



Victorian Farmers
Federation
Livestock Group

Livestock Factsheet

➤ BSE (Mad Cow Disease)



What is BSE?

BSE or bovine spongiform encephalopathy is a fatal nervous disease which affects adult cattle. The disease which is most commonly known as mad cow disease causes deterioration of the brain and other nerve tissues. The disease is one of a group of diseases known as Transmissible Spongiform Encephalopathies (TSEs). Other TSEs include the 'scrapie' disease in sheep and goats as well as a human TSE, mainly diagnosed in the United Kingdom (UK) as a result of people consuming meat from BSE-affected cattle. The human TSE, known as variant Cruetzfeldt-Jacob disease or vCJD, has never been detected in Australia.

BSE is caused by cattle ingesting the scrapie agent found in animal protein feeds. The animal protein feeds are derived from ruminants such as meat and bone meal products.

BSE is exotic to Australia, meaning it has never occurred in this country. The disease was first identified in the UK in 1986, with the peak of the disease having damaging effects for UK producers in the 1990s. Since then, BSE has been detected in over 12 countries. Strict surveillance and monitoring programs are in place in Australia to make sure Australia keeps its BSE-free status. Being BSE-free allows Australia to have access to a range of export markets; introduction of BSE to Australia would be disastrous for our cattle industry.

It is vital for the security of our cattle industry and export markets that producers are aware of the signs of the disease and understand the importance of reporting suspect cases.

If you suspect BSE, report it immediately to the Emergency Animal Disease Watch Hotline on **1800 675 888** (available 24 hours a day, every day of the year).

Clinical signs of BSE

Older cattle over four years of age are most at risk of contracting the disease however some cases suggest that cattle as young as two years can be affected. All breeds are susceptible to the disease with no available treatment or

vaccine to cure or prevent it. BSE is a fatal disease. Clinical signs for BSE include:

- Weakness
- Loss of body condition despite continued appetite.
- Nervousness, anxiety and frenzy especially when yarded or confronted with obstacles.
- Aggression
- Extreme aversion to light, noise or touch.
- Muscle tremors
- Abnormal posture and poor coordination such as staggering, high lifting of legs when walking or swaying
- Desire to lie down or constant falling down and difficulty getting up.
- Decreased milk production

If you notice any of these signs and suspect BSE, contact your Vet or call the Emergency Animal Disease Watch Hotline on **1800 675 888**. It is better to have a false alarm than miss the first case.

Protecting Australia from BSE

There are a number of strict protocols in place to protect Australia from a BSE outbreak. These practices include:

- Disease surveillance
- Strict import and quarantine procedures
- The Ruminant Feed Ban

Disease surveillance

Australia has a national program in place for monitoring TSEs including BSE working to maintain our export credibility as a BSE-free country. The program is known as the National TSE Surveillance program (NTSESP) and is funded by both industry and government and is managed by Animal Health Australia.

Part of the surveillance program involves annually examining large numbers of cattle from all over Australia. The aim of the program is to identify potential exotic diseases as early as possible. Victorian participants in this program, include herds where animals displaying abnormal behaviour or similar signs to BSE are autopsied by consulting veterinarians. Cattle must be 30

months of age or older to be eligible for the test. Producers with suitably sick cattle that are autopsied are compensated in most cases.

Importing and quarantine requirements

In 1998, Australia placed a ban on the importation of live cattle and beef from the UK and Ireland after BSE was detected there. Cattle that had been imported from the UK before the ban were placed under lifetime quarantine. In 1990 Australia began regular surveillance and monitoring for BSE.

In 1991, European countries were also banned from importing cattle into Australia. Japan was banned in 2001, Canada in 2003 and the U.S was banned from importing cattle into Australia in 2004. Cattle that had been imported from these countries before the ban were placed under lifetime quarantine where it was illegal to move the cattle without authorisation or sell them for slaughter. Upon death or destruction, the animals are examined and have to be disposed of in accordance with quarantine regulations.

Australia does not import live cattle and up until March 2010 the ban included the importation of beef and beef products. The new policy that came into effect in 2010, allows all countries including those that have had reported cases of BSE, to apply for export of beef into Australia. Under the new policy the ban for live cattle imports still stands. Cattle semen and embryos are able to be imported into Australia as long as they meet rigorous conditions and attain an import permit through the Australian Quarantine and Inspection Service (AQIS).

The Ruminant Feed Ban

Following a recommendation from the World Health Organisation (WHO) and the Office International des Epizooties (OIE) in 1996 that countries should ban the feeding of ruminant materials to ruminants, Australia introduced the Ruminant Feed Ban. The ban which came into effect in 1997 stipulates that, no material from an animal other than gelatin, milk, tallow and oils should be fed back to ruminants including cattle, sheep, goats and deer. Animal products that cannot be fed to ruminants include meat, meat and bone meal, blood meal, poultry offal meal, feather meal, fishmeal or other animal meals or faecal material. These products are known as restricted animal material (RAM). Tallows and oils must be properly rendered and correctly processed to remove RAM and packaged before use.

The ban was developed after studies showed that the source of BSE disease in cattle was ruminant material such as meat and bone meal being used in rations as a protein supplement.

The meat and bone meal used had been processed from BSE infected cattle. Manufactures of stock feed must clearly label if their product contains restricted animal material and that it should not be fed to ruminants and must adhere to state legislation. Random inspections of producers and stock food manufactures are enforced and carry heavy penalties if found guilty. The Ruminant Feed Ban helps to safeguard consumer health and maintain assurance for our international markets.

For further information, please contact the VFF Livestock Group on 1300 882 833 or by email to Jacinta Pretty at jpretty@vff.org.au

Further Links

VFF Biosecurity Resource

http://www.vff.org.au/newsite/common_php/get_file.php?id=2683

Department of Primary Industries Victoria

<http://www.dpi.vic.gov.au/agriculture/beef-and-sheep/beef/beef-health-and-welfare/ag1121-bse-mad-cow-disease>

<http://www.dpi.vic.gov.au/agriculture/pests-diseases-and-weeds/animal-diseases/beef-and-dairy-cows/bse/ag1118-bse-and-the-ruminant-feed-ban>

<http://www.dpi.vic.gov.au/agriculture/pests-diseases-and-weeds/animal-diseases/vetsource/national-tse-surveillance-program>

Animal Health Australia

<http://www.animalhealthaustralia.com.au/wp-content/uploads/2011/04/BSE3.2-14-FINAL7Mar12.pdf>

<http://www.animalhealthaustralia.com.au/wp-content/uploads/2011/03/Ruminant-Feed-Ban-Stock-Feed-Manufacturers.pdf>

<http://www.animalhealthaustralia.com.au/programs/biosecurity/tse-freedom-assurance-program/national-tse-surveillance-program/>

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