Ministry for Primary Industries
Manatū Ahu Matua

Import Health Standard

Bovine Germplasm

BOVIGERM.GEN

31 July 2025

Issued under the Biosecurity Act 1993

Te Kāwanatanga o Aotearoa
New Zealand Government

TITLE

Import Health Standard: Bovine Germplasm

COMMENCEMENT

This Import Health Standard comes into force on 31 July 2025

The amendment history to this Import Health Standard is set out in *Schedule 1: Document History*.

REVOCATION

This Import Health Standard revokes and replaces the following:

a) *Bovine Germplasm, BOVIGERM.GEN, 25 August 2021*

ISSUING AUTHORITY

This Import Health Standard is issued under section 24A of the Biosecurity Act 1993 to incorporate amendments made pursuant to sections 24B and 166A of that Act.

Dated at Wellington, 31 July 2025

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Introduction

This introduction is not part of this Import Health Standard (IHS), but is intended to indicate its general effect.

Purpose

This IHS specifies the minimum requirements that must be met when importing bovine semen and embryos into New Zealand.

The identified risk organisms associated with bovine semen and embryos that are managed by this IHS are:

a) Bovine herpesvirus 1.1 and 1.2a (BHV 1.1 and 1.2a)
b) Bovine herpesvirus 5 (BHV 5)
c) Bovine leukaemia virus
d) Bovine viral diarrhoea virus genotype 2 (BVDV2)
e) Foot and mouth disease virus (FMDV)
f) Lumpy skin disease virus (LSDV)
g) Rift Valley fever virus (RVFV)
h) *Brucella melitensis*, *B. abortus* and *B. suis*
i) *Campylobacter fetus* subspecies *venerealis* (Cfv)
j) Coxiella burnetii
k) *Leptospira interrogans* serovar Hardjoprajitno
l) *Mycobacterium tuberculosis*
m) *Mycoplasma mycoides* subspecies *mycoides SC* (MmmSC)
n) *Mycoplasma bovis*

Background

The Biosecurity Act 1993 (the Act) provides the legal basis for excluding, eradicating and effectively managing pests and unwanted organisms.

Import health standards issued under the Act set out requirements to be met to effectively manage biosecurity risks associated with importing goods. They include requirements that must be met in the exporting country, during transit, and before biosecurity clearance can be given.

Guidance boxes are included within this IHS for explanatory purposes. The guidance included in these boxes is for information only and has no legal effect.

A guidance document also accompanies this IHS providing information on how requirements may be met.

Who should read this Import Health Standard?

This IHS should be read by importers of bovine semen and embryos.

Why is this important?

It is the importer's responsibility to ensure the requirements of this IHS are met. Consignments that do not comply with the requirements of this IHS may not be cleared for entry into New Zealand and/or further information may be sought from importers. Consignments that do not comply with the requirements of this IHS may be re-shipped or destroyed under the Act or tested/treated in accordance with this IHS prior to release or equivalence determined. Importers are liable for all associated expenses.

The costs to MPI in performing functions relating to the importation of bovine semen and embryos will be recovered in accordance with the Act and any regulations made under the Act. All costs involved with

documentation, transport, storage and obtaining a biosecurity clearance must be covered by the importer or agent.

Equivalence

The Chief Technical Officer (CTO) may issue a direction under section 27(1)(d) of the Act that measures different from those set out in this IHS may be applied to effectively manage risks associated with the importation of these goods.

If an equivalent measure is approved, an import permit may be issued under section 24D(2) of the Act if the Director-General considers it appropriate to do so. The details of the CTO direction on equivalence will be included as notes in the special conditions section of the permit to inform the inspector's assessment of the commodity.

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.

Transitional facility

Any containers not intact on arrival will be required to be made secure before the consignment is moved to the transitional or containment facility. Any material which has leaked from the container will be destroyed at the port of entry.

Inspection

On arrival, all documentation accompanying the consignment will be verified by an inspector. The consignment may also be subject to inspection.

Document history

Refer to *Schedule 1*.

Other information

This is not an exhaustive list of compliance requirements and it is the importer's responsibility to be familiar with and comply with all New Zealand laws.

Owners and persons in charge of genetic material stocks and animals resulting from imported embryos must comply with the record keeping requirements included in the Biosecurity (Imported Animals, Embryos, and Semen Information) Regulations 1999.

For more information visit:
https://www.legislation.govt.nz/regulation/public/1999/0367/latest/whole.html#DLM300745

Trade Single Window (TSW) and Customs clearance

All goods imported into New Zealand need to be cleared by the New Zealand Customs Service (Customs) and the Ministry for Primary Industries (MPI). To gain customs clearance, the required documentation must be lodged through the Trade Single Window (TSW) portal.

For more information about TSW please visit: https://www.customs.govt.nz/business/trade-single-window/

Part 1: General Requirements

1.1 Application

(1) This IHS applies to all imports of bovine semen, bovine in vivo derived (IVD) embryos and bovine in vitro produced (IVP) embryos from all countries into New Zealand.

1.1.1 Transitional Arrangement

(1) From the commencement date of this IHS up until to 2 months from that date, the requirements of this import standard for importing bovine in vivo embryos and semen may be met by complying with the requirements of the Import Health Standard: Bovine Germplasm (dated 25 August 2021) in place immediately before revocation of the Import Health Standard: Bovine Germplasm (dated 25 August 2021).

1.2 Incorporation by reference

(1) The following international standards are incorporated by reference in this IHS under section 142M of the Act:

a) The World Organisation for Animal Health *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals* (the *WOAH Manual*), available at: Terrestrial Manual Online Access - WOAH - World Organisation for Animal Health.
b) The World Organisation for Animal Health *Terrestrial Animal Health Code* (the *WOAH Code*), available at: Terrestrial Code Online Access - WOAH - World Organisation for Animal Health.
c) The *International Embryo Transfer Society Manual (*The *IETS Manual)*, available at: http://www.iets.org/.
d) The *International Committee for Animal Recording*, available at: https://www.icar.org/Guidelines/06-AI-and-ET.pdf.

