds

Request of Community co-financing from beginning of :

2012

to end of

2012

1.1 Contact

Name : ELENI VELIGRATLI

Phone : +357 22805268

Fax : +357 22805 176

Email : eveligratli@vs.moa.gov.cy

2. Description of the surveillance programme in poultry

2.1 Objectives of surveillance programmes

(max. 32000 chars) :

The surveillance programme for Avian Influenza in poultry aims at the early detection of an AI virus infection in poultry farms, through active surveillance for:

- (a) low pathogenic avian influenza (LPAI) of subtypes H5 and H7 in gallinaceous birds (namely chickens, turkeys, partridges and quails) and ratites
- (b) LPAI of subtypes H5 and H7 and highly pathogenic avian influenza (HPAI) in domestic waterfowl

2.2 Design, implementation and target population

(max. 32000 chars) :

The programme will be implemented from 1st January 2012 until 31 December 2012.

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.

Samples are to be taken from chickens (breeding hens, laying hens and free range broilers), fattening turkeys, quails, partridges, pigeons, ostriches, backyard poultry and zoo and imported companion birds

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

according to Commission Decision 2010/367/EC.

Sampling

Blood sampling for serological examination will be collected from 10 birds (except quails) per holding or in cases of holdings consisting of more than one shed from 5 birds per shed. Blood samples from chickens (breeding hens, laying hens and free range broilers), fattening turkeys, partridges, ostriches and backyard poultry will be collected on the farm. Blood samples from quails and pigeons 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 16 breeding holdings and 4 hatcheries. Out of the 16 breeding holdings, 14 house parent stock for broilers and 2 for layers. There are in total 52 sheds housing parent stock for broilers and 2 sheds housing parent stock for layers. The number of samples from breeding flocks is 270 samples.

Sampling scheme in broilers

There is one free range broiler farm, which will be included in the sampling frame for the surveillance on Avian Influenza. Surveillance in that farm will consist of 10 samples every three months, a total of 40 samples.

Sampling scheme in layers

There are 27 conventional laying hen holdings with 69 sheds. Ten blood samples will be collected from holdings having one shed and five blood samples per shed in holding with more than one shed. The total number of blood samples to be collected from conventional layer farms is 375 samples

There are 14 free range and organic laying holdings with 24 sheds. Surveillance on those farms will consist of 5 blood samples per shed or 10 blood samples in case of a holdings having one shed collected every three months, a total number of 640 samples.

Sampling scheme in turkey holdings

There are no breeding farms for turkeys in Cyprus. There are 8 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 $2*8*5=80$ samples.

Sampling scheme in partridges

There are 4 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 $2*4*5=40$ samples.

Sampling scheme for pigeons.

There are two pigeon holdings. 10 samples will be collected per holding, a total of 20 samples.

Sampling scheme for quails:

There is one quail holding. 10 blood samples will be taken, a total of 20 samples.

Sampling scheme in ostrich farms

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

There is no slaughterhouse for ostriches in Cyprus. There is 1 ostrich holding and 10 blood samples are expected to be collected in 2012.

Sampling scheme in duck holdings

There are no duck holding in Cyprus. In case ducks are placed for fattening, 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).

Sampling scheme in zoo and imported companion birds

20 samples from imported companion birds and zoo birds will be tested for virus isolation.

2.2.1 Risk based surveillance (RBS)

(max. 32000 chars) :

NA

2.2.2 Surveillance based on Representative Sampling

(max. 32000 chars) :

The surveillance programme is based on Representative Sampling, according to Tables 1 and 2 of Annex I to Commission Decision 2010/367/EU.

Due to the small number of holdings in each poultry category, all poultry holdings will be tested in the framework of the surveillance programme.

3. Target populations

(max. 32000 chars) :

Samples are to be taken from chickens (breeding hens, laying hens and free range broilers), fattening turkeys, quails, partridges, pigeons, ostriches, backyard poultry and zoo and imported companion birds.

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

4. Risk-based surveillance (RBS) method

4.1 Criteria and Risk factors

4.1.1 Criteria and risk factors for virus introduction into poultry holdings due to direct or indirect exposure to wild birds in particular those of identified 'target species'

(max. 32000 chars) :

NA

4.1.2. Criteria and risk factors for virus spread within poultry holdings and between poultry holdings, as well as the consequences (impact) of the spread of avian influenza from poultry to poultry and between poultry holdings

(max. 32000 chars) :

NA

4.2. Targeting of populations at risk

(max. 32000 chars) :

NA

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

4.3. Targeting of poultry holdings to be sampled

(max. 32000 chars) :

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

5. Poultry holdings to be sampled

5.1 Poultry holdings (except ducks, geese and mallard) to be sampled according to table 1 of Annex 1 to Decision 2010/367/EU

