CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE

Animal Health Branch Newsletter

Volume 17 July 2012

Mission Statement

The Animal Health Branch is California's organized, professional veterinary medical unit that protects livestock populations, consumers, and the State's economy from catastrophic animal diseases and other health or agricultural problems.

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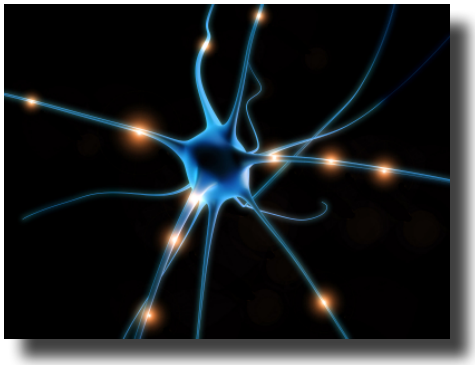
Note: In an effort to reduce costs this newsletter will only be sent electronically.

Atypical Strain (L-type) of BSE Detected in California - April, 2012

by Dr. Dennis Wilson



In April 2012, the United States Department of Agriculture (USDA) routine Bovine Spongiform Encephalopathy (BSE) surveillance program detected BSE in a sample submitted by a rendering company from an 11-year old dairy cow that was euthanized by the owner for lameness and sent to rendering. The sample analyzed by the California Animal Health and Food Safety Laboratory - Davis was confirmed positive for BSE by the USDA National Veterinary Services Laboratory in Ames Iowa on April 24, 2012. The detected strain was classified as L-type, one of two atypical types of BSE and not the United Kingdom type associated with feed transmission. Atypical strains are considered sporadic, very infrequent and have been identified in a number of countries, with Poland and France reported as the countries leading in the number of atypical BSE cases identified. The age of the animal in this case is consistent with the few atypical BSE cases detected globally. The rendering company protocol requires the holding of any carcass sampled for BSE until test results are known. Consequently, this affected cow carcass was not rendered and was disposed of in an approved alternative manner. For more information about BSE please visit:

http://www.cdfa.ca.gov/ahfss/Animal_Health/BSE_Info.html

http://www.cdc.gov/ncidod/dvrd/bse/

http://www.aphis.usda.gov/animal_health/animal_diseases/bse/index.shtml

In compliance with the USDA BSE Response Plan, personnel of the USDA and the California Department of Food and Agriculture (CDFA) Animal Health and Food Safety Services Division collaborated in tracing the affected animal to the herd of origin, identifying birth cohorts (animals born within 1 year of the animal) and progeny from this animal. Because of the effective identification/tracking system employed by the rendering company, the carcass was promptly tracked to the dairy of origin. Available dairy records aided in the investigation of birth cohorts and progeny. One progeny of the affected cow was documented as stillborn and one live progeny was found, euthanized, sampled and found test negative for BSE. The investigation indicated that there are no living birth cohorts.

The U.S. Food and Drug Administration and the CDFA Feed, Fertilizer and Livestock Drugs Regulatory Services actively participated in the investigation by visiting feed suppliers to the dairy of origin

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Atypical Strain (L-type) of BSE Detected in California - April, 2012 *(continued)*

and verifying that the feed suppliers had been producing feed in compliance with BSE feed ban rules. The feed investigation found all supplier companies in compliance with BSE prevention rules. For more information on the rule visit the following website:

http://www.fda.gov/AnimalVeterinary/GuidanceComplianceEnforcement/ComplianceEnforcement/BovineSpongiformEncephalopathy/default.htm

This case exemplifies BSE surveillance and response in action. The investigation procedures were able to ascertain that there were no other animals of concern at the dairy of origin for the affected animal or with an associated dairy herd under the same ownership with some movement of animals between the two premises. A most important component in protection of the public from BSE is the USDA Food Safety Inspection Service (FSIS) procedure on Specified Risk Materials (SRMs). SRMs are parts of the animal that could contain BSE to include the skull, brain, trigeminal ganglia, eyes, vertebral column, spinal cord, dorsal root ganglia of cattle 30 months of age or older and the tonsils and small intestine of all cattle. USDA FSIS requires removal of SRMs from all animals presented for slaughter and prohibits SRMs from entering the human food supply. USDA inspectors at slaughter facilities also prevent non-ambulatory cattle or cattle displaying signs of neurological or central nervous system disorders from entering the human food supply. For more information about the FSIS program:

http://www.fsis.usda.gov/Fact_Sheets/Bovine_Spongiform_Encephalopathy_BSE/index.asp

