Ministry for Primary Industries
Manatū Ahu Matua

Guidance Document

Semen and Embryos from Horses (Equidae)

HORSSEMB.SPE

24 May 2023

A guidance document issued by the Ministry for Primary Industries

Te Kāwanatanga o Aotearoa
New Zealand Government

Title

Guidance Document: Semen and Embryos from Horses (Equidae)

About this document

This guidance document contains information about acceptable ways of ensuring compliance with the requirements in the *Import Health Standard (IHS): Semen and Embryos from Horses (Equidae).*

Any guidance on how to comply with the applicable requirements may not be the only way to achieve compliance. Stakeholders are encouraged to discuss departures from the approaches outlined in this guidance document with the Ministry for Primary Industries (MPI) to avoid expending resources on the development of alternative approaches which may later be considered unsuitable.

The term "must" is not typically used in guidance. In this particular document if the term "must" is used, it is used in the context of quoting or paraphrasing the requirements set out in the related *IHS: Semen and Embryos from Horses (Equidae).*

Related Requirements

IHS: Semen and Embryos from Horses (Equidae)

Document history

Refer to Appendix 1.

Contact Details

For further information and questions about this guidance document, please contact:

Animal Imports
Biosecurity New Zealand
Ministry for Primary Industries
PO Box 2526
Wellington 6140

Email: animal.imports@mpi.govt.nz

Disclaimer

This guidance does not constitute, and should not be regarded as, legal advice. While every effort has been made to ensure the information in this guidance is accurate, the Ministry for Primary Industries does not accept any responsibility or liability whatsoever for any error of fact, omission, interpretation or opinion that may be present, however it may have occurred.

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Contents

1 Purpose

(1) This guidance document has been issued to accompany the *IHS: Semen and Embryos from Horses (Equidae)*. This guidance document should be read in conjunction with that standard.

(2) This document includes:

a) A table listing countries with MPI approved export systems to import equine semen and embryos into New Zealand.
b) Model semen and embryo veterinary certificates.
c) Links to the negotiated country-specific certificates.

2 Background

(1) The *IHS: Semen and Embryos from Horses (Equidae)* which this guidance document accompanies manages the biosecurity risk of importing semen and embryos from horses *(Equidae)* from those countries covered by the IHS (Australia, Canada, the European Union, Norway, Switzerland, the United Kingdom, and the United States of America) and in doing so meet New Zealand's appropriate level of protection. This guidance document contains a model veterinary certificate and the links to the bilaterally agreed country-specific veterinary certificates to be used for trade in semen and embryos from horses *(Equidae)*. The country-specific veterinary certificate represents what will be certified prior to exporting consignments of semen and embryos from horses *(Equidae)* from the country specified.

(2) General information about importing semen and embryos can be found here: http://www.mpi.govt.nz/importing/live-animals/semen-and-embryos/

3 Definitions

(3) Refer to Schedule 2 of the *IHS: Semen and Embryos from Horses (Equidae)*.

4 Importer responsibilities

(1) The costs to MPI in performing functions relating to the importation of semen and embryos from horses *(Equidae)* will be recovered in accordance with the Biosecurity Act 1993 (the Act) and any regulations made under that Act. All costs involved with documentation, transport, storage and obtaining a biosecurity clearance will be covered by the importer or agent.

5 Guidance

5.1 Equivalence and permits

(1) MPI may accept an alternative method, system or process that can be shown to achieve the biosecurity requirements of the IHS (i.e. equivalence) under section 27(1)(d) of the Act.

(2) MPI's preference is that the exporting country's Competent Authority makes equivalence requests. Equivalence requests can be lodged with animal.imports@mpi.govt.nz

(3) A permit to import is not required to import semen and embryos from horses *(Equidae)* into New Zealand if the requirements of the IHS are met.

(4) A permit may be required where specific equivalence measures are approved by MPI as per the equivalence clause in the IHS. A permit to import serves as evidence of equivalence decisions and will be written as specific notes in the special conditions section of the permit.

(5) Permit to import application forms can be found on the MPI website at: *Forms and templates for importing semen and embryos*.

(6) Completed applications are lodged with animal imports animal.imports@mpi.govt.nz.