(2) The following material is incorporated by reference in this IHS under section 142M of the Act:

a) MPI's *Specified Approvals for Animal Import Health Standards, MPI-STD-SAA*.

(3) Under section 142O(3) of the Act it is declared that section 142O(1) does not apply. That is, a notice under section 142O(2) of the Act is not required to be published before material that amends or replaces the standards, guideline or lists incorporated under clauses 1.2(1) and (2) above has legal effect as part of this IHS.

Guidance

- Incorporation by reference means that standards, guidelines or lists are incorporated into this IHS and they form part of the requirements

1.3 Definitions

(1) For the purposes of this IHS, terms used that are defined in the Act have the meanings set out there. The Act is available at http://www.legislation.govt.nz/.

(2) See *Schedule 2* for additional definitions that apply.

1.4 Requirements for clearance

(1) In order to obtain biosecurity clearance, bovine semen and embryos must:

a) Meet the requirements of clause/s 1.4-1.11 of *Part 1: General Requirements*, and *Part 2: Specified requirements for identified risk organisms*; and
b) Be imported from a country that the CTO is satisfied meets the export country systems and certification requirements of clause 1.5; and
c) Be accompanied by a veterinary certificate that meets the requirements of clause 1.12, has been agreed by a CTO, and details the measures in *Part 2* that the importing country will meet.

1.5 Exporting country systems and certification

(1) Importers may import bovine semen and embryos only if a CTO is satisfied, on the basis of evidence, that the Competent Authority overseeing the veterinary services of the exporting country are capable of ensuring that bovine semen and embryos imported from that country can meet the requirements of this IHS.

(2) The evidence must include details about all of the following, that the CTO considers applicable to the bovine semen and embryos from that exporting country:

a) The ability of the exporting country's Competent Authority to verify the animal health status of bovine semen and embryos in the exporting country, zone or compartment, with respect to the risk organisms identified in *Part 2: Specified requirements for identified risk organisms*.
b) The adequacy of the exporting country's national systems and/or programmes and standards in the exporting country for regulatory oversight of the germplasm industry.
c) The capability of the exporting country's Competent Authority to support the issue of veterinary certificates as required by this IHS.

Guidance

- The evidence will be obtained during evaluation of the veterinary services of the Competent Authority of the exporting country in accordance with section 3 of the *WOAH Code,* titled *Quality of Veterinary Services*.
- Once a CTO is satisfied with the exporting country's evidence for exporting systems and certification, MPI and the Competent Authority may commence negotiation of the country-specific veterinary certificate.
- For the CTO to be satisfied with the evidence provided, an in-country or desk-top audit may be carried out at any time, including prior to the first shipment of the commodity.
- See the *Guidance Document* for more information about exporting country systems and certification, and for a list of currently approved countries and country-specific veterinary certificates.

1.6 Diagnostic tests, vaccines and treatment

(1) All pre-export and/or surveillance testing required by this IHS must be:

a) Conducted by a laboratory approved by the Competent Authority of the exporting country; or
b) Conducted by a laboratory approved by the Competent Authority of any other country approved under this IHS to export bovine semen and embryos to New Zealand.

(2) All laboratory samples required by this IHS must be collected, processed, and stored in accordance with the recommendations in the *WOAH Code* and/or the *WOAH Manual*, or as described in *MPI-STD-SAA.*

(3) All diagnostic test(s) and vaccinations that are required to be undertaken by this IHS must be those that have been approved by MPI for that purpose and documented in *MPI-STD-SAA*.

(4) All products and vaccines required by this IHS to be administered to meet the specific disease requirements in *Part 2: Specified requirements for identified risk organisms* must have been

administered according to the manufacturer's instruction in a country that a CTO has agreed meets the requirements of clause 1.5.

(5) All requirements in this IHS for the administration of a vaccine require that either the final dose of a primary vaccination course has been administered or the recommended booster to complement the primary course has been administered.

Guidance

- See the *Guidance Document* for more information about tests and vaccination.
- MPI's approval process for diagnostic tests, treatments and vaccines includes consultation with the MPI Animal Health Laboratory.

1.7 Semen collection and embryo team centre requirements

(1) Semen collection must be carried out in a centre that complies with the requirements for semen collection centres in the *WOAH Code*.

(2) The semen collection centre must be:

a) Approved for export by the Competent Authority.
b) Subjected to regular inspection, at least every 12 months, by an Official Veterinarian.
c) Under the supervision of a semen collection centre veterinarian approved by the Competent Authority.

(3) Semen donors may be transferred from one approved semen collection centre to another approved centre of equivalent health status without isolation or testing if the Competent Authority ensures that all of the following requirements are met:

a) Donors have been examined by the approved semen collection centre veterinarian and show no evidence of infectious disease transmissible in semen on the day of entry into the centre.
b) Transfer is direct.
c) Donors do not come into direct or indirect contact with animals of lower health status.
d) The means of transport is disinfected before use.

(4) Embryo collection or production must be carried out by a team that complies with the recommendations for embryo collection or embryo production teams in the *WOAH Code*, whichever applies.

(5) The embryo team must be:

a) Approved for export by the exporting country's Competent Authority.
b) Subjected to regular inspection, at least every 12 months, by an Official Veterinarian.
c) Under the supervision of a team veterinarian.

1.8 Donor requirements

(1) Semen donors must meet the applicable requirements for collection and processing of bovine semen in the *WOAH Code,* and any additional requirements in *Part 2* of this IHS.

(2) While the semen donors are held in pre-entry isolation for at least 28 days prior to entering the semen collection centre (as prescribed in the *WOAH Code*), they must not be used for natural mating and must be isolated from animals not of equivalent health status.

