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CHAPTER 11.8.

BOVINE TUBERCULOSIS OF FARMED CERVIDAE

Article 11.8.1.

General provisions

The recommendations in this chapter are intended to manage the human and animal health risks associated with *Mycobacterium bovis* (*M. bovis*) infection in domestic (permanently captive and owned free-range) farmed cervidae (red deer, wapiti, sika, samba, rusa, fallow deer, white-tailed, black-tailed and mule deer [*Cervus elephus*, *C. canadensis*, *C. nippon*, *C. unicolor unicolor*, *C. timorensis*, *Dama dama dama*, *Odocoileus virginianus borealis*, *Odocoileus hemionus columbianus* and *Odocoileus hemionus hemionus*]). The chapter does not address the management of tuberculosis in wild cervid populations.

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

Article 11.8.2.

Country or zone free from bovine tuberculosis of farmed cervidae

To qualify as free from bovine tuberculosis of farmed cervidae, a country or *zone* should satisfy the following requirements:

1. *M. bovis* infection in domestic bovines and in farmed cervidae as specified in Article 11.8.1. is a *notifiable disease* in the country;
2. an on-going awareness programme should be in place to encourage reporting of all *cases* suggestive of tuberculosis;
3. regular and periodic testing of all *herds* of farmed cervidae has demonstrated that *M. bovis* infection was not present in at least 99.8% of the *herds* and 99.9% of the farmed cervidae in the country or *zone* for 3 consecutive years;
4. a *surveillance* programme should be in place to detect bovine tuberculosis in the country or *zone* through ante-mortem and post-mortem inspection as described in Chapter 6.2.;
5. if the *surveillance* programme described in points 3 and 4 above ~~has not detected infection with demonstrated that~~ *M. bovis* infection was not present in at least 99.8% of the herds and 99.9% of the farmed cervidae in the country or zone for 5 consecutive years, *surveillance* may be maintained through ante-mortem and post-mortem inspection as described in Chapter 6.2.;
6. farmed cervidae introduced into a country or *zone* free from bovine tuberculosis should be accompanied by a certificate from an *Official Veterinarian* attesting that they come from a country, *zone*, *compartment* or *herd* free from bovine tuberculosis or comply with the relevant provisions in Article 11.8.5. or in 11.8.6.

Article 11.8.3.

Compartment free from bovine tuberculosis of farmed cervidae

To qualify as a *compartment* free from bovine tuberculosis of farmed cervidae, the *Veterinary Authority* should be able to certify that the following requirements are satisfied:

1. all farmed cervidae:
 - a. showed no sign of bovine tuberculosis or lesions at ante-mortem or post-mortem inspection for at least 3 consecutive years;
 - b. were over 6 weeks of age at the time of the first test and have shown a negative result to at least two tuberculin tests carried out at an interval of a minimum of 6 months, the first test being performed at least 6 months following the *slaughter* of the last affected animal;
 - c. met one of the following conditions:
 - i. showed a negative result to a biannual tuberculin test to ensure the continuing absence of bovine tuberculosis if the annual percentage of *herds* confirmed as infected with tuberculosis is more than 1% of all *herds* in the country or *zone* during the last 2 years; or
 - ii. showed a negative result to an annual tuberculin test to ensure the continuing absence of bovine tuberculosis if the annual percentage of *herds* confirmed as infected with tuberculosis is more than 0.2% but not more than 1% of all *herds* in the country or *zone* during the last 2 years; or
 - iii. showed a negative result to a tuberculin test every 3 years to ensure the continuing absence of bovine tuberculosis if the annual percentage of *herds* confirmed as infected with tuberculosis is not more than 0.2% of all *herds* in the country or *zone* during the last 4 years; or
 - iv. showed a negative result to a tuberculin test every 4 years to ensure the continuing absence of bovine tuberculosis if the annual percentage of *herds* confirmed as infected with tuberculosis is not more than 0.1% of all *herds* in the country or *zone* during the last 6 years;
2. farmed cervidae introduced into the *compartment* come from a *herd* free from bovine tuberculosis. This condition may be waived for animals which have been isolated for at least 90 days and which, prior to entry into the *compartment*, were subjected to at least two tuberculin tests carried out at a 6-month interval with negative results with the second tuberculin test performed during the 30 days prior to entry into the *compartment*;
3. farmed cervidae in a *compartment* free from bovine tuberculosis are protected from contact with wildlife reservoirs of bovine tuberculosis and are managed under a common biosecurity plan protecting them from contamination with *M. bovis*, and the *compartment* has been approved by the *Veterinary Authority* in accordance with Chapters 4.3. and 4.4.

Article 11.8.4.