5.2 Inspection and verification

(1) On arrival, all documentation accompanying the consignment will be verified by an inspector. The inspector may also inspect the consignment, or a sample of the consignment on arrival.

(2) Inspectors are able to inspect and verify due to their authorised powers under the Act.

5.3 Specified countries

(1) The IHS is for semen and embryos of horses (Equidae) from specified countries. These countries are listed in the IHS. The IHS is based upon an import risk analysis (2009 IRA) written for specified countries which include Australia, Canada, the EU, and the USA. Based on equivalent disease freedom status, Switzerland, Norway and the United Kingdom are included in the IHS. Full justification of measures in the IHS can be found in the *Risk Management Proposal: Semen and Embryos from Horses (Equidae)*.

(2) Competent Authorities of other countries must approach MPI for approval of their exporting systems to allow for imports of semen and embryos of horses into New Zealand. Approval will also require an expansion of the IRA to incorporate measures for these countries.

5.4 Incorporation of material by reference

(1) Incorporation by reference means that standards, guidelines or lists are incorporated into the IHS and they form part of the requirements. This is done because technical documents are too large or impractical to include in the IHS.

(2) Where the IHS states that section 142O(1) of the Biosecurity Act does not apply, this means that importers need to refer to the most recent version of any standards, guidelines or lists that are incorporated by reference in the IHS.

5.5 Diagnostic tests and vaccines

(1) MPI lists all approved diagnostic tests, treatments and vaccines in the MPI document, *Approved Diagnostic Tests, Vaccines, Treatments and Post-Arrival Testing Laboratories for Animal Import Health Standards, MPI-STD-TVTL*.

(2) Where the World Organisation of Animal Health (WOAH, founded as OIE) recommended diagnostic tests and vaccines are listed, details can be found in the OIE *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals* found on the WOAH website: Terrestrial Manual Online Access - WOAH - World Organisation for Animal Health.

5.6 Semen collection and processing

(1) The current recommendations of the OIE *Terrestrial Animal Health Code* Article 4.7.6. on the conditions applicable to the collection of equine semen:

a) The floor of the mounting area should be clean and provide safe footing. A dusty floor should be avoided.

b) The hindquarters of the teaser, whether a dummy or a live teaser animal, should be kept clean. A dummy should be cleaned completely after each period of collection. A teaser animal should have its hindquarters cleaned carefully before each collecting session. The dummy or hindquarters of the teaser animals should be sanitised after the collection of each ejaculate. Disposable plastic covers may be used.
c) The hand of the person collecting the semen should not come into contact with the animal's penis. Disposable gloves should be worn by the collector and changed for each collection.
d) The artificial vagina should be cleaned completely after each collection where relevant. It should be dismantled, its various parts washed, rinsed and dried, and kept protected from dust. The inside of the body of the device and the cone should be disinfected before re-assembly using approved disinfection techniques such as those involving the use of alcohol, ethylene oxide or steam. Once re-assembled, it should be kept in a cupboard which is regularly cleaned and disinfected.
e) The lubricant used should be clean. The rod used to spread the lubricant should be clean and should not be exposed to dust between successive collections.
f) The artificial vagina should not be shaken after ejaculation, otherwise lubricant and debris may pass down the cone to join the contents of the collecting tube.
g) When successive ejaculates are being collected, a new artificial vagina should be used for each mounting. The vagina should also be changed when the animal has inserted its penis without ejaculating.
h) The collecting tubes should be sterile, and either disposable or sterilised by autoclaving or heating in an oven at 180°C for at least 30 minutes. They should be kept sealed to prevent exposure to the environment while awaiting use.
i) After semen collection, the tube should be left attached to the cone and within its sleeve until it has been removed from the collection room for transfer to the laboratory.

(2) Semen can be contained in various types of receptacles, such as a vial, goblet, ampoule, screw-top container or straw, as long as they are tamper-evident and separate semen from individual donors.

5.7 Agreed country-specific veterinary certificates

(1) Requests from exporting countries to negotiate veterinary certification for the import of semen and embryos from horses (Equidae) into New Zealand will be prioritised according to MPI resources available at the time of application.

(2) A model veterinary certificate is provided in this guidance document and can be used by the Competent Authority as a reference for country-specific veterinary certificate negotiation.

