

Safety of North American Cattle and Beef

Secretary's Roundtable, Minneapolis, MN,

Dr. W. Ron DeHaven
 Administrator, Animal and Plant Health Inspection Service

Dr. Barbara Masters
 Acting Administrator, Food Safety and Inspection Service

Over the last 20 years, the U.S. Department of Agriculture (USDA) has accumulated a significant amount of data on bovine spongiform encephalopathy (BSE). Through research, observation and, recently, first-hand experience in the United States, USDA's Animal and Plant Health Inspection Service (APHIS) and Food Safety and Inspection Service (FSIS) have gained a solid understanding of the disease. This understanding has led to the creation of a series of science-based initiatives designed to prevent the introduction and spread of BSE into the U.S. livestock population and the American food supply, while allowing for continued trade and growth.

BSE has a long incubation period and is not contagious, making it, in essence, a slow-moving disease. It is generally spread through the consumption of feed contaminated with BSE-infected material. This allows for certain control measures, such as feed restrictions that ban the use of ruminant protein in cattle feed, to effectively prevent the transmission of the disease. In Great Britain, cattle consumed large quantities of infected nervous system tissue in feed for years before the disease started appearing at an average rate of 1,000 new cases a week in 1992 and 1993. After adopting a comprehensive feed ban and other disease-control measures, the epidemiological "curve" of the disease in Great Britain began to decline, until only 242 cases were detected in 2004. Both the United States and Canada adopted feed bans in 1997 long before the first native case in North America.

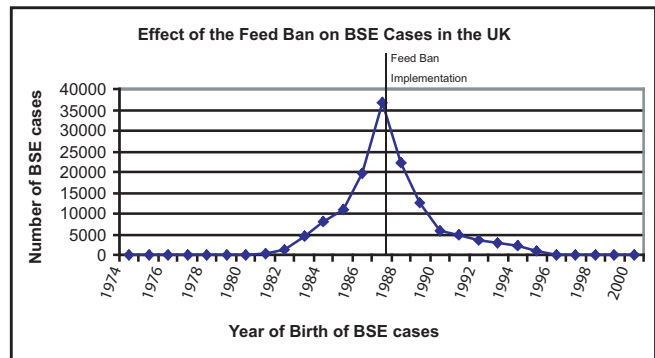


Figure 1. Confirmed cases in UK cattle born after feed ban implementation. Note: The first feed ban was implemented in the summer of 1988 (before fall calving).

In addition to feed bans, the United States has implemented effective safeguards to prevent BSE. These include:

- **A Ban on Non-Ambulatory Cattle:** USDA banned the slaughter of non-ambulatory disabled (downer) cattle from the food supply after the BSE detection in Washington state.
- **Removal of Specified Risk Material.** With the filing of an interim final rule, FSIS declared that skull, brain, trigeminal ganglia, eyes, central portions of the vertebral column, spinal cord and dorsal root ganglia of cattle 30 months of age or older. Tonsils and distal ileum from all cattle are considered inedible and therefore do not enter the food supply. In this rule, FSIS requires federally inspected establishments that slaughter cattle to remove, segregate and dispose of these SRMs so that they do not enter the human food chain. To enforce this rule, FSIS has developed and implemented procedures for their inspection personnel, to include verifying the age of cattle that are slaughtered in official establishments when age records are not available. State inspected plants must have equivalent procedures in place to prevent these SRMs from entering the food supply.

- **Advanced Meat Recovery Restrictions.** AMR is a technology that removes muscle tissue from the bone of beef carcasses under high pressure without incorporating bone material. AMR product can be labeled as “meat.” This interim final rule expanded that prohibition to include dorsal root ganglia, clusters of nerve cells connected to the spinal cord along the vertebral column, in addition to spinal cord tissue. In addition, because the vertebral column and skull in cattle 30 months and older will be considered inedible, they cannot be used for AMR.
- **A Ban Air–Injection Stunning.** To ensure that portions of the brain are not dislocated into the tissues of the carcass as a consequence of humanely stunning cattle during the slaughter process, FSIS issued an interim final rule to ban the practice of air–injection stunning.
- **Product Holding (test and hold).** USDA published a notice announcing that FSIS inspectors are no longer marking cattle tested for BSE as “inspected and passed” until confirmation is received that the cattle have, in fact, tested negative for BSE. FSIS issued a directive to inspection program personnel outlining this policy.

BSE Surveillance

In order to gauge the effectiveness of the BSE safeguards in place, both Canada and the United States conduct active BSE surveillance programs, targeting the populations where the disease is most likely to be detected and sampling similar percentages of the adult cattle population. To date, surveillance results in both countries indicate that the existing BSE controls are working. During the past year, USDA has sampled and tested more than 375,360 animals for BSE, and not a single new case has been found.

The USDA has taken all necessary steps to safeguard the health of U.S. livestock and the human food supply from BSE. In this regard, Canada shares USDA’s overall approach and commitment to dealing with this disease. Canada has taken effective and comparable measures to those of the United States. This is especially important given that historically the North American cattle industry has been highly integrated. After conducting a comprehensive risk analysis of the BSE situation in Canada and a review of their ruminant–to–ruminant feed ban compliance, USDA has found that it is safe to allow importation of ruminant and ruminant products from that country. After years of study, observation, and experience, USDA, in agreement with the World Organization for Animal Health, recognizes that a complete prohibition of all live ruminant and ruminant products is excessive and not in line with the latest science. As long as appropriate safeguards are in place, such as feed bans and SRM removal, it is safe to allow import of animals and products from countries considered to be at minimal risk such as Canada.

For more information please visit:

Animal and Plant Health Inspection Service (APHIS)
www.aphis.usda.gov/lpa/issues/bse/bse.html

Food Safety and Inspection Service (FSIS)
www.fsis.usda.gov/Fact_Sheets/Bovine_Spongiform_Encephalopathy_BSE/index.asp

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA’s TARGET Center at (202) 720–2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326–W, Whitten Building, 1400 Independence Avenue, SW, Washington, DC 20250–9410 or call (202) 720–5964 (voice and TDD). USDA is an equal opportunity provider and employer.