

10.2 Artificial Insemination - Bovine

This module describes requirements for export eligible bovine semen that is for domestic use and for owner's use only.

Export Eligible Semen

Requirements for bovines entering a centre for the production of semen for export:

1. The herd of origin must not be subject to any quarantine and the animals must be subject to the following tests with negative results, unless otherwise specified, within a 60-day period before entry into the isolation facility of the centre
 - i. **Tuberculosis** - intradermal purified protein derivative (PPD) bovine tuberculin - caudal fold read at 72 hours. Any reaction must be reported to the CFIA veterinarian.
 - ii. **Brucellosis** - (serum) tube agglutination test (TAT) less than 30 IU, **and** - (serum) complement fixation (CF), negative at 1/5.
 - iii. **Leptospirosis** - (serum) microscopic agglutination test (MAT) - serotypes *L. pomona*, *L. sejroe*, *L. hardjo*, *L. canicola*, *L. grippityphosa* and *L. icterohaemorrhagiae*. With exception of *L. hardjo*, for which a negative test at 1:100 is required, bulls with a test result of 1:100 or 1:200 must be retested after a minimum interval of 14 days and a stable titre obtained to be considered negative and eligible for entry into the isolation facility of the centre. The sampling dates and titres must be recorded on the health certificate accompanying the animal to the AI centre.
 - iv. **Bluetongue** - (serum) enzyme-linked immunosorbent assay (ELISA)
 - v. **Johne's disease** - (serum) ELISA
 - vi. **Enzootic bovine leucosis (EBL)** - (serum) ELISA
 - vii. **Enzootic haemorrhagic disease** - Type 2 (EHD2) - (serum) AGID

viii. **Bovine viral diarrhea (BVD)** - (serum) IMMUNOPEROXIDASE. Animals younger than six months of age must be retested by immunoperoxidase and serum neutralization (SN) after reaching that age. The SN test is to determine the serological status of the prospective donor bull and seropositive animals are allowed to enter into the isolation facility of the centre.

Optional Test

ix. **Infectious bovine rhinotracheitis (IBR)** - (serum) ELISA This test is done at the request of the semen production centre; a negative test is required for animals entering into an IBR negative facility.

EBL testing the dam

2. In addition, when possible, the uterine dam of the prospective donor bull should be subjected to an ELISA test for EBL subsequent to the weaning of the prospective donor, with negative results.

This test of the uterine dam is required to export semen to the EC Member States when semen is collected from a donor bull before he reaches 24 months of age and obtains a negative result to an ELISA test after reaching that age. This test is not required when the prospective donor bull originates from a Canada Health Accredited Herd for EBL (CHAH-EBL).

3. A *CFIA/ACIA 1634* certificate must accompany the animal to the isolation facility of the centre (Refer to [10.1 Artificial Insemination - General Information](#) paragraph 11 for distribution).

Domestic Use Semen

Requirements for bovines entering a semen collection centre for the purpose of the production of semen for distribution in Canada:

Herd of Origin

4. The herd of origin must not be subject to any quarantine and the animals must be subject to the following tests with negative results, unless otherwise specified, within the 60-day period preceding entry into the isolation facility of the centre.

Required Tests

i. **Tuberculosis** - intradermal purified protein derivative (PPD) bovine tuberculin - caudal fold read at 72 hours. Any reaction must be reported to the CFIA veterinarian.

ii. **EBL** - (serum) ELISA

iii. **Johne's disease** - (serum) c- ELISA

iv. **BVD** - (serum) IMMUNOPEROXIDASE Animals younger than six months of age must be retested after reaching that age.

5. A *CFIA/ACIA 1634* certificate must accompany the animal to the isolation facility of the centre (Refer to paragraph 11 in [Module 10.1](#) for distribution).

Owner's Use Only Semen

Requirements for bovines collected for owner's use only :

6. This applies to semen intended for the use of the owner of the donor animal in their own herd and may be collected from bulls at a semen collection centre approved for the purpose, or alternatively, may be collected on the premises where the donor is kept and processed in an approved mobile laboratory.
7. This section does not apply to semen being collected for the purpose of evaluating the fertility of the donor that is not intended to be inseminated into a female.
8. Bovine semen collected for any purpose other than for use in the owner's own herd must be collected in an approved semen collection centre.
9. All semen collected under the provisions of "Owner's Use Only Semen" should be clearly labelled "Owner's Use Only" with the identification of the donor animal, breed, identity of the collection unit, and date of collection of the semen. The name of the owner or herd of the donor bull is optional. Semen should be evaluated and processed according to current industry standards.
10. Semen labelled "Owner's Use Only" is to be stored at the farm of origin or in approved storage facility dedicated to that purpose. Semen of this status must never be stored in the same container as semen intended for distribution in Canada or in containers dedicated to the storage of semen for export. An exception is made for the semen stored at the farm of origin where semen "Owner's Use Only" is allowed to be stored in the same container as the semen purchased by the owner for use in his herd.
11. **IMPORTANT: Semen labelled "Owner's Use Only" must not be traded or sold. It may be used in the herd(s) of the registered owner of the donor bull only. *Health of Animals Regulations* require that records of the collection, use, distribution, and storage must be kept and made available to a CFIA inspector. Issuance of a permit to collect semen permits the CFIA to conduct an audit of the owner's semen storage and records of semen use.**