

CHAPTER 2.7.12.

~~HIGHLY PATHOGENIC AVIAN INFLUENZA~~

~~Article 2.7.12.1.~~

~~For the purposes of the *Terrestrial Code*, the incubation period for highly pathogenic avian influenza (HPAI) shall be 21 days.~~

~~Standards for diagnostic tests are described in the *Terrestrial Manual*.~~

~~Article 2.7.12.2.~~

HPAI free country

~~A country may be considered free from HPAI when it has been shown that HPAI has not been present for at least the past 3 years.~~

~~This period shall be 6 months after the slaughter of the last affected animal for countries in which a *stamping-out policy* is practised with or without vaccination against HPAI.~~

~~Article 2.7.12.3.~~

HPAI infected zone

~~A zone shall be considered as infected with HPAI until:~~

- ~~1) at least 21 days have elapsed after the confirmation of the last *case* and the completion of a *stamping-out policy* and *disinfection* procedures, or~~
- ~~2) 6 months have elapsed after the clinical recovery or death of the last affected animal if a *stamping-out policy* was not practised.~~

~~Article 2.7.12.4.~~

~~*Veterinary Administrations* of *importing countries* should require similar arrangements to those provided in Chapter 2.7.13. (Newcastle disease) of the *Terrestrial Code* for the following *commodities*:~~

- ~~1) domestic and wild birds;~~
- ~~2) *day-old birds*;~~
- ~~3) *hatching eggs*;~~
- ~~4) semen of domestic and wild birds;~~
- ~~5) *fresh meat* of domestic and wild birds;~~
- ~~6) *products of animal origin* (from birds) *intended for use in animal feeding or for agricultural or industrial*~~

~~use;~~

- 7) ~~pathological material and biological products (from birds) which have not been processed to ensure the destruction of the HPAI virus.~~

Article 2.7.12.5.
(~~under study~~)

- 1) For the purposes of the *Terrestrial Code*, ~~notifiable~~ 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):
 - a) 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.
 - b) LPNAI are all influenza A viruses of H5 and H7 subtype that are not HPNAI viruses.
- 2) Poultry is defined as ‘all birds reared or kept in captivity 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’.
- 3) For the purpose of international *trade*, this chapter deals not only with the occurrence of clinical signs caused by NAI virus, but also with the presence of infection with NAI virus in the absence of clinical signs.
- 4) The following defines the occurrence of infection with NAI virus:
 - a) HPNAI virus has been isolated and identified as such or ~~specific~~ viral RNA specific for HPNAI has been detected in poultry or a product derived from poultry; or
 - b) LPNAI virus has been isolated and identified as such or ~~specific~~ viral RNA specific for LPNAI has been detected in poultry or a product derived from poultry; or
 - c) antibodies to H5 or H7 subtype of NAI virus that are not a consequence of vaccination; ~~nor indicative of a non-specific reaction, have been detected in poultry; in such cases, virus isolation should be attempted to establish whether the serological positivity is due to LPNAI or HPNAI. If appropriate samples are not available or if results are negative, a thorough epidemiological investigation including further sampling and testing should be carried out to identify the type or exclude the presence of NAI infection.~~ have been detected in poultry. In the case of isolated serological positive results, NAI infection may be ruled out on the basis of a thorough epidemiological investigation that does not demonstrate further evidence of NAI infection.

~~For the purposes of this *Terrestrial Code*, 'NAI-free establishment' means an *establishment* in which there has been no clinical sign of NAI for the past 21 days and is not situated within 3 kilometres of any *establishment* infected with HPNAI and within one kilometre of any *establishment* infected with LPNAI.~~

For the purposes of the *Terrestrial Code*, 'NAI free establishment' means an *establishment* in which the poultry have shown no evidence of NAI infection, based on surveillance in accordance with Appendix XXX.

For the purposes of the *Terrestrial Code*, the *incubation period* for NAI shall be 21 days.