(3) Embryo donors must meet the applicable requirements for collection and processing of bovine embryos in the *WOAH Code* and any additional requirements in *Part 2* of this IHS.

(4) Embryo donors must be resident in the collection herd for at least 28 days prior to embryo or oocyte collection for export to New Zealand until completion of pre-collection donor testing. While resident with

the collection herd, the herd must not be subject to veterinary restrictions for the identified risk organisms managed in *Part 2* of this IHS.

(5) Donor animals must have lived continuously in an approved country under this IHS (clause 1.5) for at least 60 days before germplasm collection.

(6) On the day of collection, the embryo collection team veterinarian or semen collection centre veterinarian must determine that the donor animal is free from clinical evidence associated with the risk organisms listed in *Part 2*, or any other infectious diseases transmissible by germplasm.

(7) Where a specific requirement of this IHS for a risk organism is met by pre-collection testing, the donor animals must be isolated from other animals not of equivalent tested health status, from the time of the pre-collection test until completion of collection for export.

(8) Where a specific requirement of this IHS for a risk organism is met by monitoring the donor animal for clinical signs for a specified time after collection, the germplasm must be stored for that amount of time prior to export.

Guidance

- See the *Guidance Document* for the model veterinary certification which includes the most current *WOAH Code* requirements and the measures for additional risk organisms listed in *Part 2: Specified requirements for identified risk organisms* of this IHS.

1.9 Semen collection, processing and storage

(1) Semen collection, processing and storage must comply with the sections relevant for bovine semen in the *WOAH Code*, unless otherwise stated in *Part 2* of this IHS.

(2) Where *Part 2* requires testing within a certain time period before or after semen collection:

a) Semen collection may occur over a period of up to 60 consecutive days (semen collection period).
b) Samples for testing before collection must be obtained within the specified period before the first day of the semen collection period.
c) Samples for testing after collection must be obtained within the specified period after the last day of the semen collection period.

(3) Semen straws must be sealed, and clearly and permanently marked to identify the donor and the date(s) of collection. The markings must conform to international standards of the *International Committee for Animal Recording (ICAR)*. If a code is used for this information, instructions to decipher that code must accompany the consignment.

(4) Semen may only be stored with germplasm that has been collected and processed in accordance with the *WOAH Code*.

(5) Semen must be held in a storage place approved by the Competent Authority of the exporting country until the time of export.

(6) Semen must only be imported into New Zealand if the semen is imported directly from the country in which it was collected; or

a) If semen is collected in a country approved as for clause 1.5 of this IHS and is stored in another country that is also approved for the export of bovine semen into New Zealand (country of storage), that semen may be imported into New Zealand if the consignment is accompanied by:

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

1. Identifies the semen from the country of origin as the semen being exported to New Zealand, and

2. Certifies that the semen has been stored and transported in the country of storage in accordance with the requirements of this IHS.

ii) Evidence that the semen meets the rest of the requirements of this IHS in the form of either:
1. A veterinary certificate issued by the Competent Authority of the country of origin, or
2. A letter from the Competent Authority of the country of origin confirming the semen meets the requirements of this IHS and indicating how the relevant requirements have been fulfilled.

1.10 Embryo collection, processing and storage

(1) Embryos and oocytes must be collected, washed, processed and stored, while maintaining traceability, under the supervision of an embryo collection team veterinarian and in accordance with the recommendations in *IETS Manual* and the relevant *WOAH Code* chapters.

(2) Any micro-manipulation that causes a breach of the zona pellucida must be done as per the procedures described in the *IETS Manual* and the *WOAH Code*.

(3) Oocytes for the production of IVP embryos for export to New Zealand must be collected from live donor cows or heifers by transvaginal aspiration, also known as ovum pick-up (OPU), laparoscopic aspiration (LOPU) or equivalent techniques. Oocytes must not be collected from slaughterhouses.

(4) Embryos must be washed at least 10 times, with each wash being at least 100-fold dilution of the previous wash.

(5) After washing, each embryo must be 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.

(6) The equipment used for collecting and transporting embryos or oocytes to the laboratory, maturing, culturing, washing, freezing and storing oocytes or embryos must be new or cleaned and sterilised before use.

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

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

(9) Embryos must only be stored and transported with germplasm that has been collected and processed in accordance with the *WOAH Code*.

(10) Embryos must only be held in a storage place approved by the Competent Authority until the time of export.

(11) Embryos can only be imported into New Zealand if the embryos are imported directly from the country in which they were collected; or

a) If embryos are collected in a country approved as for clause 1.5 of this IHS and stored in another country that is also approved for the export of bovine embryos into New Zealand (country of storage), those embryos may be imported into New Zealand if the consignment is 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, and

2. Certifies that the embryos have been stored and transported in the country of storage in accordance with the requirements of this IHS.

ii) Evidence that the embryos meet the rest of the requirements of this IHS in the form of either:
1. A veterinary certificate issued by the Competent Authority of the origin, or
2. A letter from the Competent Authority of the origin country confirming the embryos meet the requirements of this IHS and indicating how the relevant requirements have been fulfilled.

1.11 Transport

(1) The cryogenic or cooling agent used in the freezing process, storage and transport of germplasm must not have been used previously in association with any other product of animal origin.

(2) All transport containers in which germplasm is transported to New Zealand must be new or disinfected and must be free of contamination. When a transport container has been disinfected, the disinfectant, its active chemical and the date of disinfection must be recorded on the veterinary certificate.

(3) All transport containers in which germplasm is transported to New Zealand must be sealed, by either the semen collection centre veterinarian, embryo team veterinarian or an Official Veterinarian, using tamper-evident seals that are positioned to ensure that no germplasm can be added after the tank has been sealed. The seal number must be recorded on the veterinary certificate.

