

10.7 Artificial Insemination - Bison

This module describes the requirements for bison semen for exportation and for distribution in Canada.

Note: If there is request to collect cervine semen for “Owner use only,” the procedure for “Owner’s Use Only Semen” mentioned in [10.2 Artificial Insemination - Bovine](#) should be followed.

Bison

Export and Domestic Eligible Semen

Pre-Entry Health Requirements of Semen Donor Bulls:

1. The herd of origin of the donor bulls must have been tested for tuberculosis and brucellosis according to current Canadian standards. The herd of origin must not be subject to any quarantine and the assessment of the general health of the herd must be conducted by the district veterinarian.
2. The herd of origin must be inspected and found free from clinical evidence of infectious disease and, insofar as can be determined, from history of infectious disease during the preceding 60 days.
3. In the case of animals moving from the premises of origin to the approved facility of a semen production centre, the donor bulls should remain in isolation at the premises of origin and must not be exposed to any infection to which they are susceptible from the date of pre-entry health examination until entry into the designated isolation facility.
4. A certificate *CFIA/ACIA 1634 Certificate of Health for Entry into a Semen Production Centre* must accompany the animal to the isolation facility of the centre. (Refer to [10.1 Artificial Insemination - General Information](#) paragraph 11 for distribution.)

Isolation Health Requirements of Semen Donor Bulls:

Assessments of the isolation health status and isolation testing of the donor bulls are to be performed by a veterinarian authorized to perform these functions as an accredited veterinarian.

Note: The isolation facility must be approved by the district veterinarian before the donor bison is presented.

5. All donor bulls presented for entry as additions to the semen production centre must undergo a minimum period of 30 days in an isolation facility maintained by the centre; the isolation period may begin when all animals have been assembled in the isolation facility.
6. An animal is considered eligible for entry into isolation only if a certificate of health completed by an accredited veterinarian as per paragraph 4 above accompanies the animal to the centre.
7. The animal must be placed in an isolation facility which has been pre-approved by the district veterinarian. Centres collecting bison semen may be located on premises on which other bison are raised provided isolation guidelines are maintained.
8. All animals presented for entry as additions to the semen production centre must receive an injection of dihydrostreptomycin (25 mg per kg of body weight) or an alternate antibiotic at the dosage recommended by the manufacturer, as a preventive measure against leptospirosis.
9. The initial tests of preputial samples for *Campylobacter fetus* subsp *venerealis* infection and trichomoniasis (*Trichomonas foetus*) are conducted after at least 7 days in isolation. Preputial fluid examinations should not be conducted until at least 7 days have elapsed following natural service or semen collection by means of an artificial vagina.
 - i. *Campylobacter fetus* examination requires the use of a special Transport Enriched Medium (TEM) medium and coordination with the laboratory when scheduling the submission of samples. Sample(s) of preputial washing are to be subject to culture tests as follows:

Animals less than 6 months of age or kept since that age only in a single sex group before their entry into isolation should be tested once with negative results.

Animals more than 6 months of age that could have been in contact with females before entering isolation should be tested three times at weekly intervals with negative results.

- ii. Trichomoniasis examination is by culture of preputial washing followed by direct microscopic examination. The culture examination requires the use of a special *Tritrichomonas Fætus* Transport Medium (TFTM) medium or acceptable alternate medium and coordination with the laboratory when scheduling the submission of samples. Samples of preputial washing are to be subject to culture tests as follows:

Animals less than 6 months of age or kept since that age only in a single sex group before their entry into isolation should be tested once with negative results.

Animals more than 6 months of age that could have been in contact with females before their entry into isolation should be tested three times at weekly intervals with negative results.

10. Semen may be collected from the donor immediately following each sampling mentioned above, but must be labelled "Owner's Use Only" and may be released immediately to the owner.
11. While in the isolation facility, and after a minimum of 30 days in isolation, the donor animals are to be tested for the following diseases with negative results unless otherwise specified:
 - i. **Brucellosis** - (serum) - BPAT, any reactor should be confirmed negative by CF test negative at 1/5.
 - ii. **Tuberculosis** - caudal intradermal tuberculin test using bovine PPD tuberculin.

Note: Any reactions to these tests must be reported to the district veterinarian.

12. If a suspicious or positive reaction is reported during the isolation testing regime, the individual animal is to be removed from the group. The remaining animals shall not be released for collection of semen until the suspect animal either has been confirmed negative or has been removed from the isolation facility, and the negative status of the remaining animals reconfirmed for the disease in question.
13. When tests results are known and negative, semen may be collected without restriction. The donor bulls may be collected in the isolation facility which is considered to become a centre or move to a permanent semen collection centre.
14. All semen collected from donor bulls should be clearly labelled with the identification of the donor animal, the species, the identity of the collection unit, and the date of collection of the semen.

15. Any person or organisation collecting semen on a premises designated for this purpose or on the premises of a herd owner using a mobile laboratory must be in possession of a "Permit to Operate a Semen Production Centre" issued by the National Coordinator, Artificial Insemination, Animal Health and Production Division, Ottawa. In addition, every owner of premises on which semen is collected must be in possession of a "Permit to collect semen" issued by the CFIA area office, unless the owner of the premises is granted a "Permit to Operate a Semen Production Centre." Bison semen collected is eligible for export and distribution in Canada.

16. If donor bulls are maintained in the semen collection centre or isolation facility for a period of more than 12 months, they should be retested for tuberculosis and brucellosis every 12 months.