



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.

Inside this issue:

[Click title to go directly to article](#)

Animal Health Branch Newsletter

Volume 23

April 2014

Porcine Epidemic Diarrhea Virus (PEDv)

by Dr. Hector Webster

PEDv is a coronaviral disease associated with outbreaks of diarrhea and vomiting in swine. The disease is only distinguishable from transmissible gastroenteritis of swine (TGE) by laboratory tests; both diseases cause similar clinical signs characterized by watery diarrhea and vomiting in young pigs. The first case of PEDv in the United States (US) was confirmed on May 16, 2013 and since then has spread to more than 27 states, including California. PEDv has had a devastating economic impact on the US swine industry. PEDv is a production-related disease widespread in many countries, but is not a trade-restricting disease. PEDv is not a World Organization for Animal Health (OIE) listed disease and is not a Foreign Animal Disease in the US. It is not a regulatory disease, but in California it is a monitored disease, reportable to the California Department of Food and Agriculture within thirty (30) days of laboratory diagnosis.



PEDv has known fecal-oral transmission and may cause acute diarrhea in pigs within 12-36 hours of infection. PEDv can affect pigs of any age, but is most severe in young pigs; most older pigs recover from the disease within 7-10 days. The disease, however, can cause death and loss of production. No vector or reservoir has yet been implicated in disease spread. There is no treatment for PEDv, but herd veterinarians remain well versed in managing TGE-like diseases. Research is ongoing to develop an effective vaccine. PED is not a zoonotic disease and is not a food safety concern.

Many details about the virus are still unknown. It is known that the virus is shed in swine feces and survives in manure for extended periods of time. Anything that contaminated manure contacts can be a source of infection. The nationwide spread of PEDv reinforces the need to maintain strict biosecurity protocols to protect a herd. Producers who see signs of TGE-like disease in pigs should immediately contact their veterinarian to evaluate their animals. Producers talking with their veterinarians and their farm neighbors about any change in PEDv status of their swine help efforts to track, contain and prevent the spread of the disease.

For more information see:

<http://www.pork.org/News/4045/PEDVUpdate.aspx>

<http://www.pork.org/Research/2641/ResearchLatestNews.aspx#.Uhd3GZJJOKI>

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



Equine Piroplasmosis Update

by Dr. Katherine Flynn

As part of an USDA Investigative and Enforcement Services (IES) investigation involving illegally smuggled horses across the Mexican Border, an asymptomatic 13-year old purebred Spanish Andalusian stallion located in Riverside County was tested and confirmed positive for Equine Piroplasmosis (*Theileria equi*) by the National Veterinary Services Laboratory on March 3, 2014. As part of the initial epidemiologic investigation, CDFA veterinarians tested seventeen (17) exposed horses on the index premises; all tested negative. The investigation revealed that the positive stallion was previously owned by another Riverside County horse breeder. The investigation was extended to the second Riverside County premises, where fifty-three (53) horses were tested; a 5-year old Spanish Andalusian mare and her 5 month old colt were confirmed positive for *Theileria equi*. The three (3) positive horses remain isolated and under quarantine. The owners of these horses are considering enrollment in the USDA/CDFA-Approved Equine Piroplasmosis Treatment Protocol.

Four (4) of the five (5) racing Quarter Horses confirmed positive for Equine Piroplasmosis in 2013 remain under quarantine; the fifth horse was euthanized. Of the four under quarantine, three are enrolled in the approved EP Treatment Protocol. One horse cleared the infection as evidenced by consecutive negative post-treatment PCR tests; two horses remain PCR positive post-treatment. One of the horses treated twice remains PCR positive for *Theileria equi*, possibly due to a resistant strain of EP.



West Nile Virus Update

by Dr. Katherine Flynn

The CDFA and the California Department of Public Health are unable to subsidize West Nile Virus testing in 2014 due to budget reductions. Timely and accurate reporting of suspect equine WNV cases to local health officials by private veterinarians is a valuable component of arbovirus disease surveillance and helps to direct mosquito control efforts to prevent WNV infection in horses and humans. For more information on WNV, visit the California WNV website at: <http://www.westnile.ca.gov> and CDFA WNV website at http://cdfa.ca.gov/ahfss/Animal_Health/WNV_Info.html.



