Terrestrial Animal Health Standards Commission
Report

September 2009

CHAPTER 8.16.

WEST NILE FEVER

Article 8.16.1.

General provisions

West Nile fever (WNF) is a zoonotic disease caused by certain strains of the mosquito transmitted West Nile virus (WNV).

For the purpose of this chapter, the susceptible species are equidae, geese, ducks (under study) and ~~chicken and turkey chicks less than 12 days old (under study)~~ and birds other than *poultry*.

WNV is maintained in a mosquito–bird–mosquito transmission cycle, whereas humans and equidae are considered dead-end hosts. Most human *infections* occur by natural transmission from mosquitoes.

In relation to domestic animal trade, geese and ducks pose a *risk* for the spread of the WNV as some species have been documented to develop a viraemia sufficient to infect mosquitoes.

Surveillance for WNF should be carried out according to Chapter X.X.

The following criteria define the occurrence of WNF:

1. WNV has been isolated from an animal that shows signs consistent with WNF; or

2. viral antigen or viral ribonucleic acid (RNA) specific to WNV has been identified in samples from one or more animals that show clinical signs consistent with WNF, or that is epidemiologically linked to a confirmed or suspected *outbreak* of WNF; or

3. antibodies to WNV that are not a consequence of vaccination, have been identified in an animal, that shows clinical signs consistent with WNF, or that is epidemiologically linked to a confirmed or suspected *outbreak* of WNF.

For the purposes of the *Terrestrial Code*, the *incubation period* for WNF shall be 15 days.

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

When authorising import or transit of other *commodities* listed in this chapter, *Veterinary Authorities* should require the conditions prescribed in this chapter relevant to the WNF status of the *exporting country* or *zone*.

Article 8.16.2.

~~Trade in~~ Safe commodities

Members should not impose trade restrictions on dead-end hosts such as horses.

When authorising import or transit of the following *commodities* and any products made from these, *Veterinary Authorities* should not require any WNV related conditions, regardless of the WNF status of the *exporting country* or *zone*:

1. *hatching eggs* ;
2. eggs for human consumption;
3. egg products;
4. *poultry* semen;
5. *fresh meat* and *meat products* of *poultry*;
6. products of *poultry* origin intended for use in animal feeding, or for agricultural or industrial use;
7. feathers and down from *poultry*;
8. semen of horses;
9. *meat* and *meat products* of horses.

~~When authorising import or transit of other *commodities* listed in this chapter, *Veterinary Authorities* should require the conditions prescribed in this chapter relevant to the WNF status of the *exporting country* or *zone*.~~

Article 8.16.3.

WNF free country or zone

1. A country or *zone* may be considered free from WNF when WNF is notifiable in the whole country and either:
   a. no occurrence of WNF *cases*, where *infection* occurred within the territory of the Member, have been recorded for the past 2 years; or
   b. a *surveillance* programme in accordance with Chapter X.X. has demonstrated no evidence of WNV in the country or *zone* during the past 2 years.
2. A WNF free country or *zone* will not lose its free status through the importation from WNF infected countries or *infected zones* of:
   a. seropositive animals;
   b. semen, embryo or ova;
   c. animals vaccinated in accordance with the *Terrestrial Manual* at least 30 days prior to dispatch, and are identified in the accompanying certification as having been vaccinated; or

d. animals not vaccinated if a *surveillance* programme in accordance with Chapter X.X. has been in place in the source population for a period of 30 days immediately prior to dispatch, and no evidence of WNV transmission has been detected.

Article 8.16.4.

WNF seasonally free country or zone

1. A WNF seasonally free country or *zone* is one in which for part of a year, *surveillance* demonstrates no evidence either of WNV transmission or presence of mosquitoes likely to be competent WNV vectors.

2. For the application of Article 8.16.6., the seasonally free period is taken to commence 21 days following the last evidence of WNV transmission (as demonstrated by the *surveillance* programme), or the cessation of activity of mosquitoes likely to be competent WNV vectors.

3. For the application of Article 8.16.6., the seasonally free period is taken to conclude either:

   a. at least 21 days before the earliest date that historical data show WNV transmission cycle has recommenced; or

   b. immediately if current climatic data or data from a *surveillance* programme indicate an earlier resurgence of activity of mosquitoes likely to be competent WNV vectors.

4. A WNF seasonally free country or *zone* will not lose its free status through the importation from WNF infected countries or *infected zones* of:

   a. seropositive animals;

   b. semen, embryo or ova;

   c. animals vaccinated in accordance with the *Terrestrial Manual* at least 30 days prior to dispatch, and are identified in the accompanying certification as having been vaccinated; or

   d. animals not vaccinated if a *surveillance* programme in accordance with Chapter X.X. has been in place in the source population for a period of 30 days immediately prior to dispatch, and no evidence of WNV transmission has been detected.