(3) All country-specific veterinary certificates agreed between an exporting country's Competent Authority and MPI are included in the following table:

For Semen

Country	Link to certificate	S27 CTO direction #	Date agreed	Date applicable for use
Australia	Australia Australia Cert A Australia Cert B	2017 045 [B] 2016 062 [B]	1 November 2017	1 November 2017
Canada	Canada	N/A	5 April 2018	5 April 2018
Netherlands	Netherlands	2018 053 [B]	20 December 2018	20 December 2018
USA	USA	N/A	17 July 2018	17 July 2018

For Embryos

Country	Link to certificate	S27 CTO direction #	Date agreed	Date applicable for use
Australia	Australia	2016 047 [B]	1 November 2017	1 November 2017

(4) Country-specific veterinary certificates with equivalent measures will be recorded with a number relevant to a Chief Technical Officer (CTO) direction under section 27(1)d(iii) of the Act, to enable border staff to clear the goods and record the number in the MPI database.

(5) When a newly negotiated country-specific veterinary certificate replaces one which is currently in use, the application of new import conditions will apply according to the dates listed in the table. At that time previous veterinary certificates for that country can no longer be used.

(6) After issue of the IHS, the measures may be used by countries which already have an agreed veterinary certificate. Using the measures before a new country-specific veterinary certificate is agreed can create challenges at the time of biosecurity clearance. MPI should be notified prior to their use in order to provide clarification to border staff.

(7) When a country-specific veterinary certificate is agreed, there will be a four-month transition period to allow donors to be prepared in accordance with the new conditions. During transition, both the old and the new import conditions are acceptable. After transition, the previous veterinary certificate for that country can no longer be used.

5.8 Model veterinary certificate for horse semen

(1) Below is the model veterinary certificate for trade in semen from horses (Equidae). The model meets the requirements of the IHS.

(2) The model veterinary certificate format is based on the *Code* Chapter for model veterinary certificates for international trade in semen and embryos.

<table>
<tr><td colspan="3">Country:</td></tr>
<tr><td rowspan="8">Part I: Details of dispatched consignment</td><td>I.1. Consignor (Exporter):
Name:
Address:</td><td>I.2. Certificate reference number:
I.3. Competent Authority:</td></tr>
<tr><td colspan="2">I.4. Consignee (Importer):
Name:
Address:</td></tr>
<tr><td>I.5. Country of origin:
ISO Code*:</td><td>I.6. Zone or compartment of origin**:</td></tr>
<tr><td>I.7. Country of destination:
ISO Code*:</td><td>I.8. Zone or compartment of destination**:</td></tr>
<tr><td colspan="2">I.9. Place of origin:
Name:
Address:</td></tr>
<tr><td>I.10. Place of shipment:</td><td>I.11. Date of departure:</td></tr>
<tr><td>I.12. Means of transport:
☐ Aeroplane ☐ Ship

Identification:</td><td>I.13. Expected border post:
I.14. CITES permit No(s)**:</td></tr>
<tr><td>I.15. Description of commodity:</td><td>I.16. Commodity code (HS Code):
I.17. Total quantity:</td></tr>
<tr><td></td><td>I.18. Temperature of the product:

☐ Chilled ☐ Frozen</td><td>I.19. Total number of packages:</td></tr>
<tr><td></td><td>I.20. Identification of container/seal number:</td><td>I.21. Type of packaging:</td></tr>
<tr><td></td><td colspan="2">I.22. Commodities intended for use as:
☐ Artificial Reproduction
☐ Other</td></tr>
<tr><td></td><td colspan="2">I.23. Not Applicable</td></tr>
<tr><td></td><td colspan="2">I.24. Identification of commodities: Species (Scientific name): Horse (Equidae)

<table>
<tr><th>Approval number of establishments</th><th>Net weight</th><th>Treatment type</th><th>Lot ID/Date code</th></tr>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
</table>
* Optional.
** If referenced in Part II.</td></tr>
</table>

Part II: Specific Requirements **Country:**	**Certificate reference number:**

Donor identification	
Breed	
Date of birth	
Country of birth	
Date of entry into collection centre	
Date(s) of collection	
Straw identification	
Number of straws	

**only to be filled out in case the tabulated summary of tests and results is not used*

I,…….., the undersigned Official Veterinarian certifies that the semen described above satisfy(ies) the following requirements:

Eligibility

(1) The semen is from equids.

