



United States Department of Agriculture

Supplemental Q&A on Bovine Spongiform Encephalopathy (BSE)

The U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) has confirmed the nation's fourth case of bovine spongiform encephalopathy (BSE) in a dairy cow from central California. APHIS' laboratory results confirm that this is a case of atypical BSE.

The animal was sampled for testing for BSE at a rendering facility in California. In this specific instance, the carcass of the animal was held at the rendering facility and then destroyed. It was never presented for processing for human consumption so at no time presented a risk to the food supply.

Q. What do you mean by atypical BSE?

A. Atypical BSE is a very rare form of the disease not generally associated with an animal consuming infected feed.

Q. Is the U.S. food supply safe?

A. Yes, the food supply is safe. This detection in no way impacts the safety of our nation's food supply. The positive animal was never presented for processing for human consumption so at no time presented a risk to the food supply.

Further, the safety of our food supply is assured by the removal of specified risk materials – those tissues known to be infective in an affected animal – from all human food. These requirements have been in place since 2004.

Q. Is cow's milk a source of BSE?

A. No. Scientific research indicates that BSE cannot be transmitted in cow's milk, even if the milk comes from a cow with BSE.

Q. Are milk and milk products BSE-safe?

A. Yes. The World Health Organization (WHO) has stated that tests on milk from BSE- infected animals have not shown any BSE infectivity. Milk and milk products, are, therefore considered safe.

Q. What does this detection mean for trade and exports of U.S. beef?

A. This detection in no way affects the United States' BSE status as determined by the World Organization for Animal Health, or OIE. The United States has in place all of the elements of a system that OIE has determined ensures that beef and beef products are safe for human consumption: a mammalian feed ban, removal of specified risk materials, and vigorous surveillance. Consequently, this detection should not affect U.S. trade.

Q. Where was this animal from?

A. The samples were taken from the animal at a rendering facility in central California. Due to the open epidemiological investigation into this detection, we will not release any additional information on where the animal was sampled for BSE, or where it came from prior to going to



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the rendering facility. However, as the epidemiological investigation unfolds, we will provide information as it becomes available, such as the animal's age and other information.

Q. Why was this animal tested?

A. The samples from this animal were taken at a rendering facility in California and tested as part of APHIS' targeted surveillance program for BSE. APHIS' targeted surveillance includes animals that have clinical signs consistent with BSE, have other central nervous system abnormalities, die for unknown reasons, or are non-ambulatory. We do not know which of these categories fit this animal at this time.

Q. How does the BSE testing program work?

A. There is no live animal test for BSE. A section of the brain stem called the obex must be harvested for BSE testing. BSE test samples are screened with an enzyme-linked immunosorbent assay (ELISA) test at a [National Animal Health Laboratory Network \(NAHLN\)](#) laboratory approved by the [National Veterinary Services Laboratories \(NVSL\)](#). Any test samples with inconclusive results are sent to NVSL for confirmation.

The BSE surveillance program is not for the purposes of determining food safety. Rather, it is an animal health surveillance program. USDA's BSE surveillance program allows USDA to detect the disease if it exists at very low levels in the U.S. cattle population and provides assurances to consumers and our international trading partners that the interlocking system of safeguards in place to prevent BSE are working.

Q. Where was testing for this animal done?

A. The samples were initially sent to the California Animal Health and Food Safety Laboratory for testing. On April 19, that laboratory, which is a part of the National Animal Health Laboratory Network, reported to APHIS an inconclusive test result on a sample. That sample was then sent to USDA's National Veterinary Services Laboratories in Ames, Iowa for further testing. Using immunohistochemistry and western blot tests, USDA confirmed the animal was positive for atypical BSE, a very rare form of the disease not generally associated with an animal consuming infected feed.

Q. What else is being done?

A. We are shipping samples from the animal to international animal health reference laboratories in Canada and England, which have official World Animal Health (OIE) reference labs. These labs have extensive experience diagnosing atypical BSE and will review our confirmation of this form of the disease. In addition, we will be conducting a comprehensive epidemiological investigation in conjunction with California animal and public health officials. USDA will also work with the Food and Drug Administration (FDA) as they conduct animal feed investigations. These steps are consistent with OIE reporting requirements.

Q. How is human health protected from BSE in the United States?

A. A system of strong interlocking safeguards protects human and animal health, as well as food safety, in the United States. These safeguards include the removal of specified risk



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materials (SRMs) – those tissues that may contain the BSE agent in an infected animal – from the human food chain. This requirement has been in place since 2004.

Inspectors from USDA’s Food Safety and Inspection Service prevent non-ambulatory disabled cattle from entering the human food supply. In addition, they prevent certain slaughter practices that might present a risk of transmission of BSE. FSIS inspectors also condemn any cattle that display clinical signs of neurological disease or central nervous system disorders. To prevent the disease’s transmission to people, the single most important food safety measure is to avoid human consumption of SRMs. Inspectors in every slaughterhouse in the United States work to ensure these and other food safety standards are met. For additional information, visit [here](#).

Q. How is animal health protected from BSE in the United States?

A. The primary animal-health protective measure is a feed ban. In 1997, the FDA implemented regulations that prohibit the feeding of most mammalian proteins to ruminants, including cattle. This feed ban is the most important measure to prevent the transmission of the disease to cattle. The feed ban was strengthened in 2008, by additional prohibitions on those tissues that have the highest risk of transmitting BSE. These additions to the feed ban prohibit the use of brain and spinal cord from cattle 30 months of age and older for use in any animal feed.

Q. How effective are the safeguards against BSE?

A. Evidence shows that our systems and safeguards to prevent BSE are very effective, as are similar actions taken by countries around the world. In 2011, there were only 29 worldwide cases of BSE, a dramatic decline and 99 percent reduction since the peak in 1992 of 37,311 cases that year. This is directly attributable to the impact and effectiveness of feed bans as a primary control measure for the disease.

Q. Where can I find more information this recent detection?

A. USDA will continue to communicate findings in a timely and transparent manner. To find up-to-date information, visit our website at www.usda.gov/bse.