Approach to Determining the BSE Food Safety Risk of Countries

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Introduction

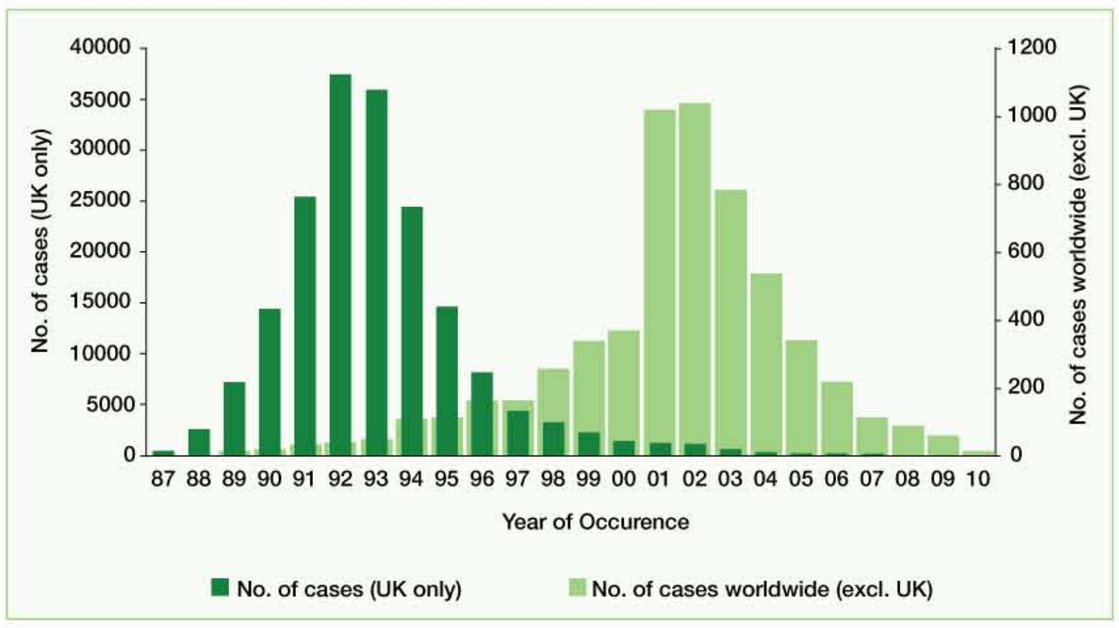
Bovine spongiform encephalopathy (BSE) is a cattle disease which may be transmitted to humans and cause variant Creutzfeldt-Jakob disease (vCJD) via the consumption of BSE-contaminated food. BSE is transmitted through ingestion of meat and bone meal contaminated with ruminant-derived protein material containing the BSE infectious agent (or prion).

The BSE epidemic occurred in the United Kingdom beginning in 1986 and since then has been confirmed in 25 countries around the world. As a result of effective control measures introduced in many countries, the incidence of the disease has dropped dramatically (Figure 1). Countries recognised as having controls in place for negligible or controlled BSE risk status is available through the World Organisation for Animal Health (OIE)[1].

In March 2010, a new policy for the importation of beef and beef products came into effect in Australia. Under this policy, beef and beef products may be imported from countries that are assessed by Food Standards Australia New Zealand (FSANZ) as having effective control measures in place to ensure that beef and beef products exported to Australia are derived from animals free of BSE[2].

This poster presents processes developed by FSANZ to assess countries for BSE food safety risk.

Figure 1. Number of Reported BSE Cases Worldwide



Purpose

1. To develop an evidence-based, transparent and consistent risk assessment process that is comparable to the assessment methodology used by the OIE and incorporates criteria around animal traceability and slaughtering practices.
2. To develop a process and protocol for in-country inspections to verify the effectiveness of BSE mitigation measures in the exporting country.

Methods and Results

FSANZ has developed a process to assess country submissions for BSE food safety risk[3] and components of this process are defined in the table below. Using this process and both desk assessment and in-country verification methods, it will be determined whether appropriate BSE control factors are in place to prevent the exposure or release of the BSE agent through importation of beef or beef products.