Bovine Tuberculosis Update - San Bernardino County Dairy Herds

by Dr. Anita Edmondson

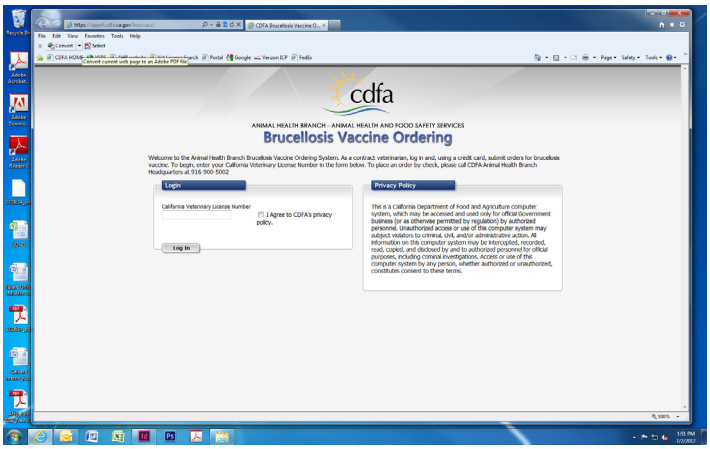
One herd, detected in April 2011 following the diagnosis of TB in a cow during routine slaughter surveillance, remains on a “test and removal plan”. Eight (8) infected cows have been removed from the herd. Trace investigations associated with this herd are completed with no evidence of disease spread and no indication of the source of infection to this herd.

A herd, detected in October 2011 following the diagnosis of TB in a cow during routine slaughter surveillance, was depopulated with 3,350 cattle removed from the premises. Sixty-five (65) TB-infected cattle were detected in the herd. Cleaning and disinfecting of the premises are in process before livestock can enter the facilities. The epidemiological investigation and testing of trace herds with epidemiological links to this dairy is ongoing. A team of fifteen (15) out-of-state USDA personnel assisted California personnel with this testing for three weeks in June.

A herd, detected in December 2011 following testing as a trace herd in the investigation of the herd detected in October 2011, remains on a “test and removal plan”. One (1) infected cow has been removed from the herd; the *M. bovis* cultured from this cow was the same genotype as that isolated from the herd detected in October 2011. The epidemiological investigation of this herd is ongoing.

New Brucellosis Vaccine On-line Ordering System

by Dr. Fred Stevens



The California Department of Food and Agriculture (CDFA) Animal Health Branch is introducing a new on-line Brucellosis Vaccine ordering system for United States Department of Agriculture accredited veterinarians. The California Code of Regulations restricts California distribution of Brucellosis Vaccine to USDA accredited veterinarians under contract with CDFA for Brucellosis vaccination of cattle, application of official Brucellosis identification to cattle and performance of other brucellosis regulatory procedures.

The new on-line, web-based, ordering system allows the placement of Brucellosis vaccine orders in five (5) dose and twenty-five (25) dose vials with either standard 2-3 day delivery or, for an extra fee, expedited "overnight" delivery. Standard shipping is free for orders of $150 or more. **Orders are paid on-line with a credit or debit card at the time of order placement.** This pre-paid system is replacing the invoicing system and will reduce the CDFA Accounts Receivable and time currently required for follow up on shipped vaccine payments. At the time of the on-line order placement, the veterinarian may also request additional ear tags and tattoo ink. The pre-pay on-line ordering system will be available for use on **July 1, 2012** and use of the system by all Accredited Veterinarians is to occur by **August 1, 2012**. Accredited Veterinarians with a valid CDFA Animal Health Branch contract may access the on-line system login page with a standard internet connection and browser at:

https://apps4.cdfa.ca.gov/brucvacc

To login, the veterinarian enters their California Veterinary License number, checks the CDFA privacy policy "Agree" box and clicks the Log In button. The system will check the veterinarian contract status and CDFA District affiliation, and then a vaccine Order Form with shipping options will appear. The order placement will require entry of a valid credit or debit card number. After order placement, a printable screen with details of the order and payment is available. Expedited "overnight" shipping is only available for orders placed *before 11:00 AM* Pacific Standard Time Monday thru Thursday to allow forwarding the order to the vaccine manufacturer in time to meet the shipping deadline. Standard shipment orders placed on Thursday or Friday will ship the following week.

On August 1, 2012, veterinarians with current overdue accounts of sixty (60) days or more will be unable to order vaccine until the account is paid in full. Veterinarians without a credit or debit card may order vaccine with payment by a check, however CDFA will not place the vaccine order until the check is processed and cleared. Please call the Animal Health Branch (916-900-5002) for use of check payment for vaccine orders.

REMINDER - CALF VACCINATION REPORTS

Veterinarians under contract with CDFA for Brucellosis regulatory activities must submit completed **Calf Vaccination Reports** to the local CDFA Animal Health Branch District Office within **fourteen (14) days** of vaccination.

California Code of Regulations Chapter 2, Article 1.5, Section 752

FDA to Implement Egg Safety Rule for 3,000 - 49,999 Layer Hen Operations

by Dr. Maurice Pitesky

Effective July 9, 2012, egg farms with 3,000 to 50,000 laying hens must be in compliance with the Food and Drug Administration (FDA) Egg Safety Rule (Title 21 Code of Federal Regulations Part 118). The federal law requires shell egg producers with 3,000 – 49,999 laying hens:

- To register with the FDA
- To implement and document a *Salmonella* Enteritidis (SE) prevention plan, a biosecurity plan and a rodent and a pest and fly control plan
- To document that chicks/pullets are procured from SE-free breeder flocks and SE-monitored chicks
- To document refrigeration records
- To conduct environmental sampling and SE testing at various ages in the life of the flock
- To cooperate with a FDA inspection to assess rule compliance through evaluation of written records and a walk-through of the hen houses.

Layer operations with less than 3,000 laying hens are exempt from the Egg Safety Rule.

The overall goal of the Egg Safety Rule is the prevention of SE contamination of shell eggs during production, storage and transportation. To verify shell egg producer compliance in California, FDA personnel or CDFA personnel trained and commissioned by the FDA, perform one of two types of inspections.

Targeted inspection: One-day inspection to determine if the producer has implemented the FDA Rule 'basic controls'

Comprehensive inspection: Two to three-day inspection of "high risk" farm, which includes environmental swabbing by FDA personnel to test for SE. FDA determines a farm "risk" level using a FDA risk model.

For Industry Resources with additional information and quick links to the Egg Safety Rule and FDA Shell Egg Producer Registration see:

http://www.cdfa.ca.gov/ahfss/Animal_Health/Avian_Health_Program.html

Vaccinate Horses for West Nile Virus

West Nile Virus remains the leading cause of arbovirus encephalitis in horses & humans in the United States. Equine vaccination is the most effective preventative for this potentially deadly virus. Private practitioners are strongly encouraged to incorporate West Nile Virus vaccination in preventive medicine plans for California horses. For additional information:

http://www.cdfa.ca.gov/ahfss/Animal_Health/wnv_info.html

http://www.aaep.org/wnv.htm

2012 Vesicular Stomatitis Incident - New Mexico

by Dr. Ellen Mary Wilson

The National Veterinary Services Laboratories (NVSL) confirmed a finding of Vesicular Stomatitis Virus (VSV), New Jersey serotype, in serology samples from two clinically-affected horses on an equine premises in New Mexico on April 30, 2012. As of June 26, 2012 there have been fourteen (14) equine premises in five (5) New Mexico counties confirmed with New Jersey serotype VSV-positive animals in 2012. Insect vectors, mechanical transmission and movement of animals are all factors that may contribute to disease spread of VSV, a Foreign Animal Diseases in the United States.

To protect California livestock, the following additional California entry requirement is in effect:

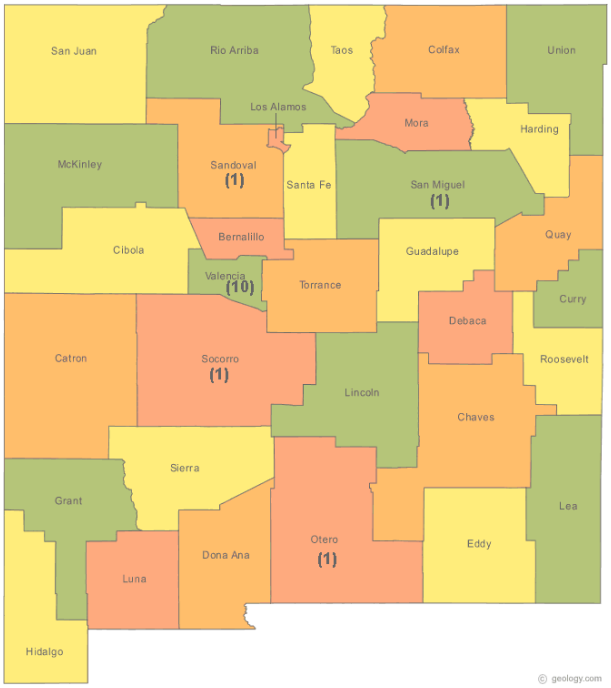
All horses, cattle, and swine originating from a state where VS has been diagnosed, or visiting an infected state and then returning to California (except cattle and swine transported directly to slaughter) must be accompanied by a certificate of veterinary inspection that includes the statement: "The animals represented on this certificate have not originated from a premises or area under quarantine for vesicular stomatitis, or a premises on which VS has been diagnosed in the past 30 days. I have examined the animals and have found no signs of vesicular stomatitis."

Veterinarians and livestock owners who suspect an animal may have vesicular stomatitis or any other vesicular disease should immediately contact State or Federal animal health authorities. Diagnosis of VSV cannot be made based on clinical signs, but requires testing of samples at a facility approved by the U.S. Department of Agriculture National Veterinary Services Laboratories in Ames, IA. A diagnosis can be based on antibody tests using serum samples from the animal and/or by detecting virus from swabs of lesions, blister fluid, and tissue (flaps, biopsies).

For additional information and 2012 situation updates:

http://www.aphis.usda.gov/vs/nahss/equine/vsv/vsv2012.html

http://www.cdfa.ca.gov/ahfss/animal_health/VS.html



New Mexico Counties Map

Number of Positive Premises 2012 Incident (as of 6/26/12)

Official Identification of Mexican-Origin Cattle

by Victor Velez

The United States Department of Agriculture (USDA) approves official animal identification devices and regulates importation of cattle into the United States. The USDA recognizes and requires the Mexico SAGARPA (Secretaria De Agricultura, Ganaderia, Desarrollo Rural, Pesca Y Alimentacion) blue metal eartag as the official identification device for use on Mexican-origin cattle being imported into the United States. Official identification devices are intended as permanent identification of livestock to ensure the ability to trace an animal to a source premises in response to an animal disease investigation. California Department of Food and Agriculture field personnel recently observed several groups of Mexican-origin Corriente cattle without blue metal eartags. As a reminder:

Removal of any official identification device is prohibited except at the time of slaughter.

[Title 9 Code of Federal Regulations, Section 93.401(c)]

Oleander - A Deadly Ornamental

by Dr. Ellen Mary Wilson

Several recent incidents of oleander toxicosis in California cattle are a grim reminder of the local presence and potential for acute poisoning from this highly-toxic, ornamental plant. Oleander, *Nerium oleander*, is an evergreen shrub in the dogbane family Apocyanaceae. The entire plant, fresh or dried, contain toxic compounds including oleandrin and neriine, that affect the cardiovascular system. Ingestion of even a small amount can cause lethal or near lethal effects in humans and many other animals including cattle, horses and other livestock. Fumes of burning oleander are also hazardous. The leaves and flowers contain the highest concentrations of toxic cardenolides; as few as eight oleander leaves can cause death in a cow.

Clinical Signs of Oleander Poisoning

Often animals are found dead with no clinical signs observed.

May see: diarrhea, excess salivation, depression & anorexia
With progression - bradycardia and arrhythmias, tremors, respiratory difficulty

Several specific analytical methods for diagnosis of oleander toxicity are available at the California Animal Health and Food Safety Laboratory. Suitable samples for diagnostic testing include blood, ingesta or milk from animals demonstrating clinical signs. The brain or carcass of a suspect affected animal may yield valuable diagnostic information. If oleander is highly suspected, a targeted diagnostic test may be performed to obtain a prompt diagnosis. If other potential toxins are suspect, a toxicology panel may be warranted. Prompt submission of samples from animals suspected of having been exposed to

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Oleander - A Deadly Ornamental *(continued)*

oleander and communication of as much available information regarding the potential toxicity event is of benefit for rapid diagnosis and initiation of potential response activities to protect animal and public health.

As a reminder, the California Food and Agricultural Code requires that any conditions caused by exposure to toxic substances that have or may have the potential to be a public health, animal health or food safety threat must be reported to California Department of Food and Agriculture (CDFA) within 24 hours. Private veterinary practitioners are encouraged to promptly contact personnel in the local District CDFA office with information on a suspected toxicity case. If necessary, a conference call can be arranged with CDFA, the CAHFS laboratory and the private practitioner to effectively communicate the presented case and coordinate appropriate sample collection and submission.

Staff Biographies

Dr. Gregory Ledbetter joined the Animal Health Branch - Tulare District in April 2012. Dr. Ledbetter received a Doctor of Veterinary Medicine Degree (1977) and a Master of Veterinary Preventive Medicine (1979) from the University of California – Davis (1977). He was a dairy practitioner in Chino, CA for several years before moving to Jerome, ID, where he started Mastitis Prevention Services of Idaho and Farm City Livestock Supply of Jerome. Dr. Ledbetter was also an owner/manager of dairy/farming operation in the Jerome area for twenty years. In 2004 his dairy was named Innovative Dairy Farm of the Year by International Dairy Foods Association. The highlight of Greg's time in Idaho was the two and a half years he served as the Idaho State Veterinarian.

After 30 years away, Greg has returned to California to live on the family ranch east of Orosi where he was raised. Dr. Ledbetter enjoys flying and hunting and is an avid skier. He is active in veterinary organizations and currently serves on the Committee for Environmental Issues of the American Veterinary Medical Association. He has one son who graduated from the College of Idaho in 2011.

Dr. Maureen Lee-Dutra joined the Animal Health Branch in the Tulare District in March 2012. Dr. Lee-Dutra was raised on a family farm in a large cow-calf area in south-central British Columbia, Canada where she gained experience with beef cattle, horses, goats, chickens, ducks, geese and turkeys and also showed Hereford steers in 4-H. Since graduation from the Ontario Veterinary College in 1994, Dr. Lee-Dutra has taken opportunities to work with multiple domestic species and wildlife and developed an interest in population medicine. She completed a bovine reproduction thesis and received a Master of Preventive Veterinary Medicine degree from the University of California – Davis in 2011. When not working, Maureen dedicates a great deal time to volunteerism and is active in emergency response activities.

Contact Information

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Website: www.cdfa.ca.gov/ahfss/Animal_Health/Index.html
Email: ahbfeedback@cdfa.ca.gov

Animal Health Branch
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Headquarters: (916) 900-5002
Fax: (916) 900-5333
Permit Line: (916) 900-5052

State Veterinarian
and
Director, Animal Health and Food Safety Services
Dr. Annette Whiteford
(916) 900-5000

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(530) 225-2140

Modesto: Dr. Randy Anderson (Acting)
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Additional AHFSS Branches

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(916) 900-5006

Milk and Dairy Food Safety
Dr. Stephen Beam, Chief
(916) 900-5008

Meat, Poultry and Egg Safety
Dr. Douglas Hepper, Chief
(916) 900-5004

United States Department of Agriculture
Area Veterinarian In Charge
Dr. Gary Brickler
(916) 854-3950/Toll Free: (877) 741-3690

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