Category : chicken breeders

delete this 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
CY00	16	16	0	270	Haemagglutination-inhibition-test (HI)
Total	16	16		270	
<i>(a) Refers to the location of the holding origin. In case NUTS 2 (Nomenclature of Territorial Units for Statistics) can not be used, coordinates (longitude/latitude) are requested. Please fill-in these values directly in the field.</i>					
Add a new row					

Category : laying hens

delete this 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
CY00	27	27	0	375	Haemagglutination-inhibition-test (HI)

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

Total	27	27	375	
<i>(a) Refers to the location of the holding origin. In case NUTS 2 (Nomenclature of Territorial Units for Statistics) can not be used, coordinates (longitude/latitude) are requested. Please fill-in these values directly in the field.</i>				

Category : free range laying hens

delete this 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
CY00	14	14	0	640	Haemagglutination-inhibition-test (HI)
Total	14	14		640	
<i>(a) Refers to the location of the holding origin. In case NUTS 2 (Nomenclature of Territorial Units for Statistics) can not be used, coordinates (longitude/latitude) are requested. Please fill-in these values directly in the field.</i>					

Category : broilers

delete this 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
CY00	106	1	40	40	Haemagglutination-inhibition-test (HI)
Total	106	1		40	

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

Add a new row	(a) Refers to the location of the holding origin. In case NUTS 2 (Nomenclature of Territorial Units for Statistics) can not be used, coordinates (longitude/latitude) are requested. Please fill-in these values directly in the field.
---------------	---

Category : fattening turkeys

delete this 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
CY00	8	8	10	80	Haemagglutination-inhibition-test (HI)
Total	8	8		80	
Add a new row					

Category : ratites

delete this 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
CY00	1	1	10	10	Haemagglutination-inhibition-test (HI)
Total	1	1		10	
Add a new row					

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

Category : farmed feathered game

delete this category

NUITS (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
CY00	6	6	10	60	Haemagglutination-inhibition-test (HI)
Total	6	6		60	
Add a new row					

(a) Refers to the location of the holding origin. In case NUTS 2 (Nomenclature of Territorial Units for Statistics) can not be used, coordinates (longitude/latitude) are requested. Please fill-in these values directly in the field.

Category : backyard flocks

delete this category

NUITS (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
CY00	8 500	20	10	200	Haemagglutination-inhibition-test (HI)
Total	8 500	20		200	
Add a new row					

(a) Refers to the location of the holding origin. In case NUTS 2 (Nomenclature of Territorial Units for Statistics) can not be used, coordinates (longitude/latitude) are requested. Please fill-in these values directly in the field.

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

Category : zoo and imported companion birds

delete this category

NUITS (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
CY00	0	30	0	20	Haemagglutination-inhibition-test (HI)
Total	0	30		20	
Add a new row					

(a) Refers to the location of the holding origin. In case NUTS 2 (Nomenclature of Territorial Units for Statistics) can not be used, coordinates (longitude/latitude) are requested. Please fill-in these values directly in the field.

Add a category

5.2 Ducks, geese and mallard holdings to be sampled according to table 2 of Annex I to Decision 2010/367/EU

NUITS (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
CY00	0	0	0	0	Haemagglutination-inhibition-test (HI)
Total	0	0		0	

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

(a) Refers to the location of the holding origin. In case NUTS 2 (Nomenclature of Territorial Units for Statistics) can not be used, coordinates (longitude/latitude) are requested. Please fill-in these values directly in the field.

Add a new row

6. Frequency and period for testing

(max. 32000 chars) :

Breeding holdings, conventional laying hen holdings, fattening turkey holdings, partridge holdings, pigeon holdings, quail holding, backyard holdings and zoo and imported companion birds will be tested once a year and sampling for those categories will take place throughout the year.

Free range and organic laying hen holdings and the free range broiler holding will be tested every three months.

7. Laboratory testing

Description of the used serological tests : (max 32000 chars)

According to Chapter VIII of the Annex to Commission Decision 2006/437/EC.

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

8. Description of the surveillance programme in wild birds

8.1 Objectives of surveillance

(max 32000 chars)

The surveillance programme for Avian Influenza in wild birds aims at the early detection of HPAI viruses of the subtype H5N1 in wild birds in order to prevent the introduction of the infection in poultry.

8.2 Surveillance design

(max. 32000 chars) :

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

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. surveillance 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.

It must be noted that the presence in Cyprus of birds listed in part 2 of Annex II of Commission Decision 2010/367/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

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

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 month between October and February. Therefore, during the five month period we expect to collect and test $2*5*3=30$ 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 or injured 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 samples from approximately 250 birds.

