

## Fourth Case of Bovine Spongiform Encephalopathy in United States

On April 24, 2012 the USDA identified a Dairy Cow in California as the fourth case of bovine spongiform encephalopathy (BSE) discovered in the United States. The cow was identified as a result of the targeted testing program conducted by USDA. This surveillance program tests approximately 40,000 head of adult cattle each year. The testing program is also designed to target suspect cattle therefore increasing the probability of finding an adult cow with BSE. The identification of the dairy cow with BSE in California indicates that the testing program was working and that the detection of an atypical case of BSE could be expected. This case of BSE has been classified as an atypical BSE positive or a rare form of the disease not thought to be associated with an animal consuming contaminated feed. The USDA has conducted enhanced and targeted testing programs for BSE since 2004 and the three previous cases of BSE were detected by USDA in 2004, 2005 and 2006.

The beef industry and the USDA are actively taking measures to ensure that beef with BSE does not enter the food supply. The USDA news release indicated that the carcass from the cow was not presented for harvest for human consumption; therefore, meat products from the cow did not enter the food supply. This would eliminate any human health risk of exposure to BSE from the cow.

Several safeguards have been put in place by the industry and the USDA to protect human health including: 1) controlling cattle imports; 2) protecting animal feeds from contamination; 3) active surveillance for the disease in US cattle; and 4) keeping the human food supply free from potentially infective materials. The beef processing industry is required to develop programs in their food safety systems, either as Hazard Analysis Critical Control Point (HACCP) programs or as other food safety standard procedures used in beef processing. The food safety programs focus on removal and elimination of Specified Risk Materials (SRM's) from the human food supply during the processing of beef. Specified risk materials may contain the BSE agent if it is present in the animal. The USDA has implemented a ban on the slaughter of non-ambulatory cattle as an additional effort to prevent the introduction of BSE into the food system.

Probably the most significant safeguard was the regulation from the Food and Drug Administration (FDA) that prohibited the inclusion of mammalian protein in feed for cattle and other ruminants since 1997. As an additional safeguard in 2009, the FDA identified other high risk materials, known as Cattle Material Prohibited from Animal Feed (CMPAF) that must be controlled by processing facilities.

The regulations and testing programs by USDA, the regulatory actions of FDA, and the food safety practices established by the beef processing industry have greatly minimized the risks of BSE for human health in the United States.

The most up to date and authoritative source on the BSE topic would be USDA APHIS Veterinary Services: <http://www.usda.gov/wps/portal/usda/usdahome?navtype=SU&navid=BSE> . An overview of BSE is found at <http://www.extension.org/pages/26181/bovine-spongiform-encephalopathy-bse> and [http://www.aphis.usda.gov/newsroom/hot\\_issues/bse/index.shtml](http://www.aphis.usda.gov/newsroom/hot_issues/bse/index.shtml)

Dennis Burson, Extension Meat Specialist  
David Smith, Extension Dairy and Beef Veterinarian  
Richard Randle, Extension Beef Cattle Veterinarian  
University of Nebraska-Lincoln

April 24, 2012