CHAPTER 14.9.

SCRAPIE

Article 14.9.1.

General provisions and safe commodities

Scrapie is a neurodegenerative *disease* of sheep and goats. The main mode of transmission is from mother to offspring immediately after birth and to other susceptible neonates exposed to the birth fluids and tissues of an infected *animal*. Transmission occurs at a much lower frequency to adults exposed to the birth fluids and tissues of an infected *animal*. A variation in genetic susceptibility of sheep has been recognised. The *incubation period* of the *disease* is variable; however, it is usually measured in years. The duration in *incubation period* can be influenced by a number of factors including host genetics and strain of agent.

Scrapie is not considered to pose a risk to human health. The recommendations in this chapter are intended to manage the animal health risks associated with the presence of the scrapie agent in sheep and goats. The chapter excludes so-called 'atypical' scrapie because this condition is clinically, pathologically, biochemically and epidemiologically unrelated to 'classical' scrapie, may not be contagious and may, in fact, be a spontaneous degenerative condition of older sheep.

1) When authorising import or transit of the following *commodities* derived from sheep or goats and any products made from these *commodities* and containing no other tissues from sheep or goats, *Veterinary Authorities* should not require any scrapie-related conditions, regardless of the scrapie risk status of the sheep and goat populations of the *exporting country*, *zone* or *compartment*:
   a) *in vivo* derived sheep embryos handled in accordance with Chapter 4.7. of this *Terrestrial Code*;
   b) *meat* (excluding materials as referred to in Article 14.9.12.);
   c) hides and skins;
   d) gelatine;
   e) collagen prepared from hides or skins;
   f) tallow (maximum level of insoluble impurities of 0.15 percent in weight) and derivatives made from this tallow;
   g) dicalcium phosphate (with no trace of protein or fat);
   h) wool or fibre.
2) 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 scrapie risk status of the sheep and goat populations of the *exporting country*, *zone* or *compartment*.

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

Article 14.9.2.

Determination of the scrapie status of the sheep and goat populations of a country, zone, compartment or establishment

The scrapie status of the sheep and goat populations of a country, *zone*, *compartment* or *establishment* should be determined on the basis of the following criteria:

1) the outcome of a *risk assessment* identifying all potential factors for scrapie occurrence and their historic perspective, in particular the:
   a) importation or introduction of sheep and goats or their semen, *in vivo* derived goat embryos or *in vitro* processed sheep and goat embryos/oocytes potentially infected with scrapie;
   b) extent of knowledge of the population structure and husbandry practices of sheep and goats;
   c) feeding practices, including consumption of *meat-and-bone meal* or *greaves* derived from ruminants;
   d) importation of *milk* and *milk products* of sheep or goats origin intended for use in feeding of sheep and goats;

2) an on-going awareness programme for *veterinarians*, farmers, and workers involved in transportation, marketing and *slaughter* of sheep and goats to facilitate recognition and encourage reporting of all *animals* with clinical signs compatible with scrapie;

3) a *surveillance* and monitoring system including the following:

   a) official veterinary *surveillance*, reporting and regulatory control in accordance with the provisions of Chapter 1.4.;

   b) a *Veterinary Authority* with current knowledge of, and authority over, all *establishments* which contain sheep and goats in the whole country;

   c) compulsory notification and clinical investigation of sheep and goats showing clinical signs compatible with scrapie;

   d) examination, in accordance with the *Terrestrial Manual*, in a *laboratory* of appropriate material from sheep and goats older than 18 months displaying clinical signs compatible with scrapie;

   e) maintenance of records including the number and results of all investigations for at least seven years.

Article 14.9.3.