Article 8.16.5.

Recommendations for importation from WNF free countries or zones

for ~~susceptible species (other than horses)~~ ducks (under study), geese and birds other than poultry

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that:

1. the animals were kept in a WNF free country or *zone* since birth or for at least 30 days prior to shipment; or

2. the animals were kept in a WNF free country or *zone* for at least 15 days, were subjected, with negative results, to an agent identification test according to the *Terrestrial Manual* carried out on a sample collected at least 3 days after the commencement of the residence period and remained in the WNF free country or *zone* until shipment; or

3. the animals:

   a. were vaccinated in accordance with the *Terrestrial Manual* 30 days before introduction into the free country or *zone*; and

   b. were identified as having been vaccinated; and

   c. were kept in a WNF free country or *zone* for at least 15 days; and

   d. remained in the WNF free country or *zone* until shipment;

AND

4. if the animals were exported from a WNF free *zone*, either:

   a. did not transit through an infected country or *infected zone* during transportation to the *place of shipment*; or

   b. were protected from mosquito attacks at all times when transiting through an infected country or *infected zone*; or

   c. had been vaccinated in accordance with point 3 above.

Article 8.16.6.

Recommendations for importation from WNF seasonally free countries or zones

for ~~susceptible species (other than horses)~~ ducks (under study), geese and birds other than poultry

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that the animals:

1. were kept during the seasonally free period in a WNF seasonally free country or *zone* since birth or for at least 30 days prior to shipment; or

2. were kept during the WNF seasonally free period in a WNF seasonally free country or *zone* for at least 15 days prior to shipment, and were subjected during the residence period in the country or *zone* to an agent identification test according to the *Terrestrial Manual*, with negative results, carried out on a sample collected at least 3 days after the commencement of the residence period and remained in the WNF seasonally free country or *zone* until shipment; or

3. were kept during the seasonally free period in a WNF seasonally free country or *zone* for at least 15 days, and were vaccinated in accordance with the *Terrestrial Manual* 30 days before introduction into the free country or *zone* against WNF, were identified as having been vaccinated and remained in the WNF seasonally free country or *zone* until shipment;

AND

4. if the animals were exported from a WNF seasonally free country or *zone*, either:

   a. did not transit through an infected country or *infected zone* during transportation to the *place of shipment*; or

b. were protected from mosquito attacks at all times when transiting through an infected country or *infected zone*; or

c. were vaccinated in accordance with point 3 above.

Article 8.16.7.

Recommendations for importation from WNF infected countries or infected zones

for ~~susceptible species (other than horses)~~ ducks (under study) and geese

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that the animals:

1. were protected from mosquito attacks for at least 30 days prior to shipment; or

2. were subjected to a serological test according to the *Terrestrial Manual* to detect WNV neutralizing antibodies with positive results; or

3. were protected from mosquito attacks for at least 15 days prior to shipment, and were subjected during that period to an agent identification test according to the *Terrestrial Manual*, with negative results, carried out on a sample collected at least 3 days after being introduced in the mosquito-free *zone*; or

4. were vaccinated at least 30 days before shipment in accordance with the *Terrestrial Manual* against WNV and were identified in the accompanying certification as having been vaccinated; or

5. are not vaccinated and a *surveillance* programme in accordance with Chapter X.X. has been in place in the source population for a period of 30 days immediately prior to shipment, and no evidence of WNV transmission has been detected;

AND

6. were protected from mosquito attacks during transportation to the *place of shipment*.

Article 8.16.8.

Recommendations for the importation from WNF infected countries ~~of birds~~

for birds other than poultry

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that:

1. the birds showed no clinical sign of WNF on the day of shipment; and

2. the birds were kept in a *quarantine station* in a mosquito-free environment for 30 days prior to shipment and a statistically valid sample was subjected, with negative results, to an agent identification test at least 3 days after the commencement of the residence period.

Article 8.16.9.

Protecting animals from mosquito attacks

When transporting animals through WNF infected countries or *infected zones*, *Veterinary Authorities* should require strategies to protect susceptible animals from mosquito attacks during transport, taking into account the local ecology of the mosquitoes.

Potential *risk management* strategies include:

1. treating animals with insect repellents prior to and during transportation;

2. ensuring *vehicles* do not stop en route unless the animals are held behind insect proof netting;

3. *surveillance* for vectors at common stopping and offloading points to gain information on seasonal variations;

4. integrated pest management practices at holding, common stopping and offloading points;

5. using historical, ongoing and/or WNF modelling information to identify low risk ports and transport routes.