(2) The semen is fresh-chilled/frozen and non-genetically modified.

Diagnostic testing, vaccination, and treatment

(3) All required laboratory testing was conducted at a laboratory approved to conduct export testing by the Competent Authority of a country approved to export equine semen to New Zealand.

(4) Original or copies of laboratory reports, or an endorsed, tabulated summary, including test date, type, and results for each donor, are attached to this veterinary certificate.

(5) All products and vaccinations administered to donor animals for the purposes of meeting the specific disease requirements of this certificate were administered according to the manufacturer's instruction in a country approved to export to New Zealand. Vaccinations were either the final dose of a primary course or the recommended booster to complement the primary.

Semen centre requirements

(6) The semen centre meets the conditions specified in the OIE *Code* Chapter on general hygiene in semen collection and processing centres.

(7) The semen centre was:

a) Approved for export by the Competent Authority.
b) Subject to regular annual inspection by an Official Veterinarian.
c) Under the supervision of a semen centre veterinarian approved by the Competent Authority.

(8) The name and approval numbers of the semen centre(s) are recorded in this veterinary certificate.

(9) The donors were transferred from one approved semen centre to another of equal health status without isolation or testing and the following occurred:

a) Donors were examined, by the approved semen collection facility veterinarian, and showed no clinical sign of disease on the day of entry into the facility.
b) Transfer was direct.
c) Donors were not in direct or indirect contact with animals of a lower health status.
d) The means of transport used was disinfected before use.

(delete entire clause as appropriate)

Semen donor requirements

(10) The semen donors were resident for at least 28 consecutive days at the semen centre prior to collection of the semen for export. During this time semen donors were not be used for natural mating and were isolated from animals not of equivalent health status.

(11) On the day of collection the semen centre veterinarian ensured by clinical examination including that of the external reproductive organs that the donor was free from clinical evidence of infectious diseases transmissible in semen.

(12) The donor has been approved for the <*enter years of breeding season*> breeding season on <*enter date*>. (applicable to Australian stallions only; *delete if not applicable*)

Semen collection, processing, storage and transport

(13) Semen was collected and processed in accordance with the current recommendations of the OIE *Code.*

(14) None of the cryogenic or cooling agent has been previously used in association with any other product of animal origin.

(15) Semen is in straws, ampoules, pellets, or new or disinfected containers which are sealed and tamper-evident, and clearly and permanently marked to identify the donor and the date(s) of collection. A code is used for this information and its decipher accompanies the consignment *(delete as appropriate and initial)*. The marking is in accordance with the OIE *Code.* Semen was only stored with semen/embryos that were collected and processed in accordance with the *Code*. Containers were held until export in storage place approved by the Competent Authority of the exporting country.

(16) Semen was stored in the same container only with semen from donors of equivalent health status.

(17) Semen was placed in a transport container that is new or disinfected and free of contamination.

Disinfectant (active chemical) and date (*delete and initial if the container was new*):
_____

(18) The transport container was sealed by either the semen centre veterinarian or an *Official Veterinarian*, using tamper-evident seals.

Seal number _____

(19) The semen was transferred from one transport container to another *(delete if not applicable).*

Date of transfer _____
Reason for transfer _____
Facility _____
Veterinarian (name and signature): _____

(20) The semen in this consignment originates from <*insert name of country of origin*> *(delete as appropriate and initial),* which is approved to export equine semen to New Zealand, and is accompanied by:

a) a declaration from the < *Insert the name of the Competent Authority of the country of export*> that links the semen to the semen being exported and confirms that the semen has been stored as per New Zealand requirements at a facility approved by the Competent Authority of <*insert name of country of export*>*;* and either

i a veterinary certificate, certified by the Competent Authority of <*insert name of country of origin*> as meeting New Zealand's requirements; or
ii a letter from Competent Authority of <*insert name of country of origin*> indicates that the semen meets New Zealand's requirements.

