

3.1 BSE Suspect (Confirmatory Negative)

On Farm

1. When contacted by a producer or private veterinarian regarding a bovine with neurological signs, CFIA staff will determine if the animal is a **BSE** (or rabies) **suspect** based on the case definition in *2.1 Policy (4)*.
2. Arrange to visit the farm as soon as possible to procure a diagnostic sample if the history and clinical signs reported indicate that the animal is a **BSE suspect** (confirmatory negative).
3. At the farm, confirm the clinical signs and history. Establish whether diagnostic samples are to be submitted for BSE testing only or for both BSE and rabies testing. Unless the clinical history clearly indicates otherwise (e.g. the clinical signs have been present for more than 10 days), all animals displaying clinical signs of central nervous system disease should also be tested for rabies. Any animal determined not to be a **BSE suspect** may be sampled under the BSE surveillance program described in *5.1 Target Populations*.
4. Order the animal destroyed with compensation. Complete and issue *CFIA 4203—Requirement to Dispose and Award of Compensation*.
5. Complete and issue *CFIA 4206—Requirement to Quarantine and/or License to Transport Animals or Things* to maintain official control of the carcass until the test results are known.
6. Collect appropriate diagnostic samples in accordance with *6.1 Appendix 1*. Specimens are to be submitted as “BSE confirmatory negative” samples and their submission is to be coordinated with NC-FAD as per the *Foreign Animal Disease Manual of Procedures* (FAD MOP).
7. Ensure that all identifiers on the animal (e.g. ear tags, legible tattoos/brands) are recorded on the submission form. Also ensure that all pertinent information regarding the name and address of the owner, a full description of the animal including its age and breed, and a description of the clinical signs are included.

In Abattoirs

8. All cattle presented for slaughter must be inspected for evidence of central nervous system disease. Cattle exhibiting such signs must be held and referred to an animal health inspector. A bovine that fits the BSE case definition referred to in *2.1 Policy (4)* must be classified as a **BSE suspect** (confirmatory negative). The possibility of rabies should also be considered. Any animal over 30 months of age determined not to be a BSE suspect may be sampled under the BSE surveillance program described in *5.1 Target Populations*.
9. **BSE suspects** are to be condemned and are not permitted to proceed to the slaughter floor or to other areas of the establishment where edible product is processed. The animal is to be isolated and cannot be moved from the premises. Specimens are to be submitted as a BSE suspect (confirmatory negative) sample and their submission is to be coordinated with NC-FAD in accordance with the FAD MOP.
10. The carcass in its entirety (including all inedible portions) must be kept separate and held until BSE and (if appropriate) rabies test results are known. Complete and issue *CFIA 4206* to detain the carcass in its entirety until test results are known or to license the carcass in its entirety for removal to an approved site for burial or incineration. Ensure that the animal identification is noted on the quarantine form. If the abattoir does not have the capacity to hold the carcass until the test results are known, it may be licensed for removal to an alternate location where it can be held.

3.2 Initial Investigation

- Non Negative*
1. Notification of non-negative results will be conducted in accordance with Part C, Section 4.5 of the FAD MOP. Upon notification of a non negative BSE test result from a CFIA laboratory, the appropriate CFIA district veterinarian is to trace the origin of the sample and inform the owner of the inconclusive result. A cursory investigation should establish the animal's premises of origin and the current location of this carcass.
 2. Complete and issue *CFIA 4206—Requirement to Quarantine and/or License to Transport Animals or Things* to maintain official control of the carcass.
- Confirmed Positive*
3. Confirmation of a BSE index case is the responsibility of the National BSE Reference Laboratory at NC-FAD, Winnipeg. Further confirmation of the diagnosis by the world reference laboratory may be considered. Notification of results will be conducted in accordance with Part C, Section 4.5 of the FAD MOP, that is, the Executive Director of NC-FAD will give the results verbally (by telephone) initially and then electronically to the Executive Director, Laboratories Directorate and the Executive Director, APD.
 4. When the appropriate district office is notified of a confirmed positive diagnosis of BSE, CFIA staff promptly contact the premises from which the animal came and schedule a visit as soon as possible. A thorough clinical and epidemiological investigation must be performed at the time of the initial visit to the suspect premises using the Epidemiological Report Form found in Part C, Section 3.2 of the FAD MOP, or its equivalent.
 5. The investigation must identify the premises where the index case most likely became infected (usually the premises of origin or the premises where the animal spent the first year of its life). Further investigation must identify the most likely source of the BSE agent to which this animal was exposed. This investigation includes establishing feeding practices and sources of feed or other products that have had the potential to be contaminated with the BSE agent and ingested by the index case. Animals of equivalent risk to be ordered destroyed are then determined on the basis of exposure to the same source of BSE agent.