(4) Where germplasm is transferred from one transport container to another, the date of transfer, approved collection centre/team, reason for transfer, and the name of veterinarian involved in the transfer must be recorded on the veterinary certificate.

1.12 Documentation that must accompany goods

(1) The consignment must arrive in New Zealand with the documentation that is specified in, and meets the requirements of, clauses 1.12.1 and 1.12.2 below.

(2) All documentation that is required to accompany bovine semen and embryos must be:

a) In English or have an English translation that is clear and legible.
b) Original (Note: certified copies may be acceptable if validity is confirmed by the issuing competent authorities).

(3) Documentation that is in a paper format must, unless otherwise stated, be endorsed on every page by the Official Veterinarian with their original stamp, signature and date or be endorsed in the space allocated and all pages have paper based alternative security features.

(4) Documentation that is in an electronic format must, unless otherwise stated, be transmitted directly from the Competent Authority of the exporting country to MPI, using an electronic system approved by MPI for that purpose.

Guidance

- Copies of all documents that are required to accompany the goods should be submitted to the biosecurity inspector at the airport/port of arrival as early as possible to avoid delays in border clearance. The recommended timeframe is at least 3 working days before arrival.
- A Trade Single Window (TSW) lodgement is required to meet both MPI and Customs requirements. For more information about TSW please visit: https://www.customs.govt.nz/business/trade-single-window/

1.12.1 Veterinary certificate

(1) A veterinary certificate from the exporting country's Competent Authority, where required by this IHS, must include the following.

a) A unique consignment identifier
b) Species, donor identification, quantity (of semen/embryos)
c) Dates of collection
d) For semen, the name and address of the approved semen collection centre and date of donor entry
e) For embryos, confirmation of the Competent Authority's approval of the embryo collection team, address of the embryo collection herd/centre and donors' date of entry
f) Name and address of the importer (consignee) and exporter (consignor)
g) Transport container number seal number and disinfection information
h) Name and signature of the Official Veterinarian
i) A list of vaccines administered to meet specific disease import requirements, including vaccine name, virus types and strains included in the vaccine (where applicable) and vaccination date(s)
j) Certification and endorsement by the Official Veterinarian that the general requirements outlined in *Part 1* and *Part 2* of this IHS have been met

Guidance

- Where equivalent measures have been negotiated and agreed to with MPI, and a CTO has, prior to import, issued a direction under section 27(1)(d) of the Act that is different from those in this standard in the form of a negotiated veterinary certificate, a country-specific veterinary certificate must accompany the consignment.
- See *Guidance Document* for more information about equivalence and country-specific veterinary certificates.

1.12.2 Laboratory reports

(1) Subject to (3), original laboratory reports, copies of laboratory reports endorsed by the Official Veterinarian, or a tabulated summary of laboratory results endorsed by the Official Veterinarian of all tests required by *Part 2* of this IHS.

(2) Laboratory reports or a tabulated summary must include the following.

a) Unique identification for each animal, consistent with the veterinary certificate
b) Dates of sample collection
c) Test type
d) Test result

(3) Notwithstanding (1), a CTO may determine that laboratory reports are not required as part of the exporting country's certification process (clause 1.5 of this IHS).

Part 2: Specified requirements for identified risk organisms

2.1 Bovine herpesvirus 1.1 and 1.2a (infectious bovine rhinotracheitis/infectious pustular vulvovaginitis, IBR/IPV)

(1) Semen:

a) At the time of collection of semen for export to New Zealand, the country of export must be free from BHV 1.1 and BHV 1.2a in accordance with the *WOAH Code*; or

b) The semen collection centre must be maintained free from BHV 1.1 and 1.2a from commencement until conclusion of semen collection for export to New Zealand, through compliance with the recommendations in the *WOAH Code* for BHV, with the following modifications:

i) All animals entering the centre must be tested prior to pre-entry isolation for antibodies using a test listed in *MPI-STD-SAA*, with negative results;

ii) All animals must be tested in pre-entry isolation for antibodies using a test listed in *MPI-STD-SAA*, with negative results, or where an animal in a group has tested positive, the remaining animals must be re-tested with negative results no less than 21 days after removal of the positive animal;

iii) Thereafter, all animals resident at the centre must be tested annually for antibodies using a test listed in *MPI-STD-SAA*, with negative results; or

c) The semen donor must be tested for BHV 1.1 and 1.2a using a test listed in *MPI-STD-SAA* at least 21 days after semen collection for export to New Zealand with negative results in accordance with the *WOAH Code* recommendations for the importation of frozen semen; or

d) An aliquot of semen from each semen collection for export to New Zealand must be tested for BHV 1.1 and 1.2a using a test listed in *MPI-STD-SAA*, with negative results.

(2) IVP embryos:

a) The semen used to produce the embryos for export to New Zealand must meet the requirements for BHV-1.1 and 1.2a in this IHS, and

i) At the time of collection of oocytes for the production of embryos for export to New Zealand, the country of export must be free from BHV 1.1 and BHV 1.2a in accordance with the *WOAH Code*; or

ii) The oocytes for production of IVP embryos for export to New Zealand must be derived from donors that are resident in a herd maintained free from BHV-1.1 and 1.2a; or

iii) The oocyte donor must be subjected to an agent detection test listed in *MPI-STD-SAA* for BHV-1.1 and 1.2a on vaginal swab sample or blood sample obtained on the day of oocyte collection, with negative result; or

iv) The oocyte donor must be subjected to a serological test for BHV-1.1 and 1.2a with a test listed in *MPI-STD-SAA* on the day of oocyte collection and at least 21 days later, with negative results; or

v) A sample of oocytes (viable or non-viable) or follicular fluid from the day of collection must be subjected to an agent detection test listed in *MPI-STD-SAA* for BHV 1.1 and 1.2a, with negative results; or

b) A sample of the IVP embryos (viable or non-viable) from the batch for export or culture medium taken immediately prior to embryo storage must be subjected to an agent detection test listed in *MPI-STD-SAA* for BHV 1.1 and 1.2a, with negative results.