SPECIFIC REQUIREMENTS FOR IDENTIFIED RISK ORGANISMS:

(21) **Equine herpesvirus-1 (EHV-1)** [abortigenic and paralytic forms]

Donor animals

a) Were kept for the 21 days prior to collection in an establishment where no case of EHV-1 (abortigenic and paralytic forms) was reported during that period; and

i) Showed no clinical signs of EHV-1 infection on the day of collection and during the 21 days prior to collection.

(22) **Equine infectious anaemia (EIA)**

a) Donors showed no clinical sign of EIA on the day of each collection; and

i) Donors were kept on premises where no case of EIA has been reported during the 90 days prior to each collection; and
ii) Donors were subjected to a test listed in the MPI document: *MPI Approved Diagnostic Tests, Vaccines, Treatments and Post-arrival Testing Laboratories for Animal Import Health Standards* (MPI-STD-TVTL), not less than 21 days after entry into the collection centre with a negative result.

(23) **Equine viral arteritis (EVA)** *(delete as applicable)*

a) Donors were kept in an establishment where no equid has shown any clinical sign of EVA for the 28 days immediately prior to semen collection and showed no clinical sign of EVA on the day of semen collection; and

i) Were subjected between 6 and 9 months of age to a test for EVA as prescribed in MPI-STD-TVTL, with either *(delete as applicable)*

i A negative result, or
ii A positive result, followed at least 14 days later by a second test that showed a stable or decreasing titre;

and were subsequently vaccinated against EVA and regularly vaccinated according to the recommendations of the manufacturer;
Vaccine name:_____
Vaccination date: _____
or

ii) Were isolated and not earlier than seven days after commencing isolation, were subjected to a test for EVA as prescribed in MPI-STD-TVTL on a blood sample with negative results, vaccinated for EVA, kept for 21 days following vaccination separated from other equids and regularly revaccinated according to the recommendations of the manufacturer;

Vaccine name:_____
Vaccination date: _____
or

iii) Were subjected to a test for EVA as prescribed in MPI-STD-TVTL on a blood sample with negative results within 14 days prior to semen collection, and had been separated from other equids not of equivalent health status for 14 days prior to blood sampling until the end of semen collection; or

iv) Have been subjected to a test for EVA as prescribed in MPI-STD-TVTL on a blood sample with positive results and then either

i Were subsequently test mated to two mares within 6 months prior to semen collection, which were subjected to two tests for EVA as prescribed in MPI-STD-TVTL with negative results on blood samples collected at the time of test mating and again 28 days after test mating; or
ii Were subjected to a test for EVA as prescribed in MPI-STD-TVTL with negative results, carried out on semen collected within 6 months prior to collection of the semen to be exported; or
iii Were subjected to a test for EVA is prescribed in MPI-STD-TVTL with negative results, carried out on semen collected within six months after the blood sample was collected then immediately vaccinated, and revaccinated regularly;
Vaccine name:_____
Vaccination date: _____
or

v) For frozen semen, were subjected with negative results to either

i A test for EVA as prescribed in MPI-STD-TVTL carried out on a blood sample taken not earlier than 14 days and not later than 12 months after the collection of the semen for export; or
ii A test for EVA as prescribed in MPI-STD-TVTL carried out on an aliquot of the semen collected immediately prior to processing or on an aliquot of semen collected within 14 to 30 days after the first collection of the semen to be exported.

(24) **Leptospirosis**

a) Antibiotics effective against *Leptospires* were added to the semen extender/diluent during processing.

Name and concentration of antibiotics: _____
_____

(25) ***Taylorella* spp. (Contagious equine metritis, CEM)** *(delete as applicable)*

a) Donors were from a country imposing control measures for CEM as described in the *Manual*, or otherwise approved by MPI, and

i) Have had no direct or indirect contact with CEM during the two months prior to collection; and

i Showed no clinical sign of CEM on the day of each collection; and
ii Have been subjected to a test* listed in MPI-STD-TVTL with negative results twice with a 4-7 day interval during the 30 days prior to the collection period; and
iii Have been protected against any possibility of contagion since the beginning of the tests; and
iv Have not been treated with antibiotics for at least 7 days before commencing the testing and throughout the sample collection period; or

ii) have previously shown signs of CEM or have been in direct or indirect contact with CEM during the two months prior to collection; and

i Were treated for CEM; and

ii After treatment, were subjected to an effective method of testing* listed in MPI-STD-TVTL, with three swabs taken at 7-day intervals with negative results followed by testing of the first three mares mated or inseminated by the stallion with negative results; and

iii Have been protected against any possibility of contagion since the beginning of the tests.