3.3 Premises Control Actions

*Equivalent Risk
Animals*

1. Animals of equivalent risk are defined as:

- all BSE suspects, and
- all progeny of confirmed positive female cases, born within two years prior to or after the clinical onset of the disease, and
- all cattle reared with the BSE cases during their first year of life and which the investigation finds may have consumed the same potential source of the BSE agent (contaminated feed) during that period of time (the feed cohort); or
- all cattle born on the same premises as the BSE case within 12 months of the birth of the BSE case (the birth cohort).

*Quarantine
Actions*

2. Complete and issue *CFIA 4206—Requirement to Quarantine and/or License to Transport Animals or Things* listing all individual bovines or groups of bovines or groups of ruminants, related carcasses and related bovine embryos on premises, and any (old) livestock feed potentially contaminated with BSE as deemed necessary by the livestock feed investigation to ensure official control of the animals of equivalent risk as defined above. These quarantines are to remain in place until such time as the epidemiological investigation has proceeded and the identification of the individual equivalent risk animals has been refined.
3. Complete and reissue *CFIA 4206* listing only the individual equivalent risk bovines, related carcasses and related embryos on the premises, and feed products of direct interest as additional information becomes available through the epidemiological investigation.
4. As milk is not considered a tissue with detectable infectivity for BSE, there are no restrictions on milk produced on a premises under quarantine or from animals subject to destruction. Milk destined for raw milk cheese is equivalent to pasteurized milk with regard to BSE. Tracing and recall of products produced from past milk production is not undertaken.
5. Semen is not considered a tissue of risk for transmission of BSE. While *in vivo* derived embryos collected according to international standards are not considered a significant risk for transmission of BSE, there remains scientific uncertainty concerning maternal transmission in the peri-clinical time period. To be consistent with the classification and disposition of the progeny born within 24 months of a confirmed positive animal showing clinical signs, bovine embryos on premises where BSE equivalent risk animals reside should be quarantined until the epidemiological investigation and test results are sufficiently advanced to permit their release or result in an order of destruction for these commodities.

3.4 Eradication Activities

1. Order the destruction with compensation of all animals of equivalent risk as defined in 3.3 *Premises Control Actions*.
2. The option to delay the destruction of equivalent risk animals will be determined on a case-by-case basis when the animal is a purebred, registered animal that the owner wishes to maintain for the purpose of collecting semen or embryos/offspring. Such animals must be maintained in individual quarantines until their ultimate disposal or demise. Examine the animal not less than once per month while alive. The CFIA should issue *CFIA 4206—Requirement to Quarantine and/or License to Transport Animals or Things* annually to remind the producer of the status of the animal.
3. Provide written instructions to the producer to examine the animal daily for evidence of any change in health status and to report to the CFIA if any changes are noted. Require the application of an easily visible permanent identifier (CCIA tag), or other means of identification approved by the CFIA. Any embryos collected from or progeny produced by the equivalent risk animal must also be quarantined. Reissue *CFIA 4206* describing the equivalent risk animal and the associated offspring. The offspring are to remain in quarantine until the equivalent risk animal has been ordered destroyed or dies and is tested. The final disposition of the animal will be dependent on the test results.
4. *In vivo* derived embryos collected from equivalent risk animals and processed in accordance with International Embryos Transfer Society (IETS) standards are not subject to any restrictions. *In vitro* fertilized embryos collected from an equivalent risk animal are to be quarantined and remain quarantined until the equivalent risk animal has been ordered destroyed or dies and is tested. The final disposition of the embryos will be dependent on the test results.
5. Any and all parts of the index case (carcass) and the carcasses of animals of equivalent risk should be ordered destroyed with compensation.
6. Order the destruction with compensation of any feedstuffs that is identified by the epidemiological investigation to be potentially contaminated with the BSE agent.