Components of the BSE food safety risk assessment process	
The Australian Questionnaire To Assess BSE Risk	• Document to provide guidance to applicant countries on information that is required by FSANZ for BSE risk assessment. • Applications addressing the Questionnaire are submitted by the country's national government Competent Authority • Data requirements based on those of Chapter 11.6 –Bovine Spongiform Encephalopathy of the OIE Terrestrial Animal Code 2009. • Sets the criteria under five areas that are examined to determine BSE risk.
The Australian BSE Food Safety Assessment Committee	• Committee which oversees the development of BSE risk assessment methodology and its process • Makes recommendations on country BSE risk status • Chaired by FSANZ and is comprised of experts in food safety and animal diseases including a BSE expert from DAFF
The Australian Process to Determine BSE Risk	• Document which details the assessment process undertaken by FSANZ • Identifies timeframes for completion of assessment and reporting information • Sets out transitional arrangements for countries currently eligible to export beef and beef products to Australia. • Provides information on certification requirements

Significance

In order to support a consistent, scientific and evidence-based risk assessment, the Australian process for determining the BSE risk status of a country:

(1) Incorporates criteria around animal traceability and slaughtering practices.

(2) Includes an in-country verification component.

(3) Embraces transparency by inviting countries to review or challenge risk assessment findings.

(4) Provides flexibility for countries to provide additional data to justify a favourable BSE risk status.

(5) Supports the principles of the One Health concept through collaboration between human and animal health government agencies to determine disease risk.