(*Swabbing sites are the prepuce, the urethral sinus and the fossa glandis (including its diverticulum))

Semen Centre Veterinarian:	**Official Veterinarian:**
Name:	Name:
Address:	Address:
Date:	Date:
Signature:	Signature:

This table accompanies the veterinary certificate with reference number: _____

Donor Information

Name	Donor identification	Breed	Date of Birth	Country of Birth	Name of Owner	Address of Owner

Semen information

Donor identification	Date/s of collection	Straw identification	Number of Straws	Date of entry into semen collection centre	Name of semen collection centre	Address of semen collection centre	Semen collection centre approval number	Date of last inspection of semen centre

Test information (Note that this information is to be amended as appropriate to the exporting country)

Donor identification	Equine infectious anaemia virus			Equine viral arteritis virus			*Taylorella* spp (contagious equine metritis (CEM)		
	Test sampling date	Test type	Result	Test sampling date	Test type	Result	Test sampling date	Test type	Result

5.9 Model veterinary certificate for horse embryos

(1) Below is a model veterinary certificate for trade in embryos from horses (*Equidae*), this model meets the requirements of the IHS.

(2) The model certificate format is based on the OIE *Code* Chapter for model veterinary certificates for international trade in semen and embryos.

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Address:</td><td>I.2. Certificate reference number:
I.3. Competent Authority:</td></tr>
<tr><td colspan="2">I.4. Consignee (Importer):
Name:
Address:</td></tr>
<tr><td>I.5. Country of origin:
ISO Code*:</td><td>I.6. Zone or compartment of origin**:</td></tr>
<tr><td>I.7. Country of destination:
ISO Code*:</td><td>I.8. Zone or compartment of destination**:</td></tr>
<tr><td colspan="2">I.9. Place of origin:
Name:
Address:</td></tr>
<tr><td>I.10. Place of shipment:</td><td>I.11. Date of departure:</td></tr>
<tr><td>I.12. Means of transport:
☐ Aeroplane ☐ Ship

Identification:</td><td>I.13. Expected border post:
I.14. CITES permit No(s)**:</td></tr>
<tr><td>I.15. Description of commodity:</td><td>I.16. Commodity code (HS Code):
I.17. Total quantity:</td></tr>
<tr><td></td><td>I.18. Temperature of the product:

☐ Frozen</td><td>I.19. Total number of packages:</td></tr>
<tr><td></td><td>I.20. Identification of container/seal number:</td><td>I.21. Type of packaging:</td></tr>
<tr><td></td><td colspan="2">I.22. Commodities intended for use as:
☐ Artificial Reproduction
☐ Other</td></tr>
<tr><td></td><td colspan="2">I.23. Not Applicable</td></tr>
<tr><td></td><td colspan="2">I.24. Identification of commodities: Species (Scientific name): Horse (Equidae)

<table>
<tr><th>Approval number of establishments</th><th>Net weight</th><th>Treatment type</th><th>Lot ID/Date code</th></tr>
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</table>
* Optional.
** If referenced in Part II.</td></tr>
</table>

Part II: Specific Requirements **Country:**	**Certificate reference number:**

Donor identification	
Breed	
Date of birth	
Country of birth	
Date(s) of collection	
Straw identification	
Number of straws	

**only to be filled out in case the tabulated summary of tests and results is not used*

I,……., a veterinarian authorised by the veterinary authority certify, after due enquiry that the embryos described above satisfy(ies) the following requirements:

Eligibility

(1) The embryos are from equids.

(2) The embryos are *in vivo* derived, frozen, non-cloned, and non-genetically modified.

Diagnostic testing, vaccination, and treatment

(3) All required laboratory testing was conducted at a laboratory approved to conduct export testing by the Competent Authority of a country approved to export equine embryos to New Zealand.

(4) Tests used were listed in and carried out in accordance with the MPI document*; Approved Diagnostic Tests, Vaccines, Treatments and Post-Arrival Testing Laboratories for Animal Import Health Standards MPI-STD-TVTL*.