Standards for diagnostic tests are, including pathogenicity testing, described in the *Terrestrial Manual*. Any vaccine used should comply with the standards described in the *Terrestrial Manual*.

Article 2.7.12.6.
(~~under study~~)

The NAI status of a country, a *zone* or a *compartment* can be determined on the basis of the following criteria:

- 1) the outcome of a risk assessment identifying all potential factors for NAI occurrence and their historic perspective;
- 2) NAI is notifiable in the whole country, an on-going NAI awareness programme is in place, and all notified suspect occurrences of NAI are subjected to field and, where applicable, laboratory investigations;
- 3) appropriate surveillance is in place to demonstrate the presence of infection in the absence of clinical signs in poultry, and the risk posed by birds other than poultry; this may be achieved through an NAI surveillance programme in accordance with Appendix XXX ~~this Chapter and Chapter 1.3.6.~~

Article 2.7.12.7.
(~~under study~~)

NAI free country, zone or compartment

A country, *zone* or *compartment* may be considered free from NAI when it has been shown that neither HPNAI nor LPNAI infection has been present in the country, *zone* or *compartment* for the past 12 months, based on surveillance in accordance with Appendix XXX. The surveillance may need to be adapted to parts of the country or existing *zones* or *compartments* depending on historical or geographical factors, industry structure, population data, or proximity to recent *outbreaks*.

If infection has occurred in a previously free country, *zone* or *compartment*, free status can be regained:

- 1) In the case of HPNAI infections, 3 months after a *stamping out policy* (including *disinfection* of all affected *establishments*) is applied, providing that surveillance in accordance with Appendix XXX has been carried out during that three-month period.

- 2) In the case of LPNAI infections, poultry may be kept for slaughter for human consumption subject to specified conditions or a *stamping out policy* applied; in either case, 3 months after the *disinfection* of all affected *establishments*, providing that surveillance in accordance with Appendix XXX has been carried out during that three-month period.

~~A country or *zone/compartment* may be considered free from NAI when it has been shown that NAI infection has not been present for the past 12 months. If infected poulties are slaughtered, this period shall be 3 months after the slaughter of the last infected poultry and *disinfection* of all affected *establishments*.~~

The NAI status should be determined by an ongoing surveillance and monitoring programme (carried out in conformity with the provisions of Chapter 1.3.6.) based on virus isolation, virus detection or serology. The programme may need to be adapted to target parts of the country or *zone/compartment* at a higher risk due to historical or geographical factors, population data, or proximity to recent *outbreaks*.

~~Freedom of infection in a country or *zone* can be demonstrated with random and/or targeted serological surveillance at a minimum interval of 6 months designed to provide at least a 95% level of confidence of detecting a prevalence of NAI infected enterprises of 1%. Freedom of infection in a *compartment* can be demonstrated with an ongoing surveillance programme designed to provide at least a 95% level of confidence of detecting a prevalence of NAI infection of 10%. Each *establishment* should be sampled to provide a 95% level of confidence of detecting a prevalence of NAI of 25%. For commercial ducks the surveillance programme should be based on virus isolation or detection in the absence of validated serological methods.~~

~~In the case of a country or *zone* in which vaccination is being conducted, the ongoing surveillance and monitoring programme (carried out in conformity with the provisions of Chapter 1.3.6.) based on virus isolation, virus detection or serology should be carried out on all vaccinated flocks at a minimum interval of 6 months. In each vaccinated flock, the number of birds to be tested should provide at least a 95% level of confidence of detecting a prevalence of NAI infection of 25%. In the case of a *compartment* in which vaccination is being conducted, the ongoing surveillance and monitoring programme (carried out in conformity with the provisions of Chapter 1.3.6.) based on virus isolation, virus detection or serology should be carried out to provide at least a 95% level of confidence of detecting a prevalence of NAI infection of 10%. If a serological test is used, it should be able to distinguish vaccinated birds from infected birds. Additional security should be provided by the use of identifiable sentinel birds which can be clinically inspected or tested to help identify field infections in vaccinated flocks.~~

