Working Document

Notification and reporting of Newcastle disease in pigeons and other birds kept in captivity and of low pathogenic avian influenza in other captive birds

This document does not necessarily represent the views of the Commission Services.

SCFCAH - Animal Health and Animal Welfare section
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1. **Purpose of the document**

The purpose of this document is to provide guidance to Member States (MS) on notification and reporting of Newcastle disease (ND) when detected in pigeons or other birds kept in captivity and on low pathogenic avian influenza (LPAI) when detected in other captive birds.

2. **Background**

An outbreak of ND in a MS has to be notified to the Commission and other MS via the ADNS (Animal Disease Notification System). Newcastle disease is defined as an infection in poultry. However, control measures are to be applied also in case the virus is detected in pigeons or other birds kept in captivity. Uncertainties have arisen whether the detection of the virus causing Newcastle disease in poultry should be notified when occurring in racing pigeons or other birds kept in captivity. ADNS only provides for the notification of "Newcastle disease". The avian species or category of birds concerned can only be specified in the "free text".

As regards outbreaks of LPAI, it is currently only possible to notify outbreaks of LPAI in poultry and outbreaks of LPAI in wild birds. An outbreak of LPAI in other captive birds can not be notified separately in the current ADNS, as it is neither an outbreak of LPAI in poultry nor an outbreak of LPAI in wild birds.

There is, therefore a need to provide guidance to MS on notification and reporting of ND in pigeons and other birds kept in captivity and LPAI in captive birds.

ADNS summary reports are available online on the Commission's website[^1]. Notification of ND or of LPAI in pigeons/other captive birds using the currently available codes and other means of publicising these disease occurrences (see below faxes and SCFCAH) might trigger unjustified trade bans imposed by third countries on Member States' exports. This should be avoided in particular as the World Organisation for Animal Health (see OIE standards in the Annex) strongly discourages imposing trade bans on poultry commodities due to infection detected in birds not falling under the definition of poultry.

Furthermore, important information on animal disease outbreaks is dispatched to MS, certain Commission services and agencies, certain third country delegations, OIE, FAO via the Commission's Animal Health Emergency System (fax and/or e-mail). An overload of the system should be prevented by restricting information to that which is in particular relevant to MS's awareness, preparedness and eventual preventative measures.

It must also be noted that reporting on all disease outbreaks in MS at the meetings of the SCFCAH takes up a large proportion of the restricted time available for discussions. Condensing and streamlining the flow of information to reduce the time spent at SCFCAH on these issues would therefore also be desirable.

3. Legal situation on notification and control measures for ND/LPAI in the EU

3.1. Notification via the Animal Disease Notification System (ADNS)

Notification of animal diseases within the EU is regulated by Council Directive 82/894/EEC\(^2\), which lists the diseases being subject to notification, which includes avian influenza and Newcastle disease. The procedures for notification using codified forms and disease codes are laid down in Commission Decision 2005/176/EC\(^3\). There is currently just one code for the notification of ND, whereas LPAI can be notified either as LPAI in poultry or LPAI in wild birds.

3.2. EU control measures for ND

Council Directive 92/66/EEC introducing Community measures for the control of ND defines the control measures to be applied in the event of an outbreak of Newcastle disease in:
(a) poultry;
(b) racing pigeons and other birds kept in captivity.

The Directive shall not apply where ND is detected in wild birds living freely; however, in that case, the MS concerned shall inform the Commission of any measure it takes.

3.2.1. ND definition

*Newcastle disease* means an infection of poultry caused by any avian strain of the paramyxovirus 1 with an intracerebral pathogenicity index (ICPI) in day-old chicks greater than 0.7.

3.2.2. Disease control in pigeons and other birds kept in captivity

Article 19 of the Directive 92/66/EEC states:

1) When pigeons or other birds kept in captivity are suspected of being infected with ND, MS shall ensure that the official veterinarian immediately starts the official investigation procedures for confirming or notifying the presence of the disease; in particular adequate samples for laboratory examination shall be taken.

2) When the competent authority has been notified of the suspicion, it shall place the holding or pigeon house under official surveillance and order that no pigeon or bird kept in captivity, and nothing likely to transmit ND, may leave the pigeon house or holding.

3) The measures provided for in paragraphs 1 and 2 shall not be withdrawn until the suspicion of ND has been ruled out by the official veterinarian.


4) As soon as the presence of ND has been officially confirmed, the competent authority shall, inter alia, order:
   (a) the application of the control and eradication measures provided for in Article 5(1)(a), (b), (e) and (f) to the pigeons or other birds kept in captivity and pigeon houses infected with ND; or
   (b) at least
      (i) a ban on the movement of the pigeons or other birds kept in captivity outside the pigeon house or holding for at least 60 days after the clinical signs of ND have disappeared;
      (ii) the destruction or treatment of any matter or waste likely to be contaminated; the treatment must guarantee the destruction of any ND virus present and all waste that has accumulated during the 60-day period referred to in point (i);
   (c) an epizootiological inquiry in accordance with Article 7.

