



The Hong Kong Veterinary Association Ltd

## **VETERINARY PUBLIC HEALTH SUB-COMMITTEE**

### **Statement on Bovine Spongiform Encephalopathy**

Bovine Spongiform Encephalopathy (BSE) or "Mad Cow Disease" is a progressive, fatal disease of the nervous system of cattle. It is one of a group of neurological diseases known as transmissible spongiform encephalopathies (TSE). Other TSEs with similar pathogenicity include Scrapie in sheep, chronic wasting disease in deer and elk, and Creutzfeldt-Jakob disease (CJD) in humans. The recent emergence of the variant CJD in humans suspected to be transmitted via the consumption of BSE infected beef has already killed more than 100 people in the United Kingdom.

BSE is an unusual disease in that the time between an animal's exposure to the disease and the onset of clinical signs ranges from three to six years. Animals with BSE may show a number of different clinical signs including nervous or aggressive behavior, abnormal posture, lack of co-ordination or difficulty in rising from a lying position, decreased milk production, and weight loss despite an increased appetite. These clinical signs may last for a period of two to six months before the animal dies.

BSE is associated with the presence of infectious agents in the nervous tissues. The infectious BSE agent is an abnormal protein called prion; which is resistant to normal inactivation procedures such as heat. The body tissues containing these BSE agents in infected cattle are known as Specified Risk Materials (SRMs) which include the brain, eyes, tonsils, spinal cord, dorsal root ganglia, vertebral column and distal ileum. Infectious BSE agent (prion) has not been found in muscle tissue.

Beef and beef products from a country with occurrence of BSE can be made safe for human consumption by:

- Not slaughtering cattle showing clinical signs of BSE through careful ante-mortem inspection.
- Testing all cattle greater than 30 months of age at slaughter and not using the carcasses until the results are available.
- Removal of SRMs during the slaughtering process of clinically normal cattle.

Depending on the prevalence of the disease, the World Organisation for Animal Health (OIE) recommends that SRMs be removed, in a hygienic manner to avoid contamination of meat, from cattle of greater than 6 to 30 months of age onward during slaughter to minimise the risk of transmission to humans via consumption.

It is the responsibility of an exporting country that has occurrence(s) of BSE to at least meet the minimal guidelines as outlined by OIE by ensuring steps are taken to prevent contamination of beef and beef products with SRMs as well as implementing programs for control and prevention of propagation of BSE, including feed ban, animal identification and traceability, education, active and passive surveillance plans, and monitoring procedures.

Engaging professionals knowledgeable in cattle production and disease control management and preventive measures as well as proper meat hygiene practices is essential to ensure that the consumers of beef and beef products are well protected from this serious disease in cattle as well as humans.

We urge the Hong Kong SAR Government to take a more proactive role in food safety in regard to food of animal origin by tightening up import requirements and employing qualified personnel such as veterinarians to perform routine audits and inspection of food production systems and processing facilities in exporting countries to make sure that only products that meet a high food safety standards are made available to our consumers.

This statement is provided by the Hong Kong Veterinary Association (HKVA) Veterinary Public Health Subcommittee, for further information please contact Secretary  
(email: [secretary@hkva.org](mailto:secretary@hkva.org)).

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