3.5 Evaluation

1. Arrange an evaluation of all bovines, products and by-products ordered destroyed.
2. Appraise the animals in accordance with the maximums specified in the *Compensation for Destroyed Animals Regulations*. Appraise an animal as a purebred if it has a valid registration certificate and can be positively identified (tattoo/eartag). Original registration certificates must accompany *CFIA 4203—Requirement to Dispose and Award of Compensation*.
3. If, for some reason, a purebred animal's registration certificate is not available at the time of the evaluation, appraise the animal as both purebred and grade. Award grade compensation. Owners should be advised that they have 90 days to present the registration certificate. Supplementary compensation is to be awarded after receipt of the valid registration certificate.

3.6 Destruction

1. Animals ordered destroyed must be humanely killed.
2. Complete and issue *CFIA 4203—Requirement to Dispose and Award of Compensation*, listing all forms of each bovine's individual identification and their description (breed, sex, age), as well as a complete description of any animal products or by-products that are to be ordered destroyed.
3. Collect and submit appropriate samples for BSE testing from all bovines ordered destroyed that are older than 30 months of age in accordance with *6.1 Appendix 1*, except in situations in which the time from potential exposure to destruction is markedly less than the shortest possible incubation period.
4. *In vitro* fertilized embryos harvested from confirmed positive BSE cases within 24 months of the sample collection date are to be ordered destroyed. All other bovine genetic material may be released (see *Section 3.4 (3)* for circumstances of genetic material collected from equivalent risk animals maintained in quarantine).
5. Collect and submit appropriate samples of any feedstuffs that have been ordered destroyed in accordance with the *Feed Inspector Certification Manual: Product Sampling*.

3.7 Disposal

- Burial or Incineration*
1. Assist owner in the arrangement of appropriate disposal of the animals / carcasses / products / by-products and feedstuffs.
 2. Carcasses / products from test negative animals may be disposed of without restrictions.

Carcasses / associated products or by-products of animals of unknown status (untested or test results not known) and feedstuffs ordered destroyed must be disposed of by burial or incineration. If an animal or carcass or product ordered destroyed is removed from the premises for incineration or burial, a license using *CFIA 1509—License for Removal of Animals or Things* must be issued by a CFIA inspector. All trucks hauling carcasses or products from the affected premises must be leak proof, covered, and follow the route detailed on the license. Standard cleaning and disinfection of the conveyance is required. Special attention should be paid to conveyances used to transport potentially contaminated feedstuffs so as to prevent residual contamination.
 3. If burial on the premises is permitted, appropriate site selection or equivalent measures should be taken to minimize the potential for ruminants to access to the site. Disposal of carcasses on the premises may require an environmental assessment review. Please consult the provincial authorities to obtain information concerning pertinent provincial legislation.
- Environmental Regulations*
4. All methods of disposal are subject to provincial and municipal environmental regulations. The district veterinarian should be knowledgeable about environmental regulations regarding on-farm and sanitary landfill use for the disposal of animal carcasses. The district veterinarian should also know if commercial incineration facilities are available and if on-farm incineration of animal carcasses is permitted.
- Composting*
5. Preliminary research results suggest that composting maybe an effective method of eliminating TSE infectivity; however, this method of disposal is not recommended at this time.
- Owner's Responsibility*
6. It is ultimately the owner's responsibility to arrange for the disposal of animals ordered destroyed and to comply with any provincial and municipal environmental regulations pertaining to the disposal of animal carcasses.
- Costs*
7. The owner is responsible for paying for all the costs of disposal for the animals and must present receipts for eligible expenses to the district veterinarian for compensation by CFIA.

3.8 Cleaning and Disinfection

1. Cleaning and disinfection activities are limited to ensuring the complete destruction/disposal of any potentially contaminated feedstuffs, or other products that may contain the BSE agent, and to preventing the contamination of future feedstuffs that may be placed in the same container or conveyance.
2. Areas and equipment that have been used for the collection of test samples from BSE suspect or equivalent risk animals should be cleaned and disinfected in accordance with *6.2 Appendix 2*.
3. Bedding and surface soil, which may have been contaminated with body fluids at the site of carcass sampling, should be collected and destroyed in a similar manner to the BSE positive animal.
4. Conveyances used to transport carcasses of confirmed positive or animals ordered destroyed of unknown disease status should be subject to standard cleaning and disinfection.
5. No cleaning and disinfection of the animal holding areas is required.

3.9 Restocking

1. There are no restrictions on the restocking of the premises with new bovine livestock.