

Veterinary Health Certificate for Export of In Vivo Derived Bovine Embryos from the United States of America to New Zealand



Veterinary Authority
UNITED STATES DEPARTMENT OF AGRICULTURE

Date Of Issue

Certificate Number

Certification Statements:

I, the undersigned USDA accredited veterinarian, certify that the product described above satisfy the following requirements:

1. Eligibility

(a) Frozen, in vivo derived embryos from the Bovinae subfamily.

2. Diagnostic tests, vaccines and treatment

(a) All pre-export and/or surveillance testing required by this veterinary certificate has been:

(i) *conducted by a laboratory approved by APHIS; or

(ii) *conducted by a laboratory approved by the Competent Authority of any other country approved to export bovine embryos to New Zealand.

(b) All laboratory samples required by this veterinary certificate have been collected, processed, and stored in accordance with the OIE's recommendations or as described in Approved Diagnostic Tests, Vaccines, Treatments and Post-Arrival Testing Laboratories for Animal Import Health Standards, [MPI-STD-TVTL](https://www.mpi.govt.nz/dmsdocument/2040/), found here:

(c) All diagnostic test(s) and vaccines that are required below are those that have been approved by MPI for that purpose and documented in MPI-STD-TVTL.

(d) All products and vaccinations required by this veterinary certificate to be administered to meet the specific disease requirements below have been administered according to the manufacturer's instruction.

(e) Any vaccine(s) administered to satisfy import requirements was/were either the final dose of a primary vaccination course has been administered or the recommended booster to complement the primary course.

3. Donor requirements

(a) The embryo donors met the recommendations in the Code chapter Collection and Processing of In Vivo Derived Embryos from Livestock and Equids, and the other specified requirements in this veterinary certificate.

(b) The embryo donors were resident in the embryo collection herd for at least 28 days prior to embryo collection for export to New Zealand. While resident with the collection herd, the herd was not subject to veterinary restrictions for organisms managed in this veterinary certificate.

(c) Embryo donors that were imported to the United States have only lived in approved countries for at least the 60 days before embryo collection.

(d) On the day of embryo collection, the embryo collection team veterinarian determined that the donors were free from clinical evidence of infectious diseases transmissible in embryos.

(e) Where a specific requirement of this veterinary certificate was met by pre-collection testing, the embryo donors were isolated from other animals not of equivalent tested health status, from the time of the test sample collection until completion of embryo collection for export.

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(f) Where a specific requirement of this veterinary certificate for a risk organism was met by monitoring the embryo donors for clinical signs for a specified time after collection, the embryos were stored for that amount of time prior to export.

4. Embryo collection, processing and storage

(a) Embryos were collected, washed, processed, stored and traceability maintained under the supervision of an embryo collection team veterinarian and in accordance with:

- (i) the recommendations in the OIE Code chapter on Collection and Processing of In Vivo Derived Embryos from Livestock and Equids;
- (ii) the recommendations in the IETS Manual.

(b) The embryo collection team operated in accordance with the conditions listed in the OIE Code chapter on Collection and Processing of In Vivo Derived Embryos from Livestock and Equids.

(c) At the time of embryo collection each embryo was examined over its entire surface at not less than 50X magnification and found to have an intact zona pellucida and be free of adherent material.

(d) *If any embryo in the consignment underwent micro-manipulation that caused a breach of the zona pellucida it was performed as per the procedures described in the OIE Code chapter Collection and Processing of Micromanipulated Oocytes or Embryos from Livestock and Horses and the IETS Manual.

(e) All biological products of animal origin used in the media and solutions for collection, processing, washing or storage of the embryos were free of pathogenic organisms including pestiviruses and prions. Media and solutions were sterilised by approved methods according to the IETS Manual and handled in a manner that ensured that sterility is maintained.

(f) All straws were sealed, and clearly and permanently marked to identify the donor and the date(s) of freezing. The markings conform to international standards of the International Committee for Animal Recording (ICAR) and the IETS Manual. *If a code is used for this information, its decipher instructions accompany the consignment.

(g) The embryos have only been stored and transported with germplasm that has been collected and processed in accordance with the OIE Code.

(h) The embryos have only been held in a storage place approved by APHIS until the time of export.

(i) Subject to (j), the embryos are exported directly from the country in which they were collected.

(j) *If embryos were collected in a country that has an agreed veterinary certificate for bovine embryo export to New Zealand and stored in another country that also has an agreed veterinary certificate for bovine embryos to New Zealand (country of storage), the embryos are accompanied by:

(i) A declaration from the Competent Authority of the country of storage that:

- 1. identifies the embryos from the country of origin as the embryos being exported to New Zealand;

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2. certifies that the embryos have been stored and transported in the country of storage in accordance with the requirements of veterinary certificate;

(ii) Evidence that the embryos meet the rest of the import requirements in the form of either:

1. A veterinary certificate issued by the Competent Authority of the origin country; or

2. A letter from the Competent Authority of the origin country confirming the embryos meet the requirements of their agreed veterinary certificate and indicating which requirements therein have been fulfilled.

5. Transport

(a) The transport container in which the germplasm is to be transported to New Zealand is new or disinfected and is free of contamination. *If the transport container has been disinfected:

(i) Disinfectant (active chemical) _____

(ii) Date of disinfection _____

(b) All transport containers in which germplasm is transported to New Zealand have been sealed, by either the embryo collection centre/herd veterinarian or an APHIS Veterinarian, using tamper-evident seals that are positioned to ensure that no germplasm can be added after the transport container has been sealed.