Article 2.7.12.7.bis

HPNAI free country, zone or compartment

A country, *zone* or *compartment* may be considered free from HPNAI when it has been shown that HPNAI infection has not been present in the country, *zone* or *compartment* for the past 12 months, although its LPNAI status may be unknown, when, based on surveillance in accordance with Appendix XXX, it does not meet the criteria for freedom from NAI but any NAI virus detected has not been identified as HPNAI virus. The surveillance may need to be adapted to parts of the country or *zones/compartments* depending on historical or geographical factors, industry structure, population data, or proximity to recent *outbreaks*.

If infection has occurred in a previously free country, *zone* or *compartment*, free status can be regained 3 months after a *stamping out policy* (including *disinfection* of all affected *establishments*) is applied,

providing that surveillance in accordance with Appendix XXX has been carried out during that 3-month period.

Article 2.7.12.8.
(~~under study~~)

When importing from an NAI free country, ~~zone~~ or *compartment*, *Veterinary Administrations* should require:

for live poultry (other than day-old poultry)

the presentation of an *international veterinary certificate* attesting that the poultry:

- 1) showed no clinical sign of NAI on the day of shipment;
- 2) were kept in an NAI free country, *zone* or *compartment* since they were hatched or for the past 21 days;

2)bis the required surveillance has been carried out on the *establishment* within the past 21 days.

- ~~3) either have not been vaccinated against NAI, or have been vaccinated and the date of vaccination and the details of the vaccine are stated.~~

Information concerning the vaccination status of the poultry (including the dates of vaccination and the vaccine used) should be included in the veterinary certificate.

Article 2.7.12.9.
(~~under study~~)

Regardless of the NAI status of the country, ~~zone~~ or *compartment* of origin, *Veterinary Administrations* should require:

for live birds other than poultry

the presentation of an *international veterinary certificate* attesting that the birds:

- 1) showed no clinical sign of infection with a virus which would be considered NAI in poultry on the day of shipment;
- 2) were kept in isolation approved by the *Veterinary Services* since they were hatched or for the 21 days prior to shipment and showed no clinical sign of infection with a virus which would be considered NAI in poultry during the isolation period;
- 3) were subjected to a diagnostic test 7 to 14 days prior to shipment to demonstrate freedom from infection with a virus which would be considered NAI in poultry; and
- 4) are transported in new containers.

Article 2.7.12.10.
(~~under study~~)

When importing from an NAI free country, *zone* or *compartment*, *Veterinary Administrations* should require:

for day-old live poultry

the presentation of an *international veterinary certificate* attesting that the poultry:

- 1) were kept in an NAI free country, *zone* or *compartment* since they were hatched;
- 2) were derived from parent flocks which had been kept in an NAI free country, *zone* or *compartment* for 21 days prior to and at the time of the collection of the eggs;
- 3) ~~and/or the parent flock had/had not been vaccinated and, if vaccinated, the date of vaccination and the details of the vaccine are stated.~~

Information concerning the vaccination status of the poultry and the parent flocks (including the dates of vaccination and the vaccine used) should be included in the veterinary certificate.

Article 2.7.12.10.bis

When importing from an HPNAI free country, *zone* or *compartment*, *Veterinary Administrations* should require:

for day-old live poultry

the presentation of an *international veterinary certificate* attesting that the poultry:

- 1) were kept in an HPNAI free country, *zone* or *compartment* since they were hatched;
- 2) were derived from parent flocks which had been kept in an NAI free establishment for 21 days prior to and at the time of the collection of the eggs;
- 3) are transported in new containers.

Information concerning the vaccination status of the poultry and the parent flocks (including the dates of vaccination and the vaccine used) should be included in the veterinary certificate.