(5) Original or copies of laboratory reports, or an endorsed, tabulated summary, including test date, type, and results for each donor, are attached to this veterinary certificate.

(6) All products and vaccinations administered to meet specific disease requirements were administered according to the manufacturer's instruction in a country approved to export to New Zealand. Vaccinations were either the final dose of a primary course or the recommended booster to complement the primary.

Embryo collection team and herd approval requirements

(7) At the time of collection of embryos for export to New Zealand, the embryo collection team was approved by and registered with the [*Competent Authority of the exporting country*].

(8) The embryo collection team veterinarian has knowledge of and authority over the embryo collection herd until completion of collection and testing of the embryo(s) exported to New Zealand specified in this IHS.

Donor and herd health status

(9) Donors were isolated from other horses, not of an equivalent tested health status, from the time of the pre-collection tests until completion of collection of embryos for export to New Zealand.

(10) On the day(s) of collection of the embryos, the approved embryo collection team veterinarian was responsible for monitoring the health status of each donor and recorded that the donor was free from clinical evidence of infectious diseases transmissible in embryos.

Embryo collection, processing, storage and transport

(11) Embryos were collected and processed under the supervision of an approved embryo collection team veterinarian and in accordance with the recommendations in the OIE *Code* chapters on collection and processing of *in vivo* derived embryos of livestock.

(12) Embryos had an intact zona pellucida and were free of adherent material after the final wash when examined over its entire surface at not less than 50X magnification. Any micro-manipulation that caused a breach of the zona pellucida, was performed according to the procedures described in the OIE *Code* and IETS *Manual*.

(13) All biological products of animal origin used in the media and solutions for collection, processing, washing or storage of embryos were free from pathogenic organisms.

(14) Media and solutions were either sterilised by approved methods according to the IETS *Manual* or commercially prepared sterile media were used. These were handled in such a manner as to ensure that sterility was maintained.

(15) None of the cryogenic or cooling agent has been previously used in association with any other product of animal origin.

(16) Embryos are sealed in receptacles, which are clearly and permanently marked to identify the donor and the date(s) of collection. A code is used for this information and its decipher accompanies the consignment *(delete as appropriate and initial).* The marking is in accordance with the IETS Standards.

(17) The embryo(s) for export has/have only been stored with embryos that have been collected and processed in compliance with the OIE *Code*. Containers have been held until export in a storage place approved by the Competent Authority of the exporting country.

(18) Embryos were placed in a container which is disinfected and free of contamination.

Disinfectant (active chemical) and date (delete and initial if container was new):
_____

(19) The transport container in which the embryos are transported to New Zealand was sealed by either the embryo collection team veterinarian or an official veterinarian, using tamper evident seals.

Seal number _____

(20) The embryos were transferred from one container to another *(delete if not applicable).*

Date of transfer _____
Reason for transfer _____
Facility _____
Veterinarian (name and signature): _____

(21) The embryos in this consignment originate from <*insert name of country of origin*> *(delete as appropriate and initial),* which is approved to export embryos to New Zealand, and is accompanied by:

a) a declaration from the < *Insert the name of the Competent Authority of the country of export*> that links the embryos to the embryos being exported and confirms that the embryos have been stored as per New Zealand requirements at a facility approved by the Competent Authority of <*insert name of country of export*>; and either

i a veterinary certificate, certified by the Competent Authority of <*insert name of country of origin*> as meeting New Zealand's requirements; or
ii a letter from Competent Authority of <*insert name of country of origin*> indicates that the embryos meet New Zealand's requirements.

SPECIFIC REQUIREMENTS FOR IDENTIFIED RISK ORGANISMS:

(22) **Equine herpesvirus-1 (EHV-1)** [abortigenic and paralytic forms]

Donor animals

a) Have been kept for the 21 days prior to collection in an establishment where no case of EHV-1 (abortigenic and paralytic forms) was reported during that period.
b) Showed no clinical signs of EHV-1 infection on the day of collection and during the 21 days prior to collection.