(c) *Where the germplasm is transferred from one transport container to another:

(i) Date of transfer _____

(ii) Name of approved collection centre/herd _____

(iii) Reason for transfer _____

(iv) Name of veterinarian involved in the transfer _____

Specified Requirements

6. Bovine viral diarrhea virus genotype 2 (BVDV2)

(a) A sample of the unfiltered collection fluid or an embryo from the collection for export to New Zealand was tested for BVDV2 with virus isolation or real-time RT PCR with negative results; or

(b) The embryo donor was tested for persistent BVDV2 infection with virus isolation, real-time RT-PCR, or antigen ELISA, with negative results; AND

(i) The semen used to produce the embryo satisfies the requirements of an agreed veterinary certificate (this includes semen that meets CSS Minimum Requirements, and semen imported from Canada that meets the Canadian Artificial Insemination Program testing requirements);

(ii) The embryo donor has not been vaccinated against BVDV2 in the last 30 days;

(iii) The embryo donor was tested for acute BVDV2 infection, with negative results, in one of the following ways:

1. with antigen capture ELISA immediately prior to an isolation period of at

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least 21 days before collection for New Zealand. Isolation must exclude cattle that were not tested negative for BVDV2 upon entry to the collection herd, and throughout isolation the herd showed no clinical signs consistent with BVDV2; or

2. with virus isolation or real-time RT-PCR test on a serum sample within 48 hours of collection for New Zealand; or
3. serologically with ELISA for antibody, serum neutralization, or virus neutralization between 2 weeks and 6 months after collection.

Note: The same test may be used to satisfy both the persistent and acute infection requirements.

7. Foot and mouth disease (FMD)

- (a) The donor was resident for at least the 3 months before embryo collection in a country or zone that was free from FMD without vaccination in accordance with the OIE Code.

8. Lumpy skin disease (LSD)

- (a) The embryo donor was resident for 6 months prior to embryo collection in a country or zone that was free of LSD as defined by the OIE Code.

9. Rift Valley fever virus (RVF)

- (a) The donor was resident, for at least the 30 days prior to, and during embryo collection for export to New Zealand in a country or zone that was free from RVF in accordance with the OIE Code.

10. Coxiella burnetii (Q-fever)

- (a) The embryo donor has never been confirmed positive for Q fever; and either
 - (i) The donor was subjected to an ELISA test or other serological test listed in MPI-STD-TVTL for Q fever, on a sample collected between 21 and 120 days after each embryo collection for export to New Zealand, with negative results; or
 - (ii) A sample of embryos/oocytes, collection fluids and/or washing fluids from each embryo collection for export to New Zealand was tested for Q fever with a PCR test or other test on germplasm listed in MPI-STD-TVTL, with negative results; or
 - (iii) Within the 6 month period before or after embryo collection for New Zealand, but before export, the embryo collection herd was tested for Q fever, using an ELISA test or other serological test listed in MPI-STD-TVTL, with negative results. The Q fever test must be:
 1. performed on either the whole herd or a random sample of at least 60 animals (whichever is the lesser number); and
 2. the herd was isolated for the period between embryo collection and diagnostic sampling.

11. Leptospira interrogans serovar hardjoprajitno (leptospirosis)

- (a) Antibiotics must be added to the embryos, minimum doses:
 - a) 50 IU/ml penicillin and 50 µg/ml streptomycin; or
 - b) 50 µg/ml tylosin;
 - c) or another combination listed in MPI-STD-TVTL; or

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- (b) The donor was given a single injection of oxytetracycline (20 mg/kg of body weight IV or SQ) between 2-7 days prior to embryo collection; or
- (c) The donor was vaccinated as per the manufacturer's guidelines; and
 - (i) given two injections of oxytetracycline (20 mg/kg of body weight IV or SQ) 10 days apart anytime during the 60 days prior to collection for New Zealand; or
- (d) A vaginal swab or unfiltered collection fluids, from the day of collection for New Zealand, tested negative for Leptospira spp. using a PCR test that has been validated by the manufacturer for fluids/tissues.

12. Mycobacterium tuberculosis (bovine tuberculosis)

- (a) No clinical signs of bovine tuberculosis were observed in the embryo collection herd during the 24 hours prior to embryo collection for export to New Zealand;
- (b) The donor was from an embryo collection herd that was free at the time of collection for export to New Zealand from bovine tuberculosis in accordance with the *OIE Code or *APHIS; and either
 - (i) from a zone free from bovine tuberculosis; or
 - (ii) subjected to an intradermal tuberculin test or other test listed in MPI-STD-TVTL for bovine tuberculosis during the period between 30 days prior to and 12 months after embryo collection for export to New Zealand, with negative results.

13. Mycoplasma mycoides subspecies mycoides SC (contagious bovine pleuropneumonia, CBPP)

- (a) The embryo donor was born in and had been continuously resident in a country free from CBPP.

14. Mycoplasma bovis

- (a) Collection and processing of embryos was in accordance with the recommendations of the OIE Code, with the following modifications: The embryos must be subjected to the protocol described in the IETS Manual: tylosin (200 µg/mL) incubation at 37°C in the antibiotic treatment for a minimum of 4 hours after being washed 10 times; or
- (b) Each embryo collection for export to New Zealand was tested with a validated PCR test for M. bovis in accordance with MPI-STD-TVTL, with negative results.

*Delete as appropriate.

Name of Accredited Veterinarian	Name of USDA Veterinarian
Signature of Accredited Veterinarian	Signature of USDA Veterinarian
Date	Date