Cattle Health Updates

by Dr. Anita Edmondson

Bovine Tuberculosis (TB)

California remains the only entire state in the nation classified by the USDA as Modified Accredited Advanced for bovine TB. One (1) affected California dairy herd detected in 2013 remains on a test-and-removal program to eradicate infection. In addition, investigations are underway for three (3) TB-infected cows (two dairy and one beef) detected during routine slaughter inspection in California in 2013. California detected eleven (11) TB-affected dairy herds in the last eleven (11) years. These affected herds represent seven (7) different introductions of bovine TB into California cattle. Despite extensive epidemiological investigation and testing, the source of these introductions has not been determined. The three current investigations represent two additional TB-strains, both unique in the US. AHB personnel are continuing to maintain high-quality TB surveillance and animal traceability, and are working with public health agencies to examine the relationships between bovine TB-strains isolated from people and those isolated from cattle.

(Continued on page 3)

Cattle Health Updates (*Continued*)

National Shortage of Purified-Protein Derivative (PPD) Tuberculin Continues Through April 2014

CDFA District Offices currently have a limited supply of PPD tuberculin due to the national shortage.

Please order your PPD tuberculin at least two (2) weeks ahead of your anticipated need and accurately estimate the actual number of cattle to be tested before ordering. If you have excess PPD tuberculin in inventory, especially if it is about to expire, please return it to your local District Office.

Thank you for your help.

Bovine Brucellosis:

California was granted bovine brucellosis-free status in 1997 and has not detected any affected herds since then. The State maintains a surveillance program by testing milk from all dairies twice a year and by testing blood from a sample of the adult cattle slaughtered at one California plant. Little disease remains in US cattle, but infected bison and elk in the Greater Yellowstone Area (GYA) are a threat to domestic herds. Twenty-two (22) brucellosis-affected cattle and bison herds have been identified in the GYA vicinity since 2002; animals from affected herds in 2011 and 2012 traced back to sixteen (16) states. California imports cattle from all states, incurring the disease risks associated with those imports. This is one key reason the California cattle industry continues to support the mandatory brucellosis vaccination of about one million California calves each year.

Bovine Trichomonosis:

The California Trichomonosis Program began in 2003 following passage of legislation sponsored by the livestock industry. Since inception, the program has been strengthened and modified by new laws requested by the cattle industry. There are currently about 250 veterinarians approved to collect trichomonosis samples and in addition to the regulatory laboratories, there are approximately 50 private laboratories, approved to test those samples. Disease detection in California continues with about 25-30 affected herds detected each year.

Cattle Anthrax:

Anthrax was confirmed as the cause of death for cattle submitted to the CAHFS laboratory from a group of 60 cow-calf pairs in Merced County in January 2014. Four cows died without prior signs of disease. The cattle were grazing in an area that is generally under water, but became available because of this year's drought. After two (2) cows died, the cattle were moved off that pasture to an adjacent lot and treated with antibiotics. Two (2) additional cattle subsequently died; samples confirmed anthrax. The dead cows were disposed of by deep burial. The pasture location for this case was less than one (1) mile from the location of the September 2013 anthrax case.

Cattle Health Updates (*Continued*)**Association between caudal fold tuberculin test responses and results of an ELISA for *Mycobacterium avium* subsp *paratuberculosis* and mycobacterial culture of feces in tuberculosis-free dairy herds.**

Brito BP1, Aly SS, Anderson RJ *, Fossler CP, Garry FB, Gardner IA.

Abstract

Objective: To evaluate associations between *Mycobacterium avium* subsp *paratuberculosis* (MAP) and caudal fold tuberculin (CFT) test results in cattle. The dairy herds represented in the study were located in California (1 herd, approx. 3,600 cows) and Colorado (3 herds, approx. 640, 1,190, and 1,480 cows) and were considered free of *Mycobacterium bovis* infection.

Procedures – California herd: The association between CFT response and MAP status was determined with ELISA and mycobacterial culture of feces within 1 year before and after CFT testing.

Procedures – All herds: The association between CFT and MAP status in all herds was modeled with mixed-effects logistic regression.

Results – California herd: Significantly higher odds of being classified as suspect by CFT were found for cows with results of MAP ELISA negative before and positive after CFT testing (OR, 5.6) and cows positive before and after CFT testing (OR, 8.1). Higher odds were found for cows positive for mycobacterial culture of feces before and negative for culture after CFT testing (OR, 4.6) and cows negative for mycobacterial culture of feces before and positive for culture after CFT testing (OR, 13.2).

Results – All herds: All herds had higher odds of being classified as suspect by CFT testing for cows with positive results for ELISA (OR, 2.9) or mycobacterial culture of feces (OR, 5.0), compared with cows with negative results of the same tests.

Conclusions and Clinical Relevance: A strong association was found between positive MAP test results and being classified as a suspect by CFT testing. Within-herd MAP prevalence may affect specificity of CFT testing for tuberculosis in cattle.

* Dr. Anderson is the Veterinarian in Charge of the Modesto District Animal Health Branch.



A Foreign Animal Disease (FAD) Investigation

by Dr. Maureen Lee-Dutra

Four dairy calves, approximately 3 weeks of age, were submitted to the California Animal Health and Food Safety (CAHFS) laboratory from a ranch housing over 7,000 calves. The calf death rate had doubled over the previous week with no apparent response to antibiotic/analgesic treatments. All four calves had red erosions/ulcers on the mucosa of the mouth, tongue, nose, and along the gum line next to the teeth. Animal Health Branch (AHB) personnel initiated an investigation to rule out Foreign Animal Diseases (FADs). Samples tested at the CAHFS laboratory, the National Veterinary Services Laboratory in Ames, Iowa and the Foreign Animal Disease Diagnostic Laboratory in Plum Island, New York ruled out Foot-and-Mouth Disease, Vesicular Stomatitis, Bluetongue, BVD, IBR and MCF. A coinfection of *papular stomatitis* and *coronavirus*, two relatively common diseases, was determined to be the cause of the outbreak. Disease incidence decreased at the ranch over the following weeks.

A FAD outbreak was ruled out within 24 hours because of an attentive producer and availability of a local laboratory, vigilant pathologist and local AHB personnel. However, it took about 10 days from the first signs of disease to ruling out FADs. This case, involving one calf ranch, multiple dairies and calves moving to many states, serves as a poignant reminder of the very real potential for catastrophic spread of a FAD in the United States.



Animal Disease Traceability - One Year Later The Next Step

by Victor Velez, MS

On March 11, 2013 the United States Department of Agriculture (USDA) implemented new regulations for the interstate movement of livestock and poultry. These regulations, known as the Animal Disease Traceability (ADT) Rule, require that most livestock and poultry moving interstate be officially identified and accompanied by an Interstate Certificate of Veterinary Inspection (ICVI). USDA's primary focus during the first year of the ADT Rule implementation was education and outreach.

With completion of the first year, USDA recently announced that it will begin enforcement by identifying individuals that are not meeting the regulation requirements. The local USDA Office will be contacting noncompliant individuals in writing to help guide them through the process for meeting ADT program requirements and provide details on the process to obtain the necessary official identification devices or movement documentation. The letters will provide the producer, livestock market, slaughter plant or accredited veterinarian with USDA contact information for questions or concerns about the ADT program. Local USDA field personnel are also available to provide additional information and respond to questions.

For information on the ADT rule, see

www.aphis.usda.gov/traceability

www.cdffa.ca.gov/AHFSS/Animal_Health/id_info.html

www.californiaid.org (click Additional Information tab)

Animal Disease Traceability (Continued)

REMINDER: The ADT Rule Prohibits Application of More Than One Official Eartag

One part of the ADT regulation prohibits the practice of applying more than one official eartag to an animal. Some *exceptions* include:

- An animal identification number (AIN) beginning with the 840 prefix (either radio frequency identification (RFID) or visual-only tag) may be applied to an animal that is already officially identified with a metal silver “brite” tag and/or an official orange vaccination eartag used for brucellosis.
- A brucellosis vaccination eartag may be applied to an animal that is already officially identified with one or more official eartags.
- In specific cases when the need to maintain the identity of an animal is intensified, the state or federal animal health official may approve the application of an additional official eartag.

When a second official identification eartag is applied, the person applying the eartag must record the date the second eartag is added and the official identification numbers of all existing official eartags. The person applying the eartag must maintain those records for five (5) years. It is important to remember that the removal of any official identification is prohibited. Only under certain circumstances, such as ear infection or malfunction of a RFID device, is the removal allowed. In either situation, the two identification numbers must be correlated.

Reminder to Accredited Veterinarians Completing Official Regulatory Forms

by Rachelle Kennedy, RSI

Accredited veterinarians performing regulatory work are responsible for proper completion of state and/or federal regulatory forms. Commonly used forms include tuberculosis test charts (VS Form 6-22), brucellosis vaccination forms (AHB Form 76-26) and the Interstate Certificate of Veterinary Inspection (ICVI). Information documented on these official forms is essential for Animal Disease Traceability (ADT).

Ensure the following information is correct on these forms:

- Premises Identification Number (Prem ID) if known
- Owner Name and/or Farm Name
- **Physical address for the location of the animals** at the time of the regulatory activity (i.e., vaccination, tuberculosis test, or examination for ICVI) **is essential information for disease tracing.**
 - ◇ The owner mailing, business, or home addresses are supplemental information to the *required physical address for the location of the animals*.
- Official Individual Animal Identification
 - ◇ Line out any animals not tested or shipped

If you have capabilities to collect the essential information electronically, we encourage you to contact evet@cdfa.ca.gov for assistance in electronic submission of this information to CDFA.

We thank you for your continued support as we work together to protect California animal agriculture.



Staff Biographies

Livestock Inspector **Beth Francia** was born in Bend, OR and grew up in Elverta, CA. While growing up, she was active in 4-H and showed horses in various disciplines, but focused primarily on Hunter/Jumpers. Beth graduate in 2005 from Sierra College in Rocklin, CA with an AS in General Agriculture and an AA in General Studies.

Beth's CDFA career began in 2005 as an Agricultural Technician for Bovine Programs, where she maintained information for the TB test database, trichomonosis, animal movement and Johne's contracts and also participated in outreach events. Eight months after starting, Beth acquired a permanent Office Assistant position answering telephones and managing mail, vehicles, distribution of health certificates and issue of pasture-to-pasture permits. In 2007, Beth tested for and achieved her current position as a Livestock Inspector in Bovine Programs at Headquarters. In this current position, she maintains the TB test database, trichomonosis information, Brucellosis contracts and contributes to the development of Emerging Threats database modules.

Beth and her husband, Tom, attended and graduated from Rio Linda High School together and married in 2005. They have two "amazing boys", Kort, who turns five in May and will start kindergarten in the fall, and Kallen, who turns two in April. They share their home with Lucy the cat and two beta fish. Beth's time away from work is spent "keeping their boys entertained" and, when possible, gardening, scrapbooking and cross stitching.



Associate Governmental Program Analyst **Brenda Williams** earned her Bachelor of Science in Strategic Management from California State University, Sacramento in 2000. Before joining the California Department of Food and Agriculture, Brenda was an Administrator and Marketing Director for assisted living facilities in the Sacramento and Fairfield areas. Her CDFA career began in December 2005 as an Office Technician in the Financial Services Branch. In 2007, she transferred into the Animal Health and Food Safety Services Division, Bureau of Livestock Identification as Office Service Supervisor II and in June 2009 joined the AHB. In her current position she is the budget analyst for the cooperative agreements with the USDA Animal and Plant Health Inspection Services, Veterinary Services.

Brenda hails from "just about everywhere". Since her father was in the Air Force, the family moved from New Mexico to California to Europe and to the Midwestern states of South Dakota, Nebraska and Iowa. She currently lives in Sacramento with her husband, Sam. They enjoy the company of their five adult children, their spouses and seven grandchildren. Brenda loves reading about and visiting historical sites, cycling on the American River trails, hiking in the Sierras and camping/boating with her family.

Contact Information



CALIFORNIA DEPARTMENT OF
FOOD & AGRICULTURE

California Department of Food and Agriculture
Animal Health and Food Safety Services
Animal Health Branch
1220 N Street
Sacramento, CA 95814

Physical Address:
2800 Gateway Oaks Drive
Sacramento, CA 95833

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

Animal Health Branch

Dr. Kent Fowler, Chief
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 Jones
(916) 900-5000

District Offices Veterinarian In Charge (VIC)

Redding: Dr. Charles Palmer
2135 Civic Center Drive, Room 8
Redding, CA 96001
(530) 225-2140

Modesto: Dr. Randy Anderson
3800 Cornucopia Way, Suite F
Modesto, CA 95358
(209) 491-9350

Tulare: Dr. Clementa Frederiksen
18830 Road 112
Tulare, CA 93274
(559) 685-3500

Ontario: Dr. Predrag Pecic
1910 South Archibald Avenue, Suite Y
Ontario, CA 91761
(909) 947-4462

Other AHFSS Branches

Bureau of Livestock Identification
Greg Lawley, Chief
(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

Dr. Gary Brickler
Director, District 6
USDA, APHIS, VS, SPRS
(916) 854-3950/Toll Free: (877) 741-3690