5) To the extent that it is required for the proper application of this Article, the MS shall furnish to the Commission, within the SCFCAH, information on the situation of the disease and the control measures applied in accordance with the model set out in Annex VI of Directive 92/66/EEC.

3.3. EU control measures for low pathogenic avian influenza (LPAI)

Council Directive 2005/94/EC on Community measures for the control of avian influenza lays down the minimum control measures to be applied in the event of an outbreak of avian influenza in poultry or other captive birds.

3.3.1. AI Definition

‘avian influenza’ means an infection of poultry or other captive birds caused by any influenza A virus:
   (a) of the subtypes H5 or H7; or
   (b) with an intravenous pathogenicity index (IVPI) in six-week old chickens greater than 1.2;

‘highly pathogenic avian influenza (HPAI)’ means an infection of poultry or other captive birds caused by:
   (a) avian influenza viruses of the subtypes H5 or H7 with genome sequences codifying for multiple basic amino acids at the cleavage site of the haemagglutinin molecule similar to that observed for other HPAI viruses, indicating that the haemagglutinin molecule can be cleaved by a host ubiquitous protease; or
   (b) avian influenza viruses with an intravenous pathogenicity index in six-week old chickens greater than 1.2;

‘low pathogenic avian influenza (LPAI)’ means an infection of poultry or other captive birds caused by avian influenza viruses of subtypes H5 or H7 that do not come within the definition in paragraph 2.
3.3.2. Definitions of bird populations

‘Poultry’ means all birds that are reared or kept in captivity for the production of meat or eggs for consumption, the production of other products, for restocking supplies of game birds or for the purposes of any breeding programme for the production of these categories of birds.

‘Other captive bird’ means any bird other than poultry that is kept in captivity for any reason other than those referred to above including those that are kept for shows, races, exhibitions, competitions, breeding or selling.

3.4. Virus characterisation

According to the duties of the national reference laboratories for AI (Annex VIII of Directive 2005/94/EC) and ND (Chapter 3 of Annex III of Dir.92/66/EEC) the national laboratories should submit all haemagglutinating agents to the EU Reference Laboratory (EURL) while it is the duty of the EURL to actively assist in the diagnosis of outbreaks in MS by receiving virus isolates for confirmatory diagnosis, characterisation and epidemiological studies.

4. New notification procedures in the EU

4.1. Newcastle disease

ND outbreaks in poultry have to be reported via ADNS.

ND virus detection in racing/carrier pigeons and birds kept in captivity shall be provided to SCFCAH according to Article 19(5) of Dir. 92/66/EEC according to the model set out in Annex VI of that Directive, if the Member State concerned deems that the finding in these birds may pose a risk to other Member States or third countries.

No changes to ADNS are necessary.

4.2. Low pathogenic avian influenza

For LPAI the notification procedures shall be split into separate notifications using distinct codes depending, if poultry or other captive birds are affected by the disease.

LPAI detection in wild birds will be deleted from the ADNS, as it is sufficiently covered by the Commission's online reporting system for AI surveillance results.

Explanatory information shall be entered in the free text of the ADNS notification, such as specific bird category (ornamental birds, zoo birds, decoy birds), derogations from killing and/or zoning, laboratory results etc.

The Commission will communicate to the ADNS members when the new code for LPAI in other captive birds will be available. The respective changes to Decision 2005/176/EC will be proposed.
4.3. Notification via ADNS

In summary the notification for the following disease outbreaks discussed in this document has to be done via ADNS:

4.3.1. Newcastle disease
ND in poultry

4.3.2. Low pathogenic avian influenza
a) LPAI in poultry
b) LPAI in other captive birds

4.4. Internet access to ADNS and information on the DG SANCO website

Currently about 40 countries (27 MS and third countries) are included in ADNS introducing their disease notifications and receiving the notifications from the other members of the system. On the Commission's DG SANCO website regularly updated summary reports and annual overviews are displayed; these shall however not include the entries for LPAI in other captive birds.

4.5. Information dispatched by the Commission via Fax

Under the Commission's Animal Health Emergency System, faxes containing important information on AI and ND outbreaks are sent to MS, their Permanent Representations, Accession and EEA countries and their missions, OIE, FAO, EFSA, ECDC (AI), Council Secretariat, DGs AGRI, DG TRADE, ENV, ELARG and EURL. SANCO D4 sends the information also to certain third countries which are the main trading partners for MS.

