

TSE programme

New Zealand is free from the transmissible spongiform encephalopathies (TSEs) of animals including bovine spongiform encephalopathy (BSE), scrapie of sheep and goats, and chronic wasting disease of deer (CWD). The European Commission's Geographical BSE Risk Assessment (GBR) has classified New Zealand as a Category 1 country, meaning that it is highly unlikely that New Zealand cattle are infected with the BSE agent.

A comprehensive TSE preventive and surveillance programme has been put in place. This is primarily directed at preventing the entry into New Zealand of TSE agents. There is also a programme to prevent the consumption of ruminant meat and bone meal by ruminants. A major activity is targeted surveillance of susceptible livestock (ie cattle, sheep, goats and deer). Contingency plans for dealing with any suspect cases in livestock have been developed. The programme is supported by an active communications strategy.

A multidisciplinary group, the TSE Steering Committee, oversees all activities. Members include senior technical and management personnel from the Ministry of Agriculture and Forestry (MAF), New Zealand Food Safety Authority (NZFSA), Ministry of Health and Ministry of Foreign Affairs and Trade. An independent BSE Expert Science Panel has also been actively involved in policy development.

From an operational perspective, there are six sub-programmes managed within MAF and NZFSA:

- imported foods standards,
- imported animals and imported feed controls,
- internal ruminant feed controls,
- animal disease surveillance,
- animal disease contingency planning,
- communications.

On the international scene, MAF and NZFSA also take a keen interest in the TSEs in general.

There have been ongoing reviews of all the sub-programmes, taking into account the expanding understanding of the epidemiology of the TSEs in both animals and humans, and the disease situation internationally. Significant areas of work were as follows.

Food standards

In January 2002, New Zealand introduced new import procedures to manage the risks to public health from BSE in food. The import measures protect consumers from the risk of vCJD by preventing the importation of meat products of bovine origin that potentially contain the BSE agent. Under the BSE measures, a country must be categorised according to its BSE risk status before it can export bovine meat products to New Zealand. Certification appropriate to a country's categorisation must accompany all exports to New Zealand of bovine meat products.

Categorisation of both Canada and the United States is currently being reassessed following the occurrence of BSE in those countries.

Feed controls (imports and internal)

Ruminant feed controls have been a key focus. The importation of all risk feeds and feed ingredients, especially meat and bone meal, and the feeding of ruminant protein (with the exception of dairy products) to ruminants is prohibited. Laboratory analyses that could be used to validate the effectiveness of these controls have been investigated. The testing procedure currently being used is an immunoassay screen test with follow-up microscopy and PCR. Work in this area, in collaboration with the livestock feed and cattle industries, is continuing.

Animal disease surveillance

Activities in this area fall into three areas: screening by veterinary laboratory diagnosticians of tissues from animals with behavioural signs suggestive of nervous disease, slaughterhouse surveys for abnormal brainstem prion protein, and monitoring of imported animals.

Since the beginning of 1990, MAF Biosecurity Authority has maintained a continuous TSE surveillance and monitoring programme to support international acceptance of New Zealand's TSE-free status. The programme involves the following components:

- A TSE awareness campaign amongst veterinary practitioners and farmers. In 2002 MAF increased the financial incentives offered for its TSE Surveillance Programme, and changed to a system of direct payment to farmers and veterinarians (refer to www.maf.govt.nz/biosecurity/pests-diseases/animals/tse/surveillance-incentives.htm for more information).
- All TSEs have been notifiable since 1993.

- A toll-free telephone number to report any cases of suspected exotic disease.
- National Centre for Disease Investigation support for expert investigation of suspect cases.
- A network of MAF-approved veterinary diagnostic laboratories.
- MAF's Expert Veterinary Pathologist.
- Referral of samples from TSE investigations, when necessary, to international reference laboratories.

Refer to Tables 3-5 of the Animal Disease Surveillance Report in this issue for the results of this screening programme in 2003. During 2003, 1,456 cattle (~80% fallen stock and ~20% emergency slaughter) were subject to testing for abnormal brainstem prion protein using a western immunoblot assay. In addition, 3,337 sheep, 1,377 deer and 21 goats were likewise screened. All results were negative. This work is continuing and will be adjusted to bring it into line with international standards and perceived market access needs.

Currently there are 906 imported animals under surveillance (580 sheep, 156 cattle, 114 goats and 56 deer). All are subject to annual inspection and, when presented for slaughter, brainstem testing.

Communications

Activities to inform rural communities about the TSEs, especially BSE, continued over last year. Fact sheets were distributed at the major national field day and articles were published in the rural press. Industry groups were also active, especially in the area of encouraging farmers to report suspect cases for investigation.

An important communications forum is the TSE Liaison Group meetings. Two were held during 2003; a wide range of interested parties (eg representatives of producers, processing industries, consumers and government) attended. In New Zealand, 'TSE events', especially relating to BSE, commonly lead to high profile media comment and are of considerable public interest. The Communications Group has a key coordination function at these times. The year 2003 will be remembered for a report of a possible vCJD human case in New Zealand (but subsequently ruled out), and the reported cattle cases of BSE in Canada and the USA.

International perspectives

New Zealand is an active member of OIE and is willing to assist in the simplification of the OIE Terrestrial Animal Health Code in relation to BSE and other TSEs. New Zealand is interested in ensuring that the risk-based approach set out in the Code is proportionate to the public and animal health threat associated with BSE, and that it reflects contemporary science and experience with the disease.

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