Scrapie free country or zone

Countries or *zones* may be considered free from scrapie if within the said territory:

1) a *risk assessment*, as described in point 1 of Article 14.9.2., has been conducted, and it has been demonstrated that appropriate measures are currently in place and have been taken for the relevant period of time to manage any *risk* identified and points 2 and 3 have been complied with for the preceding seven years;

AND

2) one of the following conditions should be met:

   a) the country or the *zone* have demonstrated historical freedom as follows:

      i) scrapie has been notifiable for at least 25 years; and

      ii) a formal programme of targeted *surveillance* and monitoring, which includes testing of sheep and goats displaying clinical signs compatible with scrapie and those over 18 months of age slaughtered, culled or found dead on farm, can be documented as having been in place for at least 10 years; and

      iii) appropriate measures to prevent scrapie introduction can be documented as having been in place for at least 25 years; and

         – either scrapie has never been reported; or

         – no *case* of scrapie has been reported for at least 25 years;

   b) for at least seven years, sheep and goats displaying clinical signs compatible with scrapie have been tested. Also a sufficient number of sheep and goats over 18 months of age, representative of slaughtered, culled or found dead on farm, have been tested annually, to provide a 95 percent level of confidence of detecting scrapie if it is present in that population at a prevalence rate exceeding 0.1 percent and no *case* of scrapie has been reported during this period; or

   c) all *establishments* containing sheep or goats have been accredited free as described in Article 14.9.5.;

AND

3) the feeding to sheep and goats of *meat-and-bone meal* or *greaves* of ruminant origin has been banned and effectively enforced in the whole country for at least seven years;

AND

4) introductions of sheep and goats or their semen, *in vivo* derived goat embryos or *in vitro* processed sheep and goat embryos/oocytes from countries or *zones* not free from scrapie are carried out in accordance with Articles 14.9.6., 14.9.7., 14.9.8. or 14.9.9., as relevant.

Article 14.9.4.

Compartment free from scrapie

To qualify as a *compartment* free from scrapie, all sheep and goats in a *compartment* should be certified by the *Veterinary Authority* as satisfying the following requirements:

1) all *establishments* within the *compartment* are free from scrapie according to Article 14.9.5.;

2) all *establishments* within the *compartment* are managed under a common *biosecurity plan* protecting them from introduction of scrapie, and the *compartment* has been approved by the *Veterinary Authority* in accordance with Chapters 4.3. and 4.4.;

3) introductions of sheep and goats are allowed only from free *establishments* or free countries;

4) introductions of *in vivo* derived goat embryos and *in vitro* processed sheep and goat embryos/oocytes are allowed either from free *establishments* or in accordance with Article 14.9.9.;

5) sheep and goat semen should be introduced into the *compartment* in accordance with Article 14.9.8.;

6) sheep and goats in the *compartment* should have no direct or indirect contact, including shared grazing, with sheep or goats from *establishments* not within the *compartment*.

Article 14.9.5.

Scrapie free establishment

To qualify as free from scrapie, an *establishment* of sheep and goats should satisfy the following requirements:

1) in the country or *zone* where the *establishment* is situated, the following conditions are fulfilled:

   a) the *disease* is compulsorily notifiable;

   b) an awareness, *surveillance* and monitoring system as referred to in Article 14.9.2. is in place;

   c) affected sheep and goats are killed and completely destroyed;

   d) the feeding to sheep and goats of *meat-and-bone meal* or *greaves* of ruminant origin has been banned and effectively enforced in the whole country for at least seven years;

   e) an official accreditation scheme is in operation under the supervision of the *Veterinary Authority*, including the measures described in point 2 below;

2) in the *establishment* the following conditions have been complied with for at least seven years:

   a) sheep and goats are permanently identified and records maintained, to enable trace back to their *establishment* of birth;

   b) records of movements of sheep and goats in and out of the *establishment* are maintained;

   c) introductions of sheep and goats are allowed only from free *establishments* or *establishment* at an equal or higher stage in the process of accreditation;

   d) introduction of *in vivo* derived goat embryos and *in vitro* processed sheep and goat embryos /oocytes should comply with Article 14.9.9.;

   e) sheep and goat semen should be introduced into the *establishment* in accordance with Article 14.9.8.;

   f) an *Official Veterinarian* inspects sheep and goats in the *establishments* and audits the records at least once a year;

   g) no *case* of scrapie has been reported;

   h) sheep and goats of the *establishments* should have no direct or indirect contact, including shared grazing, with sheep or goats from *establishments* of a lower status;

   i) all culled sheep and goats over 18 months of age are inspected by an *Official Veterinarian*, and a proportion of those exhibiting wasting signs and all those exhibiting neurological signs are tested in a *laboratory* for scrapie. The selection of the sheep and goats to be tested should be made by the *Official Veterinarian*. Sheep and goats over 18 months of age that have died or have been killed for reasons other than routine *slaughter* should also be tested (including ‘fallen’ stock and those sent for emergency *slaughter*).