Concretely this will concern in the future only the following information:

4.5.1. Newcastle disease
- Information on ND in poultry

4.5.2. Avian influenza
- Information on HPAI in poultry and captive birds
- Information on HPAI H5 (N1) in wild birds
- Information on LPAI in poultry: the dispatch of information will be adapted to the epidemiological situation (e.g. in case of endemicity)

4.6. Submission of diagnostic material

It should be recalled that virus isolates shall be submitted to the EURL by the National Reference Laboratories for ND/AI.
ANNEX

STANDARDS OF THE OIE

Standards for avian diseases are laid down in the Terrestrial Code of the OIE (chapter 10.13. for ND) and (chapter 10.4. for AI). Chapter 1.1. lays down the rules for 'Notification of diseases and epidemiological information' and Chapter 1.2. describes the 'Criteria for listing diseases'.

1. OIE Definitions

1.1. Definition of ND

For the purposes of international trade, Newcastle disease (ND) is defined as an infection of poultry caused by a virus (NDV) of avian paramyxovirus serotype 1 (APMV-1) that meets one of the following criteria for virulence:

- the virus has an intracerebral pathogenicity index (ICPI) in day-old chicks (Gallus gallus) of 0.7 or greater; or

- multiple basic amino acids have been demonstrated in the virus (either directly or by deduction) at the C-terminus of the F2 protein and phenylalanine at residue 117, which is the N-terminus of the F1 protein. The term ‘multiple basic amino acids’ refers to at least three arginine or lysine residues between residues 113 and 116. Failure to demonstrate the characteristic pattern of amino acid residues as described above would require characterisation of the isolated virus by an ICPI test.

In this definition, amino acid residues are numbered from the N-terminus of the amino acid sequence deduced from the nucleotide sequence of the F0 gene, 113–116 corresponds to residues –4 to –1 from the cleavage site.’

1.2. Definition of avian influenza

For the purposes of international trade, avian influenza in its notifiable form (NAI) is defined as an infection of poultry caused by any influenza A virus of the H5 or H7 subtypes or by any AI virus with an intravenous pathogenicity index (IVPI) greater than 1.2 (or as an alternative at least 75% mortality) as described below. NAI viruses can be divided into highly pathogenic notifiable avian influenza (HPNAI) and low pathogenicity notifiable avian influenza (LPNAI):

- HPNAI viruses have an IVPI in 6-week-old chickens greater than 1.2 or, as an alternative, cause at least 75% mortality in 4-to 8-week-old chickens infected intravenously. H5 and H7 viruses which do not have an IVPI of greater than 1.2 or cause less than 75% mortality in an intravenous lethality test should be sequenced to determine whether multiple basic amino acids are present at the cleavage site of the haemagglutinin molecule (HA0); if the amino acid motif is similar to that observed for other HPNAI isolates, the isolate being tested should be considered as HPNAI;

- LPNAI are all influenza A viruses of H5 and H7 subtype that are not HPNAI viruses.
1.3. Definition of bird populations

'Poultry' is defined as 'all domesticated birds, including backyard poultry, used for the production of meat or eggs for consumption, for the production of other commercial products, for restocking supplies of game, or for breeding these categories of birds, as well as fighting cocks used for any purpose'.

'Birds that are kept in captivity' for any reason other than those reasons referred to in the preceding paragraph, including those that are kept for shows, races, exhibitions, competitions, or for breeding or selling these categories of birds as well as pet birds, are not considered to be poultry.

2. Reporting to OIE

All occurrences of a notifiable disease, such as Newcastle disease or avian influenza, should be reported to OIE regardless of infection in poultry or wild birds.

In Chapter 1.2. of the Terrestrial code on "Criteria for listing diseases" Article 1.2.3 lists
- Newcastle disease
- Highly pathogenic avian influenza in birds
- Low pathogenicity notifiable avian influenza in poultry

In Chapter 10.13. on ND it further reads: "For the purposes of international trade, a Member should not impose immediate bans on the trade in poultry commodities in response to a notification, according to Article 1.2.3. of the Terrestrial Code, of infection with NDV in birds other than poultry, including wild birds."

In Chapter 10.4. on AI it further reads: "For the purposes of international trade, a Member should not impose immediate bans on the trade in poultry commodities in response to a notification, according to Article 1.2.3. of the Terrestrial Code, of infection with HPAI and LPAI virus in birds other than poultry, including wild birds."

When reporting to OIE it is advisable to specify in the section on "affected population" if the outbreak concerns pigeons and/or other birds kept in captivity. A statement can be included that: "In accordance with the OIE Terrestrial Animal Health Code (chapter 10.13/10.4. as appropriate) this outbreak does not change the disease free status of the country. The birds involved in the outbreak do not fall within the OIE definition of poultry."