



# FEED MANUFACTURERS YOUR role in preventing BSE



**“BSE Prevention Includes YOU!”**



**Consequences of commingling or cross contamination of feed:**

- Possibility of spreading BSE-infected material among cattle
- Potential negative effects on our economy
- Potential responses to a violation of the Federal Food, Drug, and Cosmetic Act (FFDCA) include, but are not limited to, written notification of violation (such as untitled or warning letters), seizure, injunctions, and other civil or criminal penalties.

## For more information:

Contact the Nebraska Department of Agriculture to find out more about feed manufacturing regulations. 402.471.2394

## Additional Resources:

USDA - Animal and Plant Health Inspection Service  
<http://www.aphis.usda.gov>

University of Nebraska Veterinary Extension  
<http://vetext.unl.edu>

Food and Drug Administration  
<http://www.fda.gov/cvm>

FDA Regulations for Protein Blenders, Feed Manufacturers, and Distributors  
<http://www.fda.gov/cvm/Guidance/guidance68.pdf>

Nebraska Department of Agriculture  
<http://www.agr.ne.gov>



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**Although other regulations are in place to help protect humans and cattle from BSE, feed manufacturers must do their part to prevent the spread of this disease.**

**Prohibited materials** are protein-based materials, including meat and bone meal, derived from ruminants. **Ruminant animals** are any animals with a four-chambered stomach including, but not limited to, cattle, sheep, goats, buffalo, elk, and deer.

## WHAT IS THE USA DOING TO PREVENT BSE TRANSMISSION IN CATTLE?

It is widely believed cattle become infected by eating feed contaminated with BSE-infective material. The suspected source of infectivity is rendered proteins derived from ruminants.

The causative agent of BSE is believed to be an unconventional transmissible prion protein. These proteins accumulate in brain tissue, causing changes in behavior that progress to dementia and death.

## WHAT CAUSES BSE AND HOW DO CATTLE BECOME INFECTED?

Scientific evidence suggests BSE is associated with a rare human disease called variant Creutzfeldt-Jakob disease (vCJD). Diagnosis of BSE is difficult because there are no live animal tests. **PREVENTING** transmission of the BSE agent is the **ONLY** safeguard available because there are no treatments and no vaccines available.

## WHAT IS BSE AND WHY IS IT SUCH A CONCERN?

Bovine spongiform encephalopathy (BSE), also known as “mad cow disease,” is a slow, progressive, fatal disease of the nervous system of cattle. It typically occurs in cattle 5 years of age or older. BSE has been found in cattle native to the USA and Canada.



# BSE: Your Actions Matter

Do the FDA's feed regulations apply to you?  
If you handle feed or feed ingredients, YES!

What do I need to do to comply with the FDA's feed regulations?

- **DO NOT** contaminate ruminant feeds or ingredients with prohibited materials
- If you handle prohibited and non-prohibited materials, prevent cross-contamination and commingling through **SEPARATION** or **CLEANOUT**, and proper **LABELING**
- You **MUST** provide written procedures of separation or cleanout methods and documentation of cleanout if you handle prohibited and non-prohibited materials

## 1. BE AWARE



- You may be handling feed ingredients that cannot be fed to cattle or other ruminants
- **YOU** need to know what is prohibited

Cattle may become infected by eating BSE-contaminated feed



- Retail pet foods may contain prohibited materials but do not require the caution statement

## 3. MIXING AND HANDLING

### Prevent cross contamination

You must use one or more of the following:

- **SEPARATION**
  - Using different equipment to handle prohibited and non-prohibited materials
- **CLEANOUT**
  - **Physical cleaning** - sweeping, vacuuming and/or washing
  - **Flushing and/or sequencing** - cleaning equipment by running an adequate volume of non-prohibited feed product through the equipment. The flush product is then considered prohibited



## 2. LABELING

### Follow labeling regulations

- If you handle prohibited materials...
  - **YOU** must label outgoing feeds containing prohibited material with the caution statement:

**"DO NOT FEED TO CATTLE OR OTHER RUMINANTS"**

- The statement must be prominent, conspicuous and easily read

## 4. KEEP RECORDS

Document what was done with products containing **prohibited** materials, including retail pet foods, throughout their receipt, processing, and distribution

- **Separation or cleanout records should include...**
  - How the equipment was cleaned
  - Who is responsible
  - How cleanout is monitored and verified
  - How volume of flush material was determined and handled
- **Keep records for at least ONE year**