Article 2.7.12.11.
(~~under study~~)

When importing from an NAI free country, *zone* or *compartment*, *Veterinary Administrations* should require:

for *hatching eggs*

the presentation of an *international veterinary certificate* attesting that the eggs:

- 1) came from an NAI free country, *zone* or *compartment*;
- 2) were derived from parent flocks which had been kept in an NAI free country, *zone* or

compartment for 21 days prior to and at the time of the collection of the eggs.

- 3) ~~were derived from parent flocks which had not been vaccinated against NAI, or which had been vaccinated against NAI and the date of vaccination and the details of the vaccine are stated.~~

Information concerning the vaccination status of the parent flocks (including the dates of vaccination and the vaccine used) should be included in the veterinary certificate.

Article 2.7.12.11.bis

When importing from a HPNAI free country, *zone* or *compartment*, *Veterinary Administrations* should require:

for *hatching eggs*

the presentation of an *international veterinary certificate* attesting that the eggs:

- 1) came from an HPNAI free country, *zone* or *compartment*;
- 2) were derived from parent flocks which had been kept in an NAI free establishment for 21 days prior to and at the time of the collection of the eggs;
- 3) are transported in new packing material.

Information concerning the vaccination status of the parent flocks (including the dates of vaccination and the vaccine used) should be included in the veterinary certificate.

Article 2.7.12.12.
(~~under study~~)

When importing from an NAI free country, *zone* or *compartment*, *Veterinary Administrations* should require:

for eggs for human consumption

the presentation of an *international veterinary certificate* attesting that the eggs come from an NAI free country, *zone* or *compartment*.

Article 2.7.12.13.
(~~under study~~)

When importing from a HPNAI free country, *zone* or *compartment*, *Veterinary Administrations* should require:

for eggs for human consumption

the presentation of an *international veterinary certificate* attesting that the eggs:

- 1) come from a country, *zone* or *compartment* free from HPNAI infection; and
- 2) come from *establishments* in which there has been no evidence of NAI in the past 21 days;
- 3) are transported in new ~~disposable~~ packing material.

~~Article 2.7.12.14.~~

~~(under study)~~

~~When importing from a country or *zone/compartiment* not known to be free from HPNAI, *Veterinary Administrations* should require:~~

~~for eggs for consumption~~

~~the presentation of an *international veterinary certificate* attesting that the entire consignment of eggs comes from birds:~~

- ~~1) which have been kept in an NAI free *establishment*,~~
- ~~2) which have been tested serologically or by virus detection to give a 95% probability of detecting a 5% prevalence of NAI infection, every 21 days, with negative results.~~

Article 2.7.12.15.

~~(under study)~~

When importing from an NAI free country, *zone* or *compartiment*, *Veterinary Administrations* should require:

for egg products

the presentation of an *international veterinary certificate* attesting that the egg products come from, and were processed in, an NAI free country, *zone* or *compartiment*.

~~Article 2.7.12.16.~~

~~(under study)~~

~~When importing from a country or *zone/compartiment* free from HPNAI infection, *Veterinary Administrations* should require:~~

~~for egg products~~

~~the presentation of an *international veterinary certificate* attesting that the egg products come from, and were processed in a country or *zone/compartiment* free from HPNAI infection.~~

Article 2.7.12.17.

~~(under study)~~

Regardless of the NAI status of the country, *zone* or *compartiment* of origin ~~When importing from a country, *zone* or *compartiment* not known to be free from HPNAI, *Veterinary Administrations* should require:~~

for egg products

the presentation of an *international veterinary certificate* attesting that the egg products:

- 1) are derived from eggs ~~for consumption~~ which meet the requirements of Articles 2.7.12.11, 2.7.12.11.bis, 2.7.12.12., or 2.7.12.13. ~~or 2.7.12.14.;~~ or
- 2) were processed to ensure the destruction of NAI virus (under study), and the necessary

precautions were taken after processing to avoid contact of the commodity with any source of NAI virus.

