

CAHFS CONNECTION

LEADING DIAGNOSTICS NATIONALLY, PROTECTING CALIFORNIA LOCALLY MAY, 2023



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HOLIDAY SCHEDULE In observance of Memorial Day, CAHFS will be closed on Monday May 29

CAHFS Tulare branch returns to limited services including field necropsies

The Alex A. Ardans CAHFS Tulare branch laboratory remains down and inoperable due to flooding that occurred on March 16, 2023. Flood damage (mostly in the basement and affecting critical building operation systems) is being cleaned up in preparation for the prolonged repair and rebuild efforts necessary to restore building functions. Over the past month the CAHFS Tulare staff has been busy moving next door to the UC Davis Veterