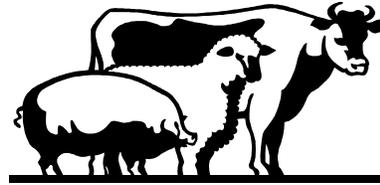


Livestock



Lines

Stanislaus & San Joaquin Counties

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BOVINE SPONGIFORM ENCEPHALOPATHY (BSE) INFORMATION

DID YOU KNOW...

That grass tetany is an easily preventable disease?

See the article on page 3 for more info.

by Theresa Ward

Livestock and Natural Resources Farm Advisor



Wheelchair accessible facilities available. With advance request, accommodations will

INSIDE THIS ISSUE:

In December we had our first case of BSE in the US. The cow was a 6 year old dairy cow from Canada where she was fed contaminated feed. While consumer confidence in our beef supply has remained high, many of you may be faced with questions from various people concerning BSE. I thought I would take this opportunity to go over some of what we currently know to help you answering any questions you may get.

Q: What is BSE?

A: BSE is a degenerative neurological disease caused by a mutated protein called a prion. It is in the family of diseases (all caused by prions) referred to as transmissible spongiform encephalopathies, or TSEs. TSEs include scrapie in sheep and goats, chronic wasting disease (CWD) in deer and elk, and Creutzfeldt-Jakob disease, or CJD, in humans. Essentially, it turns the brain into Swiss cheese.

Scrapie is the oldest TSE, believed to be first documented in the 18th century. There seems to be a genetic susceptibility to scrapie and this is being used as a method of eradication in the US. All breeding animals have been tagged to identify the herd of origin. It is also the current theory that BSE was caused by cattle eating scrapie infected sheep tissue (central nervous system).

CWD has been present in the US for years. This past season, hunters in Wyoming and

Colorado were warned to be more careful when harvesting any bucks they get since CWD had become more prevalent in the local deer populations. Nebraska, Wisconsin, and Illinois have also reported widespread cases of CWD in wildlife populations.

CJD normally affects elderly people worldwide and has been documented in vegetarians. The rate of people affected with CJD is 1 in 1 million people and is being referred to as "spontaneous". Variant CJD (vCJD) on the other hand infects younger people, with an average age of 30. The prion that has been found to cause vCJD is different from CJD and is undistinguishable from the BSE prion. With this and the fact that no cases of vCJD have occurred where there was not a long history of living in an area with BSE leads people to believe there is a link between the two. New cases of vCJD are rapidly dropping and as of January 2004, only 153 cases were diagnosed worldwide.

It's important to note that TSEs are not communicable diseases, they do not spread easily like viruses. Infected tissue needs to be ingested in order for the disease to spread. The incubation time for most TSEs is five years.

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*Q: How is BSE spread in cattle?*

A: Cattle can become infected with BSE by eating feed contaminated with the infectious BSE agent. This is why in 1997 the U.S. Food and Drug Administration prohibited the use of most mammalian protein in the manufacture of animal feed intended for cows and other ruminants. It should be noted that before this mandatory feed ban, there was a voluntary feed ban in place in the US. Feed manufacturers are inspected to ensure no banned products are used, and feed imported is also inspected. For more information on the feed ban, please visit the U.S. Food and Drug Administration's website at [www.fda.gov](http://www.fda.gov).

*Q: How does BSE affect humans?*

A: A fatal TSE affecting humans, variant Creutzfeldt-Jakob Disease (vCJD), is believed to be caused by eating neural tissue, such as brain and spinal cord, from BSE-affected cattle. For this reason, USDA requires that all nervous system materials be removed from downer cattle identified at U.S. slaughter facilities. These specified risk materials are removed, sent to rendering facilities, and do not enter U.S. food supply channels. This is believed to effectively safeguard US public health from vCJD.

*Q: What is the current situation regarding the BSE detection?*

A: Prior to December 2003, all downer animals that were sent to slaughter were tested for BSE. All risk material is removed at that time and taken out of the human food chain and sent to a rendering facility. That is how the dairy cow from Washington was determined to have BSE. Since this single case of BSE, no downer animals are allowed to be slaughtered for human consumption. Surveillance for BSE will continue in all cattle sent to slaughter. As an added precaution, all meat from an animal tested for BSE will be held until the tests are performed and it is determined that the animal was not infected with BSE. Last year, USDA tripled testing levels for BSE surveillance, and this year testing reached an all-time high of 20,526 head of cattle, or 47 times the level recommended by the OIE, the international animal health governing body.

*Q: What are the risks to the U.S. food supply as a result of this detection?*

A: Despite this finding, USDA remains confident in the safety of the U.S. food supply. The risk to human health from BSE is extremely low. As is standard practice for downer animals identified prior to slaughter, the animal's brain, spinal cord, and other related products were removed and sent to a rendering facility. These so-

called "specified risk materials" present the greatest risk of carrying the BSE agent and have not entered U.S. food supply channels. The scientific community believes that there is no evidence to demonstrate that muscle cuts or whole muscle meats that come from animals infected with BSE are at risk of harboring the causative agent of the disease. The prions have also never been found in milk from infected animals. The only tissues that the prions have been found in are the central nervous system, lymph tissue and the small intestines. These are considered the specified risk materials.