Guidance

- There are no specific import requirements to manage BHV 1.1 and 1.2a for IVD embryos.

2.2 Bovine herpesvirus 5 (BHV 5)

(1) Semen:

a) The semen donor's centres of residence must have had no cases of BHV 5 (suspected or diagnosed) in the year prior to collection for export to New Zealand.

(2) IVP embryos:

a) The semen used to produce the embryos for export to New Zealand must meet the requirements for BHV-5 in this IHS; and the oocyte donor's herd of residence must have had no cases of BHV 5 (suspected or diagnosed) in the year prior to collection for export to New Zealand.

Guidance

- There are no specific import requirements to manage BHV5 for IVD embryos.

2.3 Bovine leukaemia virus (enzootic bovine leukosis, EBL)

(1) Semen:

a) At the time of semen collection for export to New Zealand, the exporting country must be recognised by a CTO as free from EBL; or

b) The semen donor must be resident at the time of semen collection in a herd certified as free from EBL by the Competent Authority; and

i) If less than two years of age, the semen donor must come from a 'uterine dam' that has been tested for EBL using a serological test listed in *MPI-STD-SAA*, with negative results; or

ii) The semen donor must originate from a herd certified as free by the Competent Authority; or

iii) The semen donor must be subjected to a test listed in *MPI-STD-SAA* for EBL, with negative results, between 30 days before and 30 days after collection of the semen; or

c) The semen donor must be resident at the time of semen collection in an EBL free herd, and

i) Every animal must be tested prior to entry to the resident herd, and

ii) The herd was tested at least every 6 months with negative results using an ELISA or AGID test or other test listed in *MPI-STD-SAA*; or

d) The semen donor must be tested for EBL with a test listed in *MPI-STD-SAA* on two occasions with negative results, the first test being carried out at least 30 days before and the second test at least 90 days after collection of the semen; or

e) The semen donor must be tested for EBL with a test listed in *MPI-STD-SAA* on two occasions with negative results, the first test being carried out at least 6 months before and the second test at least 21 days after collection of the semen, and

i) The semen donor must be separated from animals at the centre with a lesser EBL health status from the time of test sampling before pre-entry isolation to the start of pre-entry isolation, and

ii) All animals in contact with the semen donor must be physically examined by the centre veterinarian) to determine that they do not display any clinical signs of infectious disease at the start of pre-entry isolation, or

f) The semen donor must be subjected to a test listed in *MPI-STD-SAA* for EBL, with negative results, between 30 days before and 30 days after collection of the semen and the semen donor must pass a breeding soundness exam, including manual rectal palpation or visible observation with rectal ultrasound of the seminal vesicles, conducted on the day of collection by a collection centre veterinarian; or

g) An aliquot of semen from each collection for export to New Zealand must be tested for BLV using a test listed in *MPI-STD-SAA*, with negative results.

Guidance

- There are no specific import requirements to manage EBL for embryos.

2.4 Bovine viral diarrhoea virus genotype 2 (BVDV2)

(1) At the time of germplasm collection for export to New Zealand, the exporting country must be recognised by a CTO as free from BVDV2; or

(2) Semen:

a) The semen collection centre must be maintained free from BVDV2 from commencement until conclusion of semen collection for export to New Zealand, in accordance with the recommendations in the *WOAH Code* chapter for BVDV, with the following modifications:

i) All animals entering the centre must be tested within 30 days prior to pre-entry isolation using a serological test and an agent detection test listed in *MPI-STD-SAA*,

ii) All animals must be tested after 21 days in isolation using a serological test and an agent detection test listed in *MPI-STD-SAA*,

iii) If any animal seroconverts during pre-entry isolation, all animals must be kept in pre-entry isolation until there is no more seroconversion for 3 weeks,

iv) Only groups where pre-entry isolation results indicate the absence of the virus by agent-detection testing may be approved for entry,

v) Seronegative animals resident in the semen collection centre must be re-tested annually using a serological test listed in *MPI-STD-SAA*,

vi) Seropositive donors must have their semen tested for BVDV2 using a test listed in *MPI-STD-SAA* with negative results, any time prior to collection for export to New Zealand; or

b) An aliquot of semen from each semen collection for export to New Zealand must be tested for BVDV2 using a test listed in *MPI-STD-SAA*, with negative results.

(3) IVD embryos:

a) A sample of the embryo collection (flushing) fluid or embryos (viable or non-viable) from the collection for export to New Zealand must be tested for BVDV2 in accordance with *MPI-STD-SAA*, with negative results; or

b) The embryo donor must be tested for persistent BVDV2 infection using an agent detection test listed in *MPI-STD-SAA*, with negative results, and

i) The semen used to produce the embryos for export to New Zealand must meet the requirements for BVDV2 in this IHS,

ii) The embryo donor must not have been vaccinated against BVDV2 within 30 days prior to embryo collection,

iii) The embryo donor must be tested for acute BVDV2 infection in accordance with *MPI-STD-SAA*, with negative results, in one of the following ways:

1) Using antigen capture ELISA immediately prior to an isolation period of at least 21 days before collection for New Zealand. Isolation must exclude animals 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) Using virus isolation within 48 hours of collection for New Zealand, or
3) Serologically tested between 2 weeks and 6 months after collection.