Article 2.7.12.18.
(~~under study~~)

When importing from an NAI free country, *zone* or *compartment*, *Veterinary Administrations* should require:

for poultry semen

the presentation of an *international veterinary certificate* attesting that the donor poultry:

- 1) showed no clinical sign of NAI on the day of semen collection;
- 2) were kept in an NAI free country, *zone* or *compartment* for the 21 days prior to and at the time of semen collection.

Article 2.7.12.18.bis

When importing from a HPNAI free country, *zone* or *compartment*, *Veterinary Administrations* should require:

for poultry semen

the presentation of an *international veterinary certificate* attesting that the donor poultry:

- 1) came from an HPNAI free country, *zone* or *compartment*,
- 2) were kept in an NAI free *establishment* for 21 days prior to and at the time of semen collection.

Information concerning the vaccination status of the donor flocks (including the dates of vaccination and the vaccine used) should be included in the veterinary certificate.

Article 2.7.12.19.
(~~under study~~)

Regardless of the NAI status of the country, *zone* or *compartment* of origin, *Veterinary Administrations* should require:

for semen of birds other than poultry

the presentation of an *international veterinary certificate* attesting that the donor birds:

- 1) were kept in isolation approved by the *Veterinary Services* for the 21 days prior to semen collection;
- 2) showed no clinical sign of infection with a virus which would be considered NAI in poultry during the isolation period;
- 3) were tested between 7 and 14 days prior to semen collection and shown to be free of NAI infection.

Article 2.7.12.20.

~~(under study)~~

When importing from an NAI free country, *zone* or *compartment*, *Veterinary Administrations* should require:

~~for *fresh meat and meat products* of poultry, and poultry viscera~~

the presentation of an *international veterinary certificate* attesting that the entire consignment of *fresh meat* comes from birds:

- 1) which have been kept in an NAI free country, *zone* or *compartment* since they were hatched or for the past 21 days;
- 2) which have been slaughtered in an *approved abattoir* and have been subjected to ante-mortem and post-mortem inspections for NAI with favourable results.

Article 2.7.12.21.

~~(under study)~~

When importing from a HPNAI free country, *zone* or *compartment*, *Veterinary Administrations* should require:

~~for *fresh meat and meat products* of poultry (other than turkey)~~

the presentation of an *international veterinary certificate* attesting that the entire consignment of *fresh meat* comes from birds:

- 1) which have been kept in an *establishment* since they were hatched or for the past 21 days and in which there has been no ~~clinical sign~~ evidence of NAI in the past 21 days; and
- 2) which have been slaughtered in an *approved abattoir* and have been subjected to ante-mortem and post-mortem inspections for NAI with favourable results.

~~Article 2.7.12.22.~~

~~(under study)~~

When importing from a country or *zone/compartment* not known to be free from HPNAI, *Veterinary Administrations* should require:

~~for *fresh meat and meat products* of poultry and poultry viscera (other than turkey)~~

the presentation of an *international veterinary certificate* attesting that the entire consignment of meat or meat product comes from birds:

- 1) ~~which have been kept in a free establishment;~~
- 2) ~~which have been tested to give a 95% probability of detecting a 5% prevalence of NAI infection not more than 7 days prior to slaughter using virus detection or virus isolation tests, and serological tests, with negative results in all cases;~~

- 3) ~~which have been slaughtered in an approved abattoir which has not processed poultry infected with NAI since last cleaned and disinfected, and have been subjected to ante-mortem and post-mortem inspections for NAI with favourable results.~~

~~Article 2.7.12.23.
(under study)~~

~~When importing from a country or zone/compartiment not known to be free from NAI, Veterinary Administrations should require:~~

~~for fresh meat and viscera of turkey~~

~~the presentation of an international veterinary certificate attesting that the entire consignment of meat comes from birds:~~