Article 14.9.6.

Recommendations for importation from countries or zones not considered free from scrapie

For sheep and goats for breeding or rearing

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that the *animals* come from an *establishment* free from scrapie as described in Article 14.9.5.

Article 14.9.7.

Recommendations for importation from countries or zones not considered free from scrapie

For sheep and goats for slaughter

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

1) in the country or *zone*:
   a) the *disease* is compulsorily notifiable;
   b) an awareness, *surveillance* and monitoring system as referred to in Article 14.9.2. is in place;
   c) affected sheep and goats are killed and completely destroyed;
2) the sheep and goats selected for export showed no clinical sign of scrapie on the day of shipment.

Article 14.9.8.

Recommendations for importation from countries or zones not considered free from scrapie

For semen of sheep and goats

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

1) the donor *animals*:
   a) are permanently identified to enable trace back to their *establishment* of origin;
   b) showed no clinical sign of scrapie at the time of semen collection;
2) the semen was collected, processed and stored in conformity with the provisions of Chapters 4.5. and 4.6.

Article 14.9.9.

Recommendations for importation from countries or zones not considered free from scrapie

For *in vivo* derived goat embryos and *in vitro* processed sheep and goat embryos/oocytes

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

1) in the country or *zone*:
   a) the *disease* is compulsorily notifiable;
   b) an awareness, *surveillance* and monitoring system as referred to in Article 14.9.2. is in place;
   c) affected sheep and goats are killed and completely destroyed;
   d) the feeding to sheep and goats of *meat-and-bone meal* or *greaves* of ruminant origin has been banned and effectively enforced in the whole country;
2) the donor *animals* either have been kept since birth in a free *establishment*, or meet the following conditions:
   a) are permanently identified to enable trace back to their *establishment* of origin;
   b) have been kept since birth in *establishments* in which no *case* of scrapie had been confirmed during their residency;
   c) showed no clinical sign of scrapie at the time of embryo/oocyte collection;
3) the embryos/oocytes were collected, processed and stored in conformity with the provisions of Chapters 4.7., 4.8. and 4.9., as relevant.

Article 14.9.10.

Recommendations for importation from countries or zones not considered free from scrapie

For milk and milk products of sheep or goat origin intended for use in feeding of sheep and goats

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that the *milk* and *milk products* come from scrapie free *establishments*.

Article 14.9.11.

Recommendations on meat-and-bone meal

Meat-and-bone meal containing any sheep or goat protein, or any feedstuffs containing that type of *meat-and-bone meal*, which originate from countries not considered free of scrapie should not be traded between countries for ruminant feeding.

Article 14.9.12.

Recommendations for importation from countries or zones not considered free from scrapie

For skulls including brains, ganglia and eyes, vertebral column including ganglia and spinal cord, tonsils, thymus, spleen, intestine, adrenal gland, pancreas, or liver, and protein products derived therefrom, from sheep and goats

1) These *commodities* should not be traded for use in ruminant feeds.
2) For purposes other than ruminant feeding, *Veterinary Authorities* should require the presentation of an *international veterinary certificate* attesting that:
    a) in the country or *zone*:
        i) the *disease* is compulsorily notifiable;
        ii) an awareness, *surveillance* and monitoring system as referred to in Article 14.9.2. is in place;
        iii) affected sheep and goats are killed and completely destroyed;
    b) the materials come from sheep and goats that showed no clinical sign of scrapie on the day of *slaughter*.

Article 14.9.13.

Recommendations for the importation of ovine and caprine materials destined for the preparation of biologicals

Veterinary Authorities of *importing countries* should require the presentation of an *international veterinary certificate* attesting that the products originate from sheep and goats born and raised in a scrapie free country, *zone* or *establishment*.