(4) IVP embryos:

a) A sample of the IVP embryos (viable or non-viable) from the batch for export or embryo culture medium taken immediately prior to embryo storage must be tested for BVDV2 with an agent detection test in accordance with *MPI-STD-SAA*, with negative results; or

b) A sample of oocytes (viable or non-viable) or follicular fluid from the day of collection must be subjected to an agent detection test listed in *MPI-STD-SAA*, with negative results, for BVDV2 and the semen used to produce the embryos must meet the requirements for BVDV2 in this IHS; or

c) The oocyte donor must be tested for persistent BVDV2 infection using an agent detection test listed in *MPI-STD-SAA*, with negative results; and

i) The semen used to produce the embryos for export to New Zealand must meet the requirements for BVDV2 in this IHS;

ii) The oocyte donor must not have been vaccinated against BVDV2 within 30 days prior to oocyte collection;

iii) The oocyte donor must be tested for acute BVDV2 infection in accordance with *MPI-STD-SAA*, with negative results, in one of the following ways:

1) Using antigen capture ELISA immediately prior to an isolation period of at least 21 days before collection for New Zealand. Isolation must exclude animals 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) Using virus isolation within 48 hours of collection for New Zealand; or
3) Serologically tested between 2 weeks and 6 months after collection.

2.5 Foot and mouth disease (FMD)

(1) Semen:

a) The donor must be resident for at least the 3 months before the semen collection in a country or zone that is free from FMD without vaccination in accordance with the *WOAH Code*; or

b) The herd of origin, semen collection centre, donor animal and semen for export to New Zealand must comply with *WOAH Code* recommendations for export of bovine semen from countries or zones presenting a risk of FMD; and

i) each semen collection, processing and storage facility in the exporting country intended to be used during the preparation of an export consignment to New Zealand must be approved by a CTO.

(2) IVD embryos:

a) The donor must be resident for at least the 3 months before embryo collection in a country or zone that is free from FMD without vaccination in accordance with the *WOAH Code*; or

b) Each embryo collection, processing and storage facility in the exporting country, intended to be used during the preparation of an export consignment to New Zealand, must be approved by a CTO.

(3) IVP embryos:

a) The oocyte donor must be resident for at least the 3 months before embryo collection in a country or zone that is free from FMD without vaccination in accordance with the *WOAH Code*; or

b) The oocyte donors must have been continuously residing for at least three months before oocyte collection in an FMD-free country or zone that has freedom from FMD with vaccination in accordance with the *WOAH Code*; and:

i) The semen used to produce the embryos for export to New Zealand must meet the requirements for FMD in this IHS; and the oocyte donors were either:

1) subjected, not less than 21 days after collection, to an MPI recommended serological test, with negative result; or
2) vaccinated at least twice against FMD between one and six months before oocyte collection; and

ii) The embryo collection, processing and storage facility in the exporting country, intended to be used during the preparation of an export consignment to New Zealand, must be approved by a CTO.

Guidance

- CTO approval will be dependent on the establishment, its location and operating standards, and that the verification systems of the veterinary authority achieve a very high level of risk management for FMD. The process for MPI approval may include site inspection. MPI reserves the right to supervise collection or require any other measures deemed necessary to ensure compliance with facility and operating standards upon which the approval is based.

2.6 Lumpy skin disease (LSD)

(1) The germplasm donor must be resident for 6 months prior to germplasm collection in a country or zone that is free from LSD as defined by the *WOAH Code*; or

(2) Semen:

a) The donor must be resident in an establishment that was free of clinical evidence of LSD during a period from at least 6 months prior to commencement, until 28 days after conclusion of germplasm collection for export to New Zealand; or

b) An aliquot of semen from each collection for export to New Zealand must be tested for LSD using a test listed in *MPI-STD-SAA*, with negative results.

(3) IVD embryos:

a) The embryo donor must be resident in an establishment that was free of clinical evidence of LSD during a period from at least 60 days prior to commencement, until 28 days after conclusion of germplasm collection for export to New Zealand; and

i) The semen used to produce the embryos for export to New Zealand must meet the requirements for LSD in this IHS;

ii) The donor must be subjected to agent detection with a test listed in *MPI-STD-SAA* with negative results on a blood sample collected on the date of collection and must be either;

1) Unvaccinated and subjected to a serological test listed in *MPI-STD-SAA* for LSD. on the day of embryo collection; and 21 days later with negative results; or
2) Regularly vaccinated against LSD according to manufacturer's instructions, the first vaccination administered at least 60 days before the first embryo collection and demonstrated to have antibodies against LSDV at least 30 days after vaccination; or

b) A sample of embryos from the batch for export (viable or non-viable) or embryo collection (flushing) fluids from the day of collection must be tested for LSD using with an agent detection test in accordance with *MPI-STD-SAA*, with negative results.

(4) IVP embryos:

a) The oocyte donor must be resident in an establishment that was free of clinical evidence of LSD during a period from at least 60 days prior to commencement, until 28 days after conclusion of germplasm collection for export to New Zealand and

i) The semen used to produce the embryos for export to New Zealand must meet the requirements for LSD in this IHS,

ii) The donor must be subjected to agent detection by PCR with negative results on a blood sample collected on the date of the oocyte collection and must be either;

1) Unvaccinated and subjected to a serological test listed in *MPI-STD-SAA* for LSD on the day of oocyte collection; and 21 days later with negative results, or
2) Regularly vaccinated against LSD according to manufacturer's instructions, the first vaccination administered at least 60 days before the first collection of oocytes and demonstrated to have antibodies against LSDV at least 30 days after vaccination; or

b) A sample of the IVP embryos (viable or non-viable) from the batch for export to New Zealand or culture medium taken immediately prior to embryo storage must be subjected to an agent detection test listed in *MPI-STD-SAA* for LSD, with negative results.