- 1) ~~which have been kept in a free establishment;~~
- 2) ~~which have been tested to give a 95% probability of detecting a 5% prevalence of NAI infection not more than 7 days prior to slaughter using virus detection or virus isolation tests, and serological tests, with negative results in all cases;~~
- 3) ~~which have been slaughtered in an approved abattoir which has not processed poultry infected with NAI since last cleaned and disinfected, and have been subjected to ante-mortem and post-mortem inspections for NAI with favourable results.~~

~~Article 2.7.12.24.
(under study)~~

~~Regardless of the NAI status of the When importing from a country, zone or compartment of origin not known to be free from NAI, Veterinary Administrations should require:~~

~~for meat products and processed viscera of poultry~~

~~the presentation of an international veterinary certificate attesting that:~~

- 1) ~~the commodity is derived from fresh meat and/or meat products and/or viscera which meet the requirements of Articles 2.7.12.20. or 2.7.12.21. or 2.7.12.22;~~ or
- 2) ~~the commodity has been processed to ensure the destruction of NAI virus;~~
- 3) ~~the necessary precautions were taken after processing to avoid contact of the commodity with any source of NAI virus.~~

~~Article 2.7.12.25.
(under study)~~

~~Regardless of the NAI status of the When importing from an NAI free country, zone or compartment of origin, Veterinary Administrations should require:~~

~~for products of poultry origin intended for use in animal feeding, or for agricultural or industrial~~

use

the presentation of an *international veterinary certificate* attesting that:

- 1) these *commodities* come from birds which have been kept in an NAI free country, *zone* or *compartment* since they were hatched or for the past 21 days; or
- 2) these *commodities* have been processed to ensure the destruction of NAI virus;
- 3) the necessary precautions were taken to avoid contact of the *commodity* with any source of NAI virus.

~~Article 2.7.12.26.
(under study)~~

~~When importing from a country or *zone/compartment* not considered free from NAI, *Veterinary Administrations* should require:~~

~~for meal containing meat and/or feathers and/or bones (from poultry)~~

~~the presentation of an *international veterinary certificate* attesting that:~~

- 1) ~~the commodity has been processed to ensure the destruction of the NAI virus;~~
- 2) ~~the necessary precautions were taken after processing to avoid contact of the *commodity* with any source of NAI virus.~~

~~Article 2.7.12.27.
(under study)~~

~~Regardless of the NAI status of the When importing from an NAI free country, *zone* or *compartment* of origin, *Veterinary Administrations* should require:~~

~~for feathers and down (from poultry)~~

~~the presentation of an *international veterinary certificate* attesting that the entire consignment of feathers or down comes from birds which have been kept in an NAI free country or *zone/compartment* since they were hatched or for the past 21 days.~~

~~the presentation of an *international veterinary certificate* attesting that:~~

- 1) these *commodities* come from birds which have been kept in an NAI free country, *zone* or *compartment* since they were hatched or for the past 21 days; or
- 2) these *commodities* have been processed to ensure the destruction of NAI virus;
- 3) the necessary precautions were taken to avoid contact of the *commodity* with any source of NAI virus.

~~Article 2.7.12.28.
(under study)~~

~~When importing from a country or *zone/compartment* not known to be free from NAI, *Veterinary Administrations* should require:~~

~~for feathers and down (from poultry)~~

~~the presentation of an *international veterinary certificate* attesting that:~~

- ~~1) the *commodity* has been processed to ensure the destruction of the NAI virus;~~
- ~~2) the necessary precautions were taken after processing to avoid contact of the *commodity* with any source of NAI virus.~~

Article 2.7.12.29.
~~(under study)~~

Regardless of the NAI status of the country, ~~zone~~ or *compartment*, *Veterinary Administrations* should require for the importation of:

meat or other products from birds other than poultry

the presentation of an *international veterinary certificate* attesting that:

- 1) the *commodity* has been processed to ensure the destruction of NAI virus;
 - 2) the necessary precautions were taken after processing to avoid contact of the *commodity* with any source of NAI virus.
-