Figure 2. Process for BSE Food Safety Risk Assessment

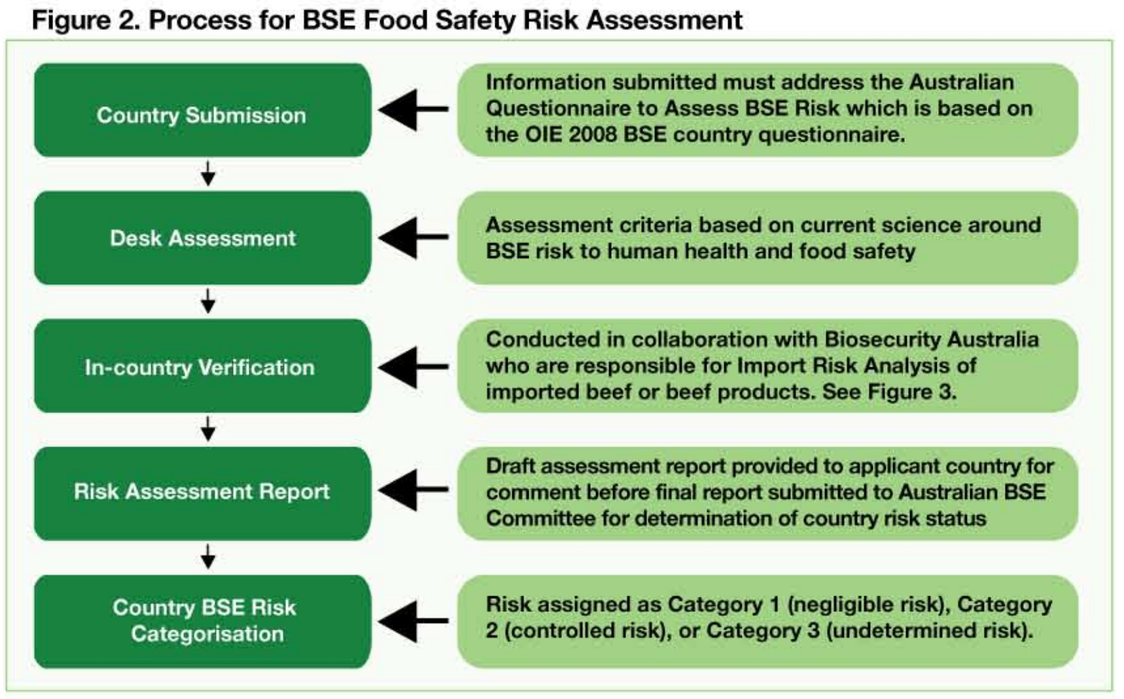


Figure 3. In-country Verification

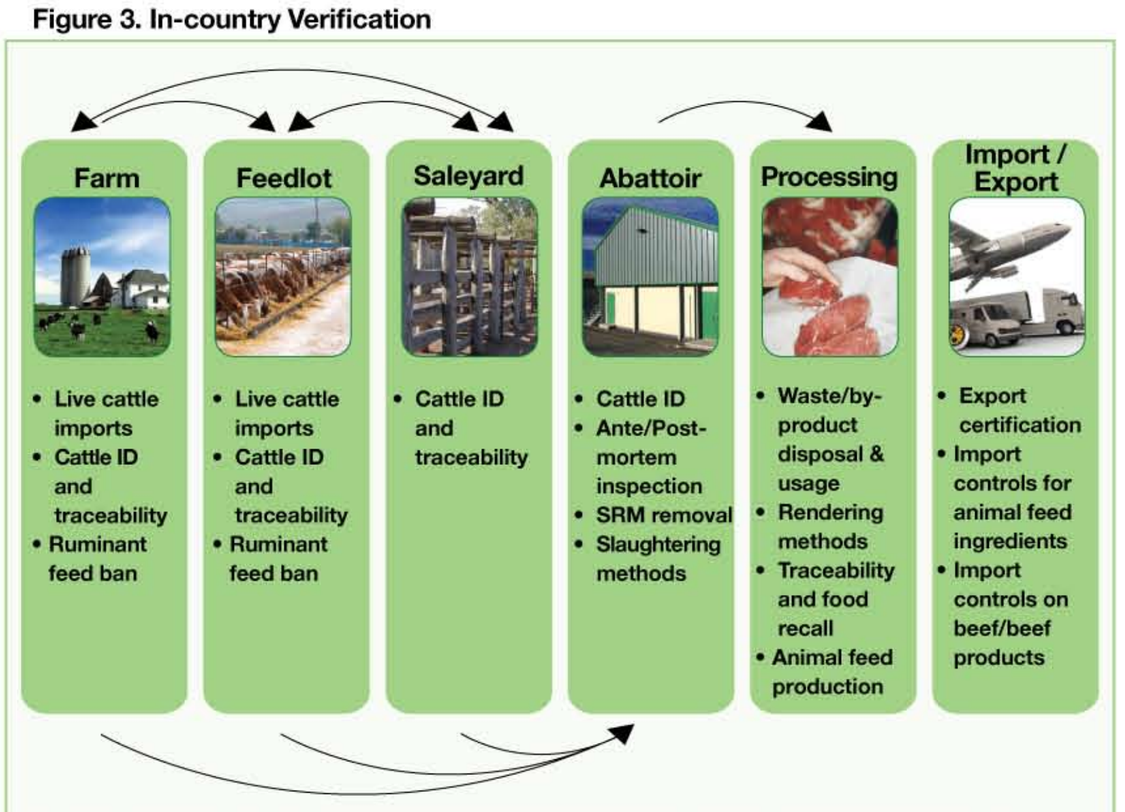


Figure 3 represents the key components of the beef production systems where BSE controls are important and verification visits may be conducted (in collaboration with Biosecurity Australia).

Determination of Country Categorisation

Countries eligible to export beef or beef products to Australia must be assigned Category 1 or Category 2 status through the risk assessment process described in Figure 2.

Category 1 or Category 2 countries will have demonstrated appropriate control systems (Box 1), given their BSE history and the level of surveillance activities undertaken to detect BSE should it occur.

Only Category 1 and Category 2 countries will be listed on the FSANZ website.

Category 1
- Meet the OIE requirements for "negligible BSE risk" status
- Certify[2] that beef or beef product is derived from animals that:
  i. Have been born, raised and slaughtered in Category 1 countries
  ii. Have passed ante– and post- mortem inspection

Category 2
- Meet the OIE requirements for "controlled BSE risk" status
- Certify[2] that beef or beef product is derived from animals that:
  i. Have been born, raised and slaughtered in Category 1 or Category 2 countries
  ii. Have passed ante- and post-mortem inspection
  iii. Do not contain BSE risk materials

Category 3
- Has not showed that it meets Category 1 or Category 2 requirements
- Is not eligible to export beef or beef products to Australia

Box 1: BSE controls for Category 1 or Category 2 status
- Processing methods to remove risk materials from bovine carcasses, by-products and waste material
- Ante- and post-mortem veterinary inspection
- BSE awareness, notification, diagnostic programs
- Feed practices that include ruminant feed ban
- Cattle identification and food traceability programs
- Import controls for live cattle, MBM, and potentially infectious beef products

References

(1) http://www.oie.int/eng/info/en_esb.htm;
(2) http://www.foodstandards.gov.au/_srcfiles/BSE%20Policy%2025%20September2009.pdf
(3) For further information, see FSANZ website on BSE: http://www.foodstandards.gov.au/consumerinformation/bovinespongiformencephalopathybse/