2.7 Rift Valley fever virus (RVF)

(1) Semen, IVD and IVP embryos:

a) The germplasm donor must be resident, for at least the 30 days prior to, and during germplasm collection for export to New Zealand in a country or zone that is free from RVF in accordance with the *WOAH Code*; or

b) The germplasm donor must not show any clinical signs of RVF within the period from 14 days prior to and 14 days following germplasm collection and either;

i) The donor must be vaccinated against RVF in accordance with *MPI-STD-SAA* at least 14 days prior to collection; or
ii) The donor must be demonstrated to be seropositive on the day of collection using a test listed in *MPI-STD-SAA*; or
iii) Testing of paired samples using a test listed in *MPI-STD-SAA* must demonstrate that seroconversion did not occur between germplasm collection and 14 days after.

c) In the case of IVP embryos, semen used for the production of embryos for export to New Zealand must meet the requirements for RVF in this IHS.

2.8 *Brucella melitensis*, and *Brucella abortus* (bovine brucellosis)

(1) Semen:

a) The semen donor must be kept since birth in a country or zone that is free from bovine brucellosis in accordance with the *WOAH Code*; or

b) The semen collection centre must be maintained free from bovine brucellosis from commencement until conclusion of semen collection for export to New Zealand, through compliance with the recommendations in the *WOAH Code* for *Brucella*, with the following modifications:

i) The donor must be from a country, zone, or herd that is free from bovine brucellosis in accordance with the *WOAH Code* or the Competent Authority,
ii) During the 30 days prior to pre-entry isolation, the donor must be tested using a test listed in *MPI-STD-SAA* for bovine brucellosis, with negative results,
iii) All animals in pre-entry isolation must be tested using a test listed in *MPI-STD-SAA* for bovine brucellosis, with negative results, and
iv) At least annually all animals resident in the semen collection centre must be tested using a test listed in *MPI-STD-SAA* for bovine brucellosis, with negative results; or

c) The semen collection centre must be maintained free from brucellosis from commencement until conclusion of semen collection for export to New Zealand, through compliance with the Competent Authority's collection centre testing program in relation to *Brucella abortus* and *B. melitensis*.

(2) IVP embryos:

a) The semen used to produce the embryos for export to New Zealand must meet the requirements for bovine brucellosis in this IHS.

Guidance

- There are no specific import requirements to manage bovine brucellosis for IVD embryos.

2.9 Brucella suis

(1) Semen:

a) The semen donor must be kept since birth in a country or zone that is recognised by a CTO as free from *Brucella suis*; or
b) The semen collection centre must be maintained free from *Brucella suis* from commencement until conclusion of semen collection for export to New Zealand, through compliance with the Competent Authority's collection centre testing program in relation to *Brucella suis*; or
c) The donor must be tested using a test listed in *MPI-STD-SAA* for *Brucella suis* between 2 weeks after entry into the collection centre and 90 days after collection, with negative results.

(2) IVP embryos:

a) The semen used to produce the embryos for export to New Zealand must meet the requirements for *Brucella suis* in this IHS.

Guidance

- There are no specific import requirements to manage *Brucella suis* for IVD embryos.

2.10 Campylobacter fetus subspecies *venerealis (Cfv)* (bovine genital campylobacteriosis, BGC)

(1) Semen:

a) At the time of collection for New Zealand, the semen collection centre must have a programme, approved by the Competent Authority or aligned with the *WOAH Code*, to prevent *Cfv* infected animals from entering the collection herd, and there must have been no case of bovine genital campylobacteriosis reported in centre in the 1 year prior to collection; or
b) Preputial specimens collected at the time of semen collection for export to New Zealand must be tested for *Cfv* using a test listed in *MPI-STD-SAA*, with negative results.

Guidance

- There are no specific import requirements to manage BGC for embryos.

2.11 Coxiella burnetii (Q-fever)

(1) Semen, IVD and IVP embryos:

a) An aliquot germplasm from each batch for export to New Zealand must be tested for Q fever using a test listed in *MPI-STD-SAA*, with negative results; or
b) The germplasm donor must never have been confirmed positive for Q fever and either:

i) The donor must be subjected to a serological test listed in *MPI-STD-SAA* for Q fever, on a sample collected between 21 and 120 days after each germplasm collection for export to New Zealand, with negative results, or

ii) Within the 6-month period before or after germplasm collection for export to New Zealand, but before export, the embryo collection herd or semen collection centre herd must be tested for Q fever, using a test listed in *MPI-STD-SAA*, 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 must be isolated for the period between semen collection and diagnostic sampling.

2.12 Leptospira interrogans serovar Hardjoprajitno (leptospirosis)

(1) Semen:

a) Antibiotics must be added to semen in accordance with *MPI-STD-SAA*; or
b) The donor must be tested for *L. interrogans* serovar Hardjoprajitno in accordance with *MPI-STD-SAA*, with negative results; or
c) An aliquot of semen from each semen collection for export to New Zealand must be tested for leptospirosis in accordance with *MPI-STD-SAA*, with negative results.

(2) IVD and IVP embryos:

a) Antibiotics must be added during the embryo processing in accordance with *MPI-STD-SAA*; or
b) The semen used to produce the embryos for export to New Zealand must meet the requirements for leptospirosis in this IHS; and

i) The embryo donor must be tested for *L. interrogans* serovar Hardjoprajitno in accordance with *MPI-STD-SAA*, with negative results; or

c) A sample of the embryos (viable or non-viable) from the batch for export to New Zealand must be tested for leptospirosis in accordance with *MPI-STD-SAA*, with negative results.

2.13 Mycobacterium tuberculosis (bovine tuberculosis)

(1) Semen:

a) At the time of collection for export to New Zealand, the semen collection centre must be:

i) Located in a country or zone that was recognised by a CTO as free from bovine tuberculosis, or
ii) Free from bovine tuberculosis in accordance with the *WOAH Code* or the Competent Authority of the exporting country; or

b) The semen collection centre must be maintained free from bovine tuberculosis from commencement until conclusion of semen collection for export to New Zealand, in accordance with the recommendations in the *WOAH Code* for bovine tuberculosis, and

i) Prior to pre-entry isolation, donors must be from a herd free from bovine tuberculosis, either in accordance with the *WOAH Code* or the Competent Authority of the exporting country, and
ii) At least annually all resident animals must be tested using a test listed in *MPI-STD-SAA* for bovine tuberculosis, with negative results.

