



BOVINE SPONGIFORM ENCEPHALOPATHY (BSE)

- BSE is a degenerative disease of the brain and spinal cord of cattle.
- The exact cause of BSE is unknown, but the disease is associated with the accumulation of abnormal proteins, called prions, in the brain.
- BSE is not contagious and is not spread from one animal to another.
- BSE has never been detected in cattle less than 22 months of age.
- The greatest risk factor for the spread of BSE is providing cattle with feed contaminated with prions.
- Other possible modes of spread include transmission from cow to calf or spontaneous mutation.
- The occurrence of variant Creutzfeldt-Jakob disease (vCJD) in humans is associated with eating contaminated beef products.
- BSE is a reportable disease under Canada's *Health of Animals Act*.
- Alberta participates in Canada's BSE surveillance program by testing high-risk cattle: animals over 18 months of age that are showing nervous signs; cattle over 18 months of age that are condemned in provincially-licensed abattoirs; and, dead stock over 18 months of age. Since 1996, 1,878 cattle have been tested for BSE and all but one were negative for BSE.
- BSE was detected in May 2003 in a cow presented for slaughter at an Alberta-licensed abattoir. The carcass was condemned because it was unfit for human consumption. It did not enter the human food chain.
- Over 2,700 animals were depopulated as part of the effort to trace and eradicate the source of the disease. All these animals tested negative for BSE.
- The risk to consumers of Canadian beef continues to be immeasurably small.

WEST NILE VIRUS

- West Nile virus (WNV) is a mosquito borne virus that potentially causes the inflammation of the brain and spinal cord in horses, birds and humans.
- Mosquitoes acquire the virus by feeding on infected birds. Corvids, such as crows, magpies and blue jays, are very susceptible to disease with WNV.
- Horses and humans are incidental hosts.
- The virus is likely to be detected in Alberta in 2003.
- WNV is a reportable disease in horses in Alberta. This means anyone knowing of, or suspecting a case of WNV must report it to the Chief Provincial Veterinarian.
- A vaccine for horses is available from veterinarians.
- Animals other than corvids, horses, mules and donkeys are rarely affected.
- Eliminating mosquito breeding sites by draining shallow, still water is strongly recommended.
- For more information see the WNV Frequently Asked Questions website at: [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/afs4377?opendocument](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/afs4377?opendocument)

CHRONIC WASTING DISEASE

- Chronic Wasting disease (CWD) is a progressive, fatal, degenerative disease of the brain that affects elk, mule deer and white-tailed deer.
- CWD belongs to a group of related diseases, which include Scrapie in sheep and Bovine Spongiform Encephalopathy (BSE) in cattle.
- CWD is associated with the accumulation in the brain of abnormal proteins, called prions.
- The exact mode of transmission of CWD is unclear, but it is known that CWD can spread from one cervid to another, and that females can pass it to their offspring.

chief provincial VETERINARIAN'S REPORT

- Evidence suggests the disease can be spread through contaminated feed and water, possibly with feces.
- There is no evidence to suggest CWD can affect humans.
- There is a mandatory surveillance program in Alberta that requires heads to be submitted for testing from all farmed cervids (older than one year) that die or are slaughtered.
- Alberta reported three cases of CWD in 2002, two farmed white-tailed deer and one farmed elk. Both herds were depopulated. Investigation continues.
- CWD is a reportable disease under the Canada *Health of Animals Act*. Therefore, it falls under the jurisdiction of the Canadian Food Inspection Agency (CFIA).
- In addition to information on Alberta Agriculture, Food and Rural Development's website, more information is available at the CFIA website at: <http://www.inspection.gc.ca>.
- Plans will outline specific details and contacts necessary for the stakeholder to complete the tasks outlined for them in the FADES plan.
- A departmental committee has been formed to complete Alberta Agriculture, Food and Rural Development's plan.
- A simulation exercise is planned for the fall of 2003 to test the FADES plan and FMD contingency plans.

ALBERTA'S FADES PLAN

- Alberta has a Foreign Animal Disease Eradication Support (FADES) plan.
- The plan outlines how the federal and provincial governments may provide the assistance required by the Canadian Food Inspection Agency in eradicating a Foreign Animal Disease (FAD) outbreak in Alberta.
- Industry groups have agreed to develop contingency plans to support the disease control effort.
- The plan is complete and will be signed off when ministry contingency plans are complete (2003).
- Support tasks, organizations and 24/7 contacts have been incorporated.

Foot-and-Mouth Disease (FMD) Contingency Plan

- All Alberta livestock stakeholders have agreed to develop their own FMD contingency plan.

BIOSECURITY

- A biosecurity plan is a **MUST** for all livestock and food production operations.
- The introduction of a new disease into a naïve herd can negatively impact the productivity of the herd, as well as the economic well being of the owner.
- If Foot-and-Mouth disease entered Canada, it is estimated that the cost to the Canadian economy would be \$14 to \$45 billion, with approximately 10 million head of livestock destroyed. It would take the Canadian industry four to six years to regain export markets.
- Biosecurity plans must focus on: preventing the entry of disease to an operation; preventing the spread of disease to different production groups within the operation; and, preventing the diseases present in the operation from leaving the operation.

FINDING INFORMATION

Ropin' the Web

<http://www1.agric.gov.ab.ca>

Chief Provincial Veterinarian

[http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/cpv4264?opendocument](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/cpv4264?opendocument)