

Food Safety Laboratory System

CAHFS CONNECTION

LEADING DIAGNOSTICS NATIONALLY, PROTECTING CALIFORNIA LOCALLY . APRIL, 2020



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Message from the Co-Directors

CAHFS remains committed to our mission of protecting animal and human health during these unprecedented times. Due to COVID-19 measures, we are experiencing some staffing shortages, and we are making an effort to use our supplies wisely given that many of the items we use are also needed by hospitals and other medical facilities.

CAHFS continues to operate and maintain normal business hours, however our work capacity is limited. We are prioritizing submissions related to public health & safety, foreign animal diseases, disease outbreaks (including virulent Newcastle disease), maintaining a safe food supply, and animal movement. Submissions for other reasons may experience longer turnaround times or, in the case of necropsies, decreased discretionary testing. Please consider limiting non-essential submissions to CAHFS during this period.

We are also changing our processes for in-person receipt of submissions to minimize opportunities for disease transmission. Please follow directions at the lab when you arrive.

Thank you for your understanding. We will continue to provide the highest level of service that is possible, and update you with any changes to our situation.

VND Update

Good news on the vND eradication effort. After the latest case confirmed in backyard exhibition chickens in San Bernardino County on February 25, 2020, no additional cases of



the disease have been detected. All Control Areas have been released, however the Regional Quarantine is still in effect. Freedom of Disease testing is currently underway. If no more cases are found, the California Department of Food and Agriculture (CDFA) hopes to release the Regional Quarantine by late Spring. CDFA and the United States Department of Agriculture, with the laboratory support of CAHFS, keep making significant progress towards eradicating vND. Please continue practicing good biosecurity, stop illegal movement of birds, and report any sick birds immediately to the Sick Bird Hotline, 866-922-2473.

Equine

Coccidioides sp. infection occurred in a full-term Thoroughbred foal that presented with a diffusely red and thickened placenta, which was covered with fibrin over the cervical star region. At necropsy, the lungs were partially inflated and had pin-point pale foci throughout. Histopathology revealed pyogranulomatous pneumonia and placentitis with numerous Coccidioides spp. spherules present. The mare remained healthy; it had a Coccioides immitis titer of 1:16 and was IgM positive for this fungus, thus supporting recent infection.





California Animal Health and Food Safety Laboratory System

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UC DAVIS VETERINARY MEDICINE - CAHFS CONNECTION - APRIL, 2020

Bovine

Anaphylaxis was the cause of death in a 45-day-old Holstein dairy calf from a group of 22 calves that were vaccinated with a combination of viruses and Mannheimia haemolytica vaccine. Three calves developed respiratory distress within 15 minutes post-vaccination. Two of the three calves responded to epinephrine administration but the third calf did not, and died 30 minutes later. Gross pathology revealed severe pulmonary edema. The lung tested negative for bacteria and viruses.

Infectious bovine rhinotracheitis virus (IBRv)

was the cause of death in a 4-month-old Holstein bull calf that died two days after onset of respiratory signs on a calf ranch; the animal had failed to respond to antibiotic treatment. The entire tracheal mucosa was covered by a fibrinonecrotic membrane, and the lungs had bronchopneumonia involving 50% of the cranial lung lobes. The lungs were positive for IBRv by PCR; Pasteurella multocida and Mycoplasma bovis were also detected in the lungs.

Small Ruminant

Yersinia pseudotuberculosis infection caused anorexia followed by diarrhea and death of a yearling Nigerian dwarf goat from a herd of 50, where five other adult goats (1- to 9-years-old) had died with the same signs during the previous two weeks. The only change in management in the past year had been access to a new pasture, which was thought to be the probable source of the Y. pseudotuberculosis. The organism was isolated from an enlarged mesenteric lymph node and the small intestine. Histologic lesions in the intestinal tract were typical of yersiniosis. Moderate numbers of whipworms in the cecum and severe copper deficiency were also found.

Pig

Malignant catarrhal fever (MCF) due to ovine herpesvirus type 2 (Ohv-2) caused the death of a 7-month-old gilt in a herd of seven pigs, in which another pig had died during the two previous weeks. The gilt was lethargic for four days before death. The pancreas was swollen, firm and

had multiple white spots and omental adhesions. The spleen was enlarged and the lungs were edematous. Histology revealed marked pancreatic necrosis and adjacent peritonitis, lymphadenitis, interstitial pneumonia and nephritis, with vasculitis and peri-vasculitis. PCR for Ohv-2 on the spleen was positive.

Poultry

Inclusion body hepatitis (IBH) was diagnosed in 23-day-old commercial broiler chickens submitted for increased mortality (240 dead/day for past 4 days) and depression. Enlarged tan livers with petechial hemorrhages, mottled pancreas, and gizzard erosions were noted at necropsy. Microscopically, severe hepatocellular necrosis and degeneration, and intranuclear inclusion bodies in the liver, pancreas, gizzard, and small intestine were seen. IBH is caused by several serotypes of fowl adenovirus, and has been documented to cause hepatitis as well as hydropericardium and gizzard erosions. A sudden increase in mortality that can last for a week or more in affected flocks is typically observed.

Welcome Dr. Wendi Jackson

CAHFS is pleased to welcome Dr Wendi Jackson to its team effective January 2, 2020. Dr Jackson joined the CAHFS-Davis lab as a diagnostician.



Dr. Jackson received her DVM, MS, and MPVM from UC Davis. She is currently completing her PhD in epidemiology, working on production-related diseases in beef and dairy cattle.