8.3 Sampling procedures

max 32000 chars :

In Cyprus there are no stations for capturing and ringing of wild birds. Faecal samples from high risk areas for active surveillance will be collected by the Veterinary personnel at the District Veterinary Offices.

Samples from birds found dead or injured will be collected at the Laboratories of the Veterinary Services.

8.4 Laboratory testing

max 32000 chars :

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

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

8.5. WILD BIRDS - Investigation according to the surveillance programme for avian influenza in wild birds set out in Annex II to Decision 2010/367/EU

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
CY00	250	250	30	150 X
Total		250	30	150
Add a new row				

(a) Refers to the place of collection of birds/samples. In case NUTS 2 (Nomenclature of Territorial Units for Statistics) can not be used, region as defined in the programme by the Member State is requested. Please fill-in these values directly in the field.

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

max 32000 chars :

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.

9.1 Measures included in the programme for surveillance in poultry

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

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

(max. 32000 chars) :

The Veterinary Services (VS) are subordinated to the Ministry of Agriculture, Natural Resources and Environment. 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.

9.1.2 System in place for the registration of holdings

(max. 32000 chars) :

The central authority has registered officially all holdings with breeding flocks according to Κ.Δ.Π. 317/2002, which transfers Directive 90/539/EEC into Cyprus national law and all holdings with laying flocks according to Κ.Δ.Π. 761/2003, which transfers Directive 1999/74/EC and Directive 2002/4/EC into Cyprus national law.

The rest of holdings have been identified by the Veterinary Services VS and registered in the VS database.

9.1.3 Data on vaccination carried out

(max. 32000 chars) :

No vaccination for avian influenza is carried out in Cyprus

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

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

(max. 32000 chars) :

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.

10.1 Measures included in the programme for surveillance in wild birds

(max. 32000 chars) :

The programme consists of both active and passive surveillance. Passive surveillance includes testing of wild birds found dead or injured and active surveillance includes testing of wild birds captured or faecal samples from high risk areas.

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

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

(32max. 32000 chars) :

The Veterinary Services (VS) are subordinated to the Ministry of Agriculture, Natural Recourses and Environment. 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).

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

(max. 32000 chars) :

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

10.1.3 Estimation of the local and/or migratory wildlife population

(max. 32000 chars) :

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. However, the number of some species of wild migratory birds increased during 2009, whereas the number of other remained low as the previous years. In general the number of migratory wild birds depends on the weather conditions each year.

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

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

(max. 32000 chars) :

Any case of Avian influenza should be notified according to Animal Health Laws of 2001 until 2009. Furthermore, any such case will be notified to the EU through ADNS and OIE according to the relevant legislation provisions.

12. Costs

12.1 Detailed analysis of the costs

12.1.1 Poultry

(max. 32000 chars) :

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

12.1.2 Wild birds

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

(max. 32000 chars) :

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

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

12.2 Summary of the costs

12.2.1 Poultry surveillance

Methods of laboratory analysis	Number of tests to perform per method	Unitary test cost (per method) in €	Total cost (€)
ELISA test	0	0	0
agar gel immune diffusion test	0	0	0
Haemagglutination-inhibition-test (HI) for H5 (specify number of tests for H5)	1 695	5	8475
Haemagglutination-inhibition-test (HI) for H7 (specify number of tests for H7)	1 695	5	8475
Virus isolation test	0	0	0
PCR test	0	0	0
Total	3 390		16 950,00 €
Other measures to be covered			
NA	0	0	X
			Add a new row
Total	0		0,00 €

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

12.2.2 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	0	0	0
Virus isolation test	80	30	2400
PCR test	100	20	2000
Other please specify here	0	0	0
Total	180	50,00 €	4 400,00 €
Other measures to be covered			
Sampling	250	40	10000 X
			Add a new row
Total	250	40,00 €	10 000,00 €

Standard requirements for the submission of surveillance programmes for avian influenza

version : 2.1

Attachments

IMPORTANT :

- 1) The more files you attach, the longer it takes to upload them .
- 2) This attachment files should have one of the format listed here : [.zip](#), [.jpg](#), [.jpeg](#), [.tiff](#), [.tif](#), [.xls](#), [.doc](#), [.bmp](#), [.pna](#).
- 3) The total file size of the attached files should not exceed 2 500Kb (+- 2.5 Mb) . You will receive a message while attaching when you try to load too much.
- 4) IT CAN TAKE **SEVERAL MINUTES TO UPLOAD** ALL THE ATTACHED FILES. Don't interrupt the uploading by closing the pdf and wait until you have received a Submission Number!
- 5) Zip files cannot be opened (by clicking on the Open button) . All other file formats can be opened.