(23) **Equine infectious anaemia (EIA)**

a) Donors showed no clinical sign of EIA on the day of each collection; and

i) Donors were kept on premises where no case of EIA has been reported during the 90 days prior to each collection; and
ii) Donors were subjected to a test listed in the MPI document: *MPI Approved Diagnostic Tests, Vaccines, Treatments and Post-arrival Testing Laboratories for Animal Import Health Standards* (MPI-STD-TVTL), not less than 21 days after entry into the collection centre with a negative result.

(24) **Equine viral arteritis (EVA)** *(delete as applicable)*

a) Donors were

i) kept in an establishment where no animals have shown any signs of EVA for the 28 days prior to collection; and

i Were subjected to a test for EVA, as prescribed in MPI-STD-TVTL, carried out on blood samples collected either once within 21 days prior to collection with negative result, or on two occasions at least 14 days apart within 28 days prior to collection, which demonstrated stable or declining antibody titres; or
ii Were regularly vaccinated according to the recommendations of the manufacturer.

Vaccine: _____
Date of vaccination: _____
or

ii) Donors were isolated for the 28 days prior to collection and during this period showed no sign of EVA.

(25) **Leptospirosis**

a) Antibiotics effective against Leptospires were added to collection, processing, washing and storage media.

Name and concentration of antibiotics:

_____

(26) ***Taylorella* spp. (Contagious equine metritis, CEM)** *(delete as applicable)*

a) Donors were from a country imposing control measures for CEM as described in the *Manual*, or otherwise approved by MPI, and

i) Have had no direct or indirect contact with CEM during the two months prior to collection; and

i Showed no clinical sign of CEM on the day of each collection; and
ii Have been subjected to a test[1] listed in MPI-STD-TVTL with negative results twice with a 4-7 day interval during the 30 days prior to the collection period; and
iii Have been protected against any possibility of contagion since the beginning of the tests; and
iv Have not been treated with antibiotics for at least 7 days before commencing the testing and throughout the sample collection period; or

ii) have previously shown signs of CEM or have been in direct or indirect contact with CEM during the two months prior to collection; and

i Were treated for CEM; and
ii After treatment, were subjected to an effective method of testing[2] listed in MPI-STD-TVTL, with three clitoral swabs taken at 7-day intervals with negative results followed by testing of three endometrial swabs during the next three oestrus periods with negative results; and
iii Have been protected against any possibility of contagion since the beginning of the tests.

[1] Swabbing sites are the clitoral fossa and sinuses; two swabs are required 4-7 days apart.
[2] Swabbing sites are the clitoral fossa and sinuses; three swabs are required at weekly intervals.

Embryo Collection Veterinarian:	**Official Veterinarian:**
Name	Name:
Address:	Address:
Date:	Date:
Signature:	Signature: Official Veterinarian signature

This table accompanies the veterinary certificate with reference number: _____

Female donor information

Name	Donor identification	Breed	Date of Birth	Country of Birth	Name of Owner	Address of Owner

Male donor information

Name	Donor identification	Breed	Date of Birth	Country of Birth	Name of Semen Centre	Address of Semen Centre	Semen Centre Number

Embryo information (Note that this information is to be amended as appropriate to the exporting country)

Female donor identification	Date/s of collection	Identification of embryos	Number of embryos	Date of entry into place of embryo collection	Embryo team approval number	Date of last inspections

Test information

	Equine infectious anaemia virus			*Taylorella* spp. (contagious equine metritis, CEM)			Equine viral arteritis (EVA)		
Female donor identification	Test sampling date	Test type	Result	Test sampling date	Test type	Result	Test sampling date	Test type	Result

Appendix 1 – Document History

Date First Issued	Title	Shortcode
3 December 2015	Guidance Document: Semen and Embryos from Horses *(Equidae)*	HORSSEMB.SPE
Date of Issued Amendments	**Title**	**Shortcode**
7 July 2017	Guidance Document: Semen and Embryos from Horses (*Equidae*)	HORSSEMB.SPE
9 May 2018	Guidance Document: Semen and Embryos from Horses (*Equidae*)	HORSSEMB.SPE
18 September 2018	Guidance Document: Semen and Embryos from Horses (*Equidae*)	HORSSEMB.SPE
24 May 2023	Guidance Document: Semen and Embryos from Horses (*Equidae*)	HORSSEMB.SPE