*Q: Is there a number consumers can call with questions about meat products?*

A: Consumers with other food safety questions can phone the toll-free USDA Meat and Poultry Hotline at 1-888-MPHotline. The hotline is available in English and Spanish and can be reached from 10 a.m. to 4 p.m. (Eastern Time), Monday through Friday. Recorded food safety messages are available 24 hours a day. You can also contact your local UC Cooperative Extension office for more information at (209)525-6800.

*Q: How has the market been affected by this one case of BSE?*

A: Since the announcement of the single BSE case here in the US, all countries that import US beef have placed a ban on importing our meat. Ships that were on route to deliver were turned back. We consume approximately 90% of the beef that we produce. However, US consumers do not consume variety meats. Without trade to other countries these have to either be stored or rendered. With no value to these cuts, and added costs, the producer may see less money for their cattle. Mexico is believed to open its borders in the near future, with other countries to follow. The big two countries, Japan and South Korea, still show no sign of opening borders. They want to ensure more precautions from the US before they go forward.

*Q: What is the status of a national animal identification system?*

A: The USDA has been working on a national program and it will be implementing it soon. It should be noted that the national animal ID program is different from County of Origin Labeling (COOL). The ID program is designed to be able to trace back animals in case of a disease outbreak, such as Foot and Mouth or BSE. Only the USDA will have access to the data.

For any other information regarding BSE, please see the USDA website at: <http://www.usda.gov/>.

## **PASTURE MANAGEMENT GRASS TETANY**

Grass tetany is one of those easily prevented diseases that sometimes catches people off guard and leaves them with dead cattle. Grass tetany is caused by low magnesium and often low calcium in the blood which can occur for many different reasons this time of the year, when new lush grasses are starting to grow. Prevention is very simple; provide a mineral supplement with magnesium and calcium that will provide one-ounce of each per day to cattle.

Why is grass tetany a problem this time of the year? There are many reasons that compound the problem. First, rapidly growing plants tend to be low in magnesium while high in potassium and crude protein. Lactating cows lose magnesium and calcium through milk production. And yet another factor, ammonia fertilizer applied to the pasture. While it may make sense that plants with low magnesium and lactating animals would be an obvious risk for grass tetany, you may be wondering how potassium, crude protein and ammonia fertilizer play a role. It's actually a quite easy connection; potassium and ammonia interfere with magnesium absorption. Crude protein is quickly broken down to ammonia in the rumen, providing another source of the ammonia.

Because all of these factors tend to happen at one time, prevention is the best solution for grass tetany. If you do find a cow down from grass tetany do not try to move her or excite her in any way. This will only make the problem worse and she will probably die before you are able to treat her.

## **FULL SCALE BEEF QUALITY ASSURANCE PROGRAM OFFERED**

The California Cattlemen's Association along with the California Beef Council and UC Cooperative Extension will be offering a full scale Beef Quality Assurance (BQA, formerly QAP) program Thursday, February 19<sup>th</sup>, 2004 at the Producer's Livestock Market in Oakdale. Registration will begin at 9:30 a.m. with the program running from 10:00 a.m. until 3:00 p.m. Lunch will be provided in part by the San Joaquin

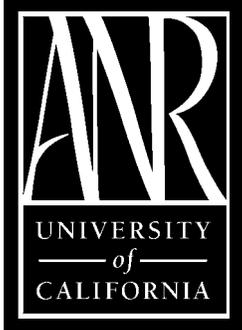
Stanislaus Cattlemen, Conlin Supply and Conlin Fencing. This program will feature the Ft. Dodge QA calf seminar which gives a hands on look at injection site blemishes, as well as both facets of the basic and advanced residue avoidance programs offered through CCA. New items have been added to both programs, including herd health issues, recording keeping and herd identification.

Registrations are due to the CCA office by February 13<sup>th</sup>. Cost for the program is \$10 per operation before the February 13<sup>th</sup> deadline and \$20 per operation after the deadline. For more information please contact Rachel Hickerson in the CCA office at 916-444-0845 or by email at [rhickerson@calcattlemen.org](mailto:rhickerson@calcattlemen.org).

With increasing focus on food safety, BQA provided the beef industry an opportunity to be proactive in producing a safe, wholesome product for consumers. The program demonstrates how using the proper medication, needles, and injection sites can make a difference in the final product; the meat on the consumer's table.

## **OAKDALE LIVESTOCK FORUM**

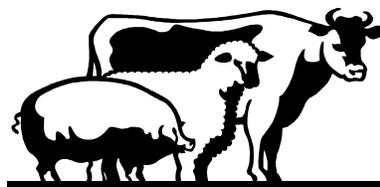
The 52<sup>nd</sup> Oakdale Livestock Forum is just around the corner! This year's program will focus on tools producers have available in selecting animals and how DNA testing can be beneficial to the commercial cattlemen. In addition, there will be a panel discussion on easements. With increasing pressure from development, many ranchers are looking towards easements as a way to maintain their family operation now and into the future. If you have ever wondered if easements may be a management tool you could use, please be sure to make it. This will be your chance to ask questions and discover if easements may be for you. Pre-registration is due by February 17<sup>th</sup>. For more information, please call me at 525-6800.



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SEE WHAT'S INSIDE...

Register For The  
Upcoming  
California Beef  
Quality Assurance  
Program  
&  
52<sup>nd</sup> Annual Oakdale  
Livestock Forum