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## Information on Mad Cow Disease

The discovery in December of bovine spongiform encephalopathy (BSE, or "mad cow" disease) in an adult cow in Washington State has dominated recent news. The following summary information is presented to assist in answering common questions related to BSE as well as provide additional resources for more information.

### Mad Cow Disease In Brief

BSE is a progressive neurological disorder that ONLY affects cattle. The currently accepted theory is that the disorder results from an unconventional transmissible protein called a prion. The past outbreak of BSE in the United Kingdom is believed to have resulted from feeding scrapie<sup>1</sup>-containing sheep meat-and-bone meal to cattle. In addition, there is general agreement that this outbreak was amplified by the United Kingdom's practice of feeding rendered bovine meat-and-bone meal to young calves. Preliminary "trace-back" ear-tags numbers suggest that the BSE-infected cow recently discovered in Washington was imported into the United States from Canada in August 2001.

<sup>1</sup>Scrapie is a fatal, degenerative disease affecting the central nervous system of sheep and goats

### Do Humans Get Mad Cow Disease?

No, but a disease similar to BSE can strike humans -- called variant Creutzfeldt-Jakob Disease (vCJD), or vCJD. A small number of cases of vCJD have been reported, primarily in the United Kingdom, among people who consumed beef that may have been contaminated. There is strong scientific evidence (epidemiological and laboratory) that the agent that causes BSE in cattle is the agent that causes vCJD in people. In the United Kingdom, where more than one million cattle may have been infected with BSE, a substantial species barrier appears to protect humans from widespread illness. As of December 1, 2003, a total of only 153 vCJD cases had been reported worldwide; over 90% (143) of these cases occurring in the United Kingdom. **The risk to human health from BSE in the United States is extremely low.**

### Is BSE a foodborne hazard in the United States?

Strong evidence indicates that BSE has been transmitted to humans primarily in the United Kingdom through livestock feeding practices that reintroduce **high-risk materials** (e.g., spinal cord, brain, eyes, tonsils, parts of the intestines) into the food chain. **In the United States, the USDA has asserted that the food supply remains safe.** However, in light of this event, the USDA has recently taken steps directed at reducing or eliminating these high-risk materials from the food chain. This will further strengthen protection of the food supply against BSE.

### Have there been any cases of vCJD in the United States?

One case of vCJD has been reported in the United States in a young woman in Florida who contracted the disease while residing in the UK.



**Am I at Risk for Mad Cow Disease?**

While mad cow disease is important and may have a significant economic impact within the beef industry, there is no public health threat in the United States at this time. **The risk to human health from BSE in the United States remains extremely low.**

Individuals are at greater risk from eating a runny egg or a medium-rare hamburger, leaving the leftovers from a restaurant meal in your car for a few hours, or thawing a frozen chicken on your counter. These potentially risky behaviors are responsible for much of the food borne illness seen in the United States. **The CDC estimates each year food borne infections (i.e., salmonella, listeria, E-coli, campylobacter, etc.) from improper food handling result in 76 million illnesses, 350,000 hospitalizations, and 5,000 deaths in the United States.** These type of food borne illnesses place a huge toll on public health, yet have receive little of the attention that is now focused on the beef from one Washington State Holstein infected with mad cow. Greater understanding of the causes of food borne illness should help us all put their risk in better perspective.

**Sources for the above information**

CDC, USDA, FDA, Food and Agriculture Organization for the United Nations.

**Additional resources for those who may want more detailed information include:**

Consumer Inquiries: 888-INFO-FDA

USDA Meat and Poultry Hotline at 1-888-MPHotline

**CDC Sites**

General Q&A:

[http://www.cdc.gov/ncidod/diseases/cjd/bse\\_cjd\\_qa.htm](http://www.cdc.gov/ncidod/diseases/cjd/bse_cjd_qa.htm)

Risk for Travelers

<http://www.cdc.gov/travel/diseases/madcow.htm>

vCJD Fact Sheet:

[http://www.cdc.gov/ncidod/diseases/cjd/cjd\\_fact\\_sheet.htm](http://www.cdc.gov/ncidod/diseases/cjd/cjd_fact_sheet.htm)

**USDA Site**

BSE Information and Resources

<http://www.usda.gov/news/releases/2003/06/resources.html>

Foodborne Illness: What Consumers Need to Know.

[http://www.fsis.usda.gov/oa/pubs/fact\\_fbi.htm](http://www.fsis.usda.gov/oa/pubs/fact_fbi.htm)