

TERRESTRIAL ANIMAL HEALTH STANDARDS COMMISSION

SEPTEMBER 2011 REPORT

USA COMMENTS

(Note : recommended changes indicated as ~~strikethrough~~ or double underlined in blue font color)

CHAPTER 8.10.

RABIES

Article 8.10.1.

General provisions

For the purpose of the *Terrestrial Code*,

~~1. Rabies is a *disease* caused by one any member of the *Lyssavirus* genus; the *Rabies virus* (formerly referred to as classical rabies virus; genotype 1). All mammals including human are susceptible to *infection*. Carnivora and Chiroptera are the reservoirs for rabies.~~

1. Rabies is a disease caused by members of the Lyssavirus genus. The members of the genotype-1 (i.e., classical rabies viruses) present the greatest risk of rabies transmission to humans and animals. All mammals are susceptible to infection.

Rationale: Suggested changes and additional text are provided for clarity and scientific accuracy. Rabies is the clinical manifestation of virtually always fatal encephalitis caused by a number of viruses in the Lyssavirus genus. These viruses include those found in:

- 1) Genotype 1 consists of dog-to-dog transmitted canine rabies virus variants, wild-canid-transmitted rabies viruses variants (raccoon, skunk, fox, coyote, jackel, raccoon dog, arctic fox, gray fox, red fox, etc.), insectivorous bat rabies virus variants (more than 16 different virus variants), vampire-bat associated variants, and others
- 2) Genotype 2 consists of Lagos bat virus
- 3) Genotype 3 consists of Mokola virus
- 4) Genotype 4 consists of Duvenhage virus
- 5) Genotype 5 consists of European Bat lyssavirus 1
- 6) Genotype 6 is European Bat lyssavirus 2
- 7) Genotype 7 is Australian bat lyssavirus, which is diagnosed with rabies DFA conjugate and is vaccinated against with human and animal pre-exposure rabies vaccines and exposed humans are protected with human rabies post-exposure prophylaxis biologics.
- 8) In addition, there have been four genotypes recently discovered, and these are West Caucasian Bat virus, Aravan Virus, Khujand virus, and Irkut virus.

Furthermore:

- The risk of translocation of a variant into a previously uninfected area is greatest with the domestic dog which may be in the incubation period with a canine-rabies virus variant from an area where dog-to-dog transmitted rabies is present to canine rabies-free area. This risk is abrogated by the 6-month quarantine or through microchip (or equivalent identification), vaccination, and confirmation of appropriate immunization through serology (recognizing that on rare occasions, even successfully vaccinated animals may develop rabies depending on the timeframe of vaccination, the severity of the exposure and changes in the health status of the animal).
- Movement of other domestic animal species (none of which is a known reservoir other than dogs) poses much less risk than does the global movement of dogs. An individual animal may be infected with rabies (of any genotype or variant) but if it is not the reservoir species for that particular variant, the probability of an infectious shedding and transmission behavior (mobile and capable of biting) which would be able to perpetuate the infection in contact animals is exponentially lower and has not been documented to happen to date.
- The risk of translocation of a variants associated with wild-canids has been aptly demonstrated by the raccoon rabies virus variant introduction into the mid-Atlantic US from the Southeastern US through intentional translocation of the reservoir species for hunting purposes. Movement of the reservoir species of a wild-canid –associated rabies virus variant from an infected area poses the greatest risk of introduction to new areas. A 6-month quarantine or raising in a confinement facility precluding exposure will abrogate this risk or identification, vaccination (even if off-label as few vaccines are available for most species), and documentation of an appropriate response would greatly minimize risk.
- The “spillover” of European bat Lyssaviruses and Australian bat lyssaviruses to humans and animals does occur and results in fatal encephalitis which is indistinguishable from rabies caused by genotype 1 viruses. From this scientific perspective, The UK, Europe and Australia are not rabies-free. These areas are canine-rabies free, and in-large part, free of terrestrial rabies virus variants associated with wild canids, and have only a very low occurrence of “rabies” in insectivorous bats due to European Bat Lyssavirus, or in the case of Australia, associated with insectivorous and frugivorous bats.

Based on this technical explanation and rationale, the United States recommends re-writing the sentence as shown, and which makes the rest of the chapter congruent with it.

For the purposes of the *Terrestrial Code*:

24. ~~A~~ a *case* is any *animal* infected with the *Rabies virus* species;

32. ~~The~~ *incubation period* for rabies is variable, and ~~but will be considered to be less than 6 months or less; . and~~ € ~~The~~ *infective period* for dogs, cats and ferrets is considered to start 10 days before the onset of the first apparent clinical signs.

Globally, the most common source of exposure of humans to rabies virus is the dog. Other mammals, particularly members of the Orders Carnivora and Chiroptera, also present a risk.

The aim of this chapter is to mitigate the risk ~~related to~~ rabies to human and animal health and to prevent the for international spread of the disease ~~trade and non-commercial movements of rabies susceptible species.~~

~~The most important species for international trade purposes are domestic carnivores (primarily dogs [*Canis familiaris*], cats [*Felis catus*] and ferrets [*Mustela putorius furo*]) and also include domestic livestock (equids, ruminants and suids).~~

~~Rabies can be suspected based on clinical signs or history of exposure to a rabid animal. Confirmation requires antigen detection or virus isolation. Standards for diagnostic tests and vaccines are described in the *Terrestrial Manual*.~~

Members ~~are encouraged to~~ should implement and maintain a programme for the management of stray dog populations consistent with Chapter 7.7.

Article 8.10.2.

Rabies free country

A country may be considered free from rabies when:

1. the *disease* is notifiable and any change in the epidemiological situation or relevant events are ~~should be~~ reported in accordance with Chapter 1.1.;
2. an effective ongoing system of *disease surveillance in accordance with Chapter 1.4* has been in operation for the last 2 years, with a minimum requirement being an on-going early detection programme to ensure investigation and reporting of rabies suspect *animals*;
3. regulatory measures for the prevention of rabies are implemented consistent with the recommendations in the *Terrestrial Code* this chapter, including effective procedures for the importation of animals ~~domestic dogs, cats and ferrets~~;
4. no *case* of indigenously acquired *rabies virus* infection has been confirmed during the past 2 years;
5. no imported *case* ~~reservoir~~ species in the Orders of Carnivora or Chiroptera has been confirmed outside a *quarantine station* for the past 6 months;
6. an imported human *case* of rabies does will not affect the rabies free status.

~~Members should implement and maintain a programme for the management of stray dog populations consistent with Chapter 7.7.~~

~~Article 8.10.3.~~

Country free from dog to dog transmission of rabies

~~A country may be considered free from dog to dog transmission of rabies when:~~

1. ~~the *disease* is notifiable and any change in the epidemiological situation or relevant events are reported in accordance with Chapter 1.1.;~~
2. ~~an effective system of *disease surveillance* has been in operation for the last 2 years, with a minimum requirement being an on-going early detection programme to ensure investigation and reporting of rabies suspect *animals*;~~
3. ~~regulatory measures for the prevention and control of rabies are implemented consistent with the recommendations in this chapter, including vaccination, identification and effective procedures for the importation of domestic dogs, cats and ferrets;~~
4. ~~thorough epidemiological investigations have demonstrated no *case* of dog to dog transmission of rabies during the past 2 years.~~

~~Members should implement and maintain a programme for the management of stray dog populations consistent with Chapter 7.7.~~

Article 8.10.43.

Recommendations for importation from rabies free countries

For domestic mammals, and captive wild mammals

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

1. showed no clinical sign of rabies ~~the day prior to or~~ on the day of shipment;
2. and either:
 - a) were kept since birth or at least 6 months prior to shipment in the free country; or
 - b) were imported in conformity with the regulations stipulated in Articles 8.10.75., 8.10.86., 8.10.97. or 8.10.408.

Article 8.10.54.

Recommendations for importation from rabies free countries

For wild mammals

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

1. showed no clinical sign of rabies ~~the day prior to or~~ on the day of shipment;
2. and either:

- a) have been captured at a distance that precludes any contact with animals in an infected country. The distance should be defined according to the biology of the species exported, including home range and long distance movements, and remained in a rabies free country, at a sufficient distance, based on the biology of species, including home range, from any infected country. The distance should be defined according to the species exported and the reservoir species in the neighbouring infected countries; or
- b) were kept for the 6 months prior to shipment in a rabies free country.

~~Article 8.10.6~~

~~Recommendations for importation of dogs from countries free from dog to dog transmission of rabies~~

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

- ~~1. were kept for at least the 6 months prior to shipment in a country free from dog to dog transmission of rabies;~~
- ~~2. were permanently identified (e.g., by a microchip or tattoo) and the identification number should be stated in the *certificate*;~~
- ~~3. received, prior to shipment, a valid anti-rabies vaccination in accordance with the *Terrestrial Manual*, or revaccination if applicable, in accordance with the recommendations of the manufacturer;~~
- ~~4. showed no clinical sign of rabies the day prior to or on the day of shipment;~~

Article 8.10.75.

Recommendations for importation of dogs, cats and ferrets from countries considered infected with rabies

Veterinary Authorities should require the presentation of an *international veterinary certificate* complying with the model of Chapter 5.11, attesting that the *animals*:

1. showed no clinical sign of rabies ~~the day prior to or~~ on the day of shipment;
2. were permanently identified and their identification number stated in the *certificate*;

AND EITHER:

- ~~2. were permanently identified (e.g., by a microchip or tattoo) and their identification number should be stated in the *certificate*; and~~
3. received, prior to shipment, a ~~valid anti-rabies vaccination or revaccination if applicable, in accordance with the recommendations of the manufacturer;~~ The vaccine should have been produced in accordance with the *Terrestrial Manual*; ~~or revaccination if applicable, in accordance with the recommendations of the manufacturer; vaccination and~~
4. were subjected not less than 3 months and not more than 12 months prior to shipment to an antibody titration test as prescribed in the *Terrestrial Manual* with a positive result of at least 0.5IU/ml;

OR

5. ~~have not been vaccinated against rabies or do not meet all the conditions set out in points 2, 3 and 4 above;~~ in such cases, the ~~animals~~ should be were quarantined for 6 months prior to export.

Article 8.10.86.

Recommendations for importation of domestic ruminants, equids, camelids and suids from countries considered infected with rabies

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

1. showed no clinical sign of rabies the day prior to or on the day of shipment.
2. were permanently identified (e.g. by ear tag, microchip or tattoo) and the identification number should be stated in the certificate;
3. a) were kept for the 6 months prior to shipment in an *establishment* where no *case* of rabies was reported for at least 12 months prior to shipment;
or
 b) were vaccinated in accordance with the recommendations of the manufacturer, using a vaccine produced in accordance with the *Terrestrial Manual*.

~~Article 8.10.9.~~

~~Recommendations for importation of domestic equids from countries considered infected with rabies~~

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

1. ~~showed no clinical sign of rabies the day prior to or on the day of shipment;~~
2. ~~and either:~~
 - a) ~~were kept for the 6 months prior to shipment in an *establishment* where no contact with reservoir species was maintained and where no *case* of rabies was reported for at least 12 months prior to shipment; or~~
 - b) ~~were vaccinated as prescribed in the *Terrestrial Manual*.~~

Article 8.10.107.

Recommendations for importation from countries considered infected with rabies

For rodents and lagomorphs born and reared in a biosecure facility

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

1. showed no clinical sign of rabies on the day of shipment;

2. were kept since birth in a biosecure facility where no *case* of rabies was reported for at least 12 months prior to shipment.

~~Article 8.10.11.~~

~~Recommendations for importation from countries considered infected with rabies~~

~~for captive wild animals (other than non-human primates and captive wild carnivores)~~

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

1. ~~showed no clinical sign of rabies the day prior to or on the day of shipment;~~
2. ~~were kept since birth, or for the 6 months prior to shipment, in an *establishment* where no contact with reservoir species and where no *case* of rabies was reported for at least 12 months prior to shipment.~~

Article 8.10.128.

Recommendations for importation of wildlife from countries considered infected with rabies

~~for wild and feral animals (other than non-human primates and Chiroptera)~~

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

1. showed no clinical sign of rabies ~~the day prior to or~~ on the day of shipment;
2. were kept for the 6 months prior to shipment in an *establishment* where separation from susceptible wild animals and feral animals was maintained and where no *case* of rabies was reported for at least 12 months prior to shipment.

~~Article 8.10.13.~~

~~Recommendations for importation from countries considered infected with rabies~~

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

~~for captive non-human primates~~

1. ~~the animals showed no clinical sign of rabies the day prior to or on the day of shipment;~~
2. ~~quarantine measures were applied in accordance with Chapter 5.9. and Chapter 6.11.~~