

Food Safety Laboratory System

CAHFS CONNECTION

LEADING DIAGNOSTICS NATIONALLY, PROTECTING CALIFORNIA LOCALLY - FEBRUARY, 2020



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VIRULENT NEWCASTLE DISEASE UPDATE

No new cases of virulent Newcastle disease (vND) have been diagnosed in California since January 7th (confirmed on January 13th by NVSL). No cases of the disease have been diagnosed in commercial poultry facilities for many months. This continues the decreasing trend of vND detections observed over the last few months. Nevertheless, all bird owners in Southern California should stop illegal movement of birds from property to property, practice good biosecurity, remain aware of vND signs, and report any sick birds immediately to the Sick Bird Hotline, 866-922-2473. More information about vND, including biosecurity guidelines to keep birds healthy, is available on the CDFA virulent Newcastle disease web page.

Equine

Hepatopathy probably due to pyrrolizidine alkaloid (PA) toxicosis caused neurologic signs and death in a 3-year-old Andalusian mare. On the day prior to death the mare was icteric, obtunded, ataxic, anorexic, dull and depressed. The liver enzymes and fibrinogen were elevated. At necropsy, the serosal surfaces were icteric and the liver was orange,

WELCOME DR. JAVIER ASIN

CAHFS is pleased to welcome
Dr. Javier Asin to our
team. Dr. Asin joined the
CAHFS—San Bernardino
laboratory as a diagnostic
pathologist on January 2,
2020. He received his DVM (2014) from
the University of Zaragoza, Spain, and
recently completed a combined PhD/
Anatomic Pathology Residency program at
the same institution. Dr. Asin also received
Diplomate status by the European College
of Veterinary Pathologists (ECVP) in
2019.

AVIAN INFLUENZA DETECTED

Influenza virus, typed as H4N6 using CAHFS new whole genome sequencing methodology, was detected in a commercial quail ranch by regular surveillance testing. Interestingly, the Neuraminidase gene (which enables the virus to leave a cell) showed a major deletion known as 'short stack'. This deletion is a well known characteristic for adaptation of influenza viruses in poultry. A very similar deletion has been described in the scientific literature before and was linked to a change in virus tropism.

moderately small and very firm. Histologic liver lesions of extensive dissecting fibrosis were compatible with PA toxicosis.





California Animal Health and Food Safety Laboratory System

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Bovine

Clostridium botulinum type C was the cause of death in 13 Holstein cows over seven days, in a pen of 60 on a 600 cow dairy. The affected pen and one other pen were fed from a single feed wagon batch. Clinical signs included weakness, recumbency and marked decreased tongue tone. In the first 24 hours, three cows died and six more were affected. Additional new cases occurred over the following five days. Deaths occurred within 1-2 days of onset of signs. Botulism (type C) was confirmed by mouse bioassay on liver of one cow.

Pig

Porcine epidemic diarrhea virus (PEDV) was the cause of diarrhea in 200 piglets over four days on one ranch. Thirty of these animals died. Two affected 3-day-old piglets submitted to CAHFS had severe enteritis and were positive by PCR for PEDV on colon contents but negative for transmissible gastroenteritis virus and porcine deltacoronavirus.

Small Ruminant

Listeria monocytogenes meningoencephalitis

was diagnosed in an 8-month-old castrated male Nigerian dwarf goat that died suddenly. Another goat had died on the same property 3 days before. The submitted goat was underweight and histologically the brain lesions appeared subacute (over several days duration).

AVMA HONOR ROLL INDUCTEE

Congratulations to Dr. H.L. Shivaprasad, CAHFS-Tulare, for being inducted to the American Veterinary Medical Association's (AVMA) Honor Roll. This Dr. H.L. Shivaprasad distinction is reserved for individuals that have maintained AVMA membership for a period of 40 years or more and have reached the age of 70.

Bacterial meningitis caused neurologic signs and death in a 3-week-old crossbred lamb that was still nursing. The lamb had a two-day history of ataxia and weakness prior to death. The meninges were covered by greenish-yellow exudate. Streptococcus entericus and Stenotrophomonas maltophilia were isolated from the brain swab.

Poultry and Other Avian

Enterococcal vertebral osteomyelitis was diagnosed in 27-day-old broiler chickens submitted for lameness and depression. The broilers were crouched and sitting on their hocks. Enlarged thoracic vertebrae and inter-vertebral junctions were noted at necropsy. Spondylitis and osteomyelitis was confirmed microscopically. Enterococcus cecorum was isolated from vertebral cultures. Small bursas were also observed and an endemic strain of infectious bursal disease virus was detected by RT-PCR.

NEW USDA EIA TESTING REQUIREMENTS

Starting April 15, 2020, new USDA requirements for EIA testing will go into effect. Practitioners will be required to use only the most current VS 10-11 EIA form (currently dated Feb 2018), and must complete all fields on the form (or indicate as N/A). Practitioners are also required to have federal Category II Accreditation. Laboratories will be required to confirm accreditation status and ensure completion of the VS 10-11 form prior to accepting samples. To obtain current VS 10-11 forms, contact your CDFA district office.

www.cahfs.ucdavis.edu