Herd free from bovine tuberculosis

To qualify as free from bovine tuberculosis, a *herd* of farmed cervidae should satisfy the following requirements:

1. the *herd* is in a country, a *zone* or a *compartment* free from bovine tuberculosis and is certified free by the *Veterinary Authority*; or
2. farmed cervidae in the *herd*:
 - a. showed no sign of bovine tuberculosis or lesions at ante-mortem or post-mortem inspection for at least 3 consecutive years;
 - b. were over 6 weeks of age at the time of the first test and have shown a negative result to at least two tuberculin tests carried out at an interval of a minimum of 6 months, the first test being performed at least 6 months following the *slaughter* of the last affected animal;
 - c. met one of the following conditions:
 - i. showed a negative result to an annual tuberculin test to ensure the continuing absence of bovine tuberculosis; or
 - ii. showed a negative result to a tuberculin test every 2 years to ensure the continuing absence of bovine tuberculosis if the annual percentage of *herds* confirmed as infected with tuberculosis is not more than 1% of all *herds* in the country or *zone* during the last 2 years; or
 - iii. showed a negative result to a tuberculin test every 3 years to ensure the continuing absence of bovine tuberculosis if the annual percentage of *herds* confirmed as infected with tuberculosis is not more than 0.2% of all *herds* in the country or *zone* during the last 4 years; or
 - iv. showed a negative result to a tuberculin test every 4 years to ensure the continuing absence of bovine tuberculosis if the annual percentage of *herds* confirmed as infected with tuberculosis is not more than 0.1% of all *herds* in the country or *zone* during the last 6 years;
3. farmed cervidae introduced into the *herd* come from a *herd* free from bovine tuberculosis. This condition may be waived for animals which have been isolated for at least 90 days and which, prior to entry into the *herd*, were subjected to at least two tuberculin tests carried out at a 6-month interval with negative results.

Article 11.8.5.

Recommendations for the importation of farmed cervidae for breeding or rearing

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

1. showed no signs of bovine tuberculosis on the day of shipment;
2. originate from a *herd* free from bovine tuberculosis of farmed cervidae that is in a country, *zone* or *compartment* free from bovine tuberculosis of farmed cervidae; or
3. were subjected to the tuberculin test for bovine tuberculosis with negative results during the 30 days prior

to shipment and come from a *herd* free from bovine tuberculosis of farmed cervidae; or

4. have been isolated for at least 90 days prior to entry into the *herd*, including protection from contact with wildlife reservoirs of bovine tuberculosis and were subjected to at least two tuberculin tests carried out at a six-month interval with negative results with the second tuberculin test performed during the 30 days prior to entry into the *herd*.

Article 11.8.6.

Recommendations for the importation of farmed cervidae for slaughter

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

1. showed no signs of bovine tuberculosis on the day of shipment;
2. originated from a *herd* free from bovine tuberculosis of farmed cervidae or were subjected to a tuberculin test for bovine tuberculosis with negative results during the 30 days prior to shipment;
3. were not being eliminated as part of an eradication programme against bovine tuberculosis.

Article 11.8.7.

Recommendations for the importation of semen of farmed cervidae

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

1. the donor animals showed no signs of bovine tuberculosis on the day of collection of the semen; and either:
 - a. were kept in a *herd* free from bovine tuberculosis in any species, in a country, *zone* or *compartment* free from bovine tuberculosis of farmed cervidae, and which only accepts animals from free *herds* in a free country, *zone* or *compartment*; or
 - b. showed negative results to tuberculin tests carried out annually and were kept in a *herd* free from bovine tuberculosis;
2. the semen was collected, processed and stored in conformity with the provisions of Chapter 4.5. and Chapter 4.6.

Article 11.8.8.

Recommendations for the importation of embryos/ova of farmed cervidae

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

1. the donor females and all other susceptible animals in the *herd* of origin showed no signs of bovine tuberculosis during the 24 hours prior to embryo collection; and either
 - a. originated from a *herd* free from bovine tuberculosis of farmed cervidae in a country, *zone* or *compartment* free from bovine tuberculosis; or

- b. were kept in a *herd* free from bovine tuberculosis of farmed cervidae and were subjected to a tuberculin test for bovine tuberculosis with negative results during an isolation period of 30 days in the *establishment* of origin prior to collection;
2. the embryos/ova were collected, processed and stored in conformity with the provisions of Chapters 4.7., 4.8. and 4.9., as relevant.

Article 11.8.9.

Recommendations for the importation of fresh meat and meat products of farmed cervidae

Veterinary Authorities of importing countries should require the presentation of an *international veterinary certificate* attesting that the entire consignment of *meat* comes from animals which have been subjected to ante-mortem and post-mortem inspections as described in Chapter 6.2.