(2) IVD and IVP embryos:

a) The donor must be from an embryo collection herd that was free from bovine tuberculosis at the time of collection for export to New Zealand in accordance with the *WOAH Code* or the Competent Authority of the exporting country and the donor must be:

i) From a country or zone recognised by a CTO as free from bovine tuberculosis, or
ii) Subjected to a test listed in *MPI-STD-SAA* for bovine tuberculosis during the period between 30 days prior to and 12 months after embryo/oocyte collection for export to New Zealand, with negative results.

2.14 Mycoplasma mycoides subspecies *mycoides SC* (contagious bovine pleuropneumonia, CBPP)

(1) Semen, IVD and IVP embryos:

a) The germplasm donor must be born in and have been continuously resident in a country that is recognised by a CTO as free from CBPP; or
b) The germplasm donor must:

i) Never have been vaccinated for CBPP;
ii) Be kept since birth, or for at least the 6 months prior to commencement until conclusion of germplasm collection for export to New Zealand in establishments where no case of CBPP has been reported, and which are not situated in a CBPP infected zone, as defined by the *WOAH Code*;
iii) Be serologically tested for CBPP, using a test listed in *MPI-STD-SAA* on two occasions 21 to 30 days apart, with the last test within 14 days prior to germplasm collection for export to New Zealand, with negative results.

2.15 Mycoplasma bovis

(1) Semen:

a) The semen donor must be subjected to a test for *M. bovis* listed in *MPI-STD-SAA*, with negative results; or
b) Each semen collection for export to New Zealand must be tested using a validated test for *M. bovis* in accordance with *MPI-STD-SAA*, with negative results.

(2) IVD and IVP embryos:

a) Embryos must be treated with antibiotics during processing in accordance with *MPI-STD-SAA*; or
b) Each embryo collection for export to New Zealand must be tested using a validated test for *M. bovis* in accordance with *MPI-STD-SAA*, with negative results; or
c) The embryo donor must be subjected to a test for *M. bovis* listed in *MPI-STD-SAA*, with negative results; and

i) The semen used to produce the embryos for export to New Zealand must meet the requirements for *M. bovis* in this IHS.

Schedule 1 – Document history

Date First Issued	Title
25 August 2021	Import Health Standard: Bovine Germplasm
Date of Amendments	**Summary**
31 July 2025	• Added requirements for in vitro produced embryos • Removed the import permit requirement • Changed references of cattle to "animals" throughout the IHS to cover other relevant bovine species. • Introduced new options for the management of enzootic bovine leukosis • Clarified testing options for BVDV2 • Added embryo testing options for the management of leptospirosis • Amended semen donor testing requirements for the management of *Campylobacter fetus* subspecies *venerealis* • Removed the condition for donors to never have had a confirmed positive result for Q fever when semen is tested directly (aligned with IRA) • Removed the antibiotic treatment option for the management of *Mycoplasma bovis* in semen • Added a definition for semen collection and germplasm batch • Aligned of the import conditions for lumpy skin disease with WOAH recommendations • Added embryo testing and donor treatment options for the management of leptospirosis • Removed the requirement for embryo donors to be free of TB signs 24 hours prior to collection

Schedule 2 – Definitions

A term used in this standard that is defined in the *WOAH Code* has the meaning is given to it in the *Code* unless otherwise defined below.

Batch

A group of embryos collected or produced and processed at the same time and under the same conditions. This term is also synonymous with semen collection.

Semen collection

A single ejaculate or a pool of ejaculates collected from one donor on one calendar date.

Bovine animal

An animal of the species of ungulates belonging to the genera Bison, Bos and Bubalus and the offspring of crossings of those species.

Competent Authority

The Veterinary or other Governmental Authority of the World Organisation of Animal Health Member, that has the responsibility and competence for ensuring or supervising the implementation of animal health and welfare measures, international veterinary certification and other standards and recommendations in the *WOAH Code* in the whole territory.

Embryo collection (flushing) fluids

Fluids used during embryo collection and collected after flushing the uterine horn(s), in accordance with the WOAH recommendations in article 4.8.7 or subsequent relevant articles.

Embryo donor

Refers to either embryo donor or oocyte donor in the case of IVD and IVP embryos respectively.

Establishment

The farm, semen collection centre, artificial insemination centre and any other place of accommodation where the animals in question reside.

Germplasm

Semen or embryos collected from animals that are eligible for importation under this import health standard.

***In vivo* derived embryos (IVD)**

Embryos recovered after incubation occurred in the reproductive tract of the female donor.

***In vitro* produced embryos (IVP)**

Embryos produced by collection of oocytes, in vitro maturation and fertilization of the oocyte and embryo culture.

MPI

Ministry for Primary Industries, New Zealand.

MPI-STD-SAA

Specified Approvals for Animal Import Health Standards (Previously known as: Approved Diagnostic Tests, Vaccines, Treatments, and Post-Arrival Testing Laboratories for Animal Import Health Standards, MPI-STD-TVTL).

Official Veterinarian

A veterinarian authorised by the Competent Authority of a country to perform certain designated official tasks associated with animal health and/or public health and inspections of commodities and, when appropriate, to certify in conformity with the provisions of the World Organisation for Animal Health Terrestrial Animal Code Chapter for certification procedures.

Veterinary Certificate

A certificate, issued in conformity with the provisions of the World Organisation for Animal Health Code Chapter for certification procedures, describing the animal health and/or public health requirements which are fulfilled by the exported commodities.

WOAH

The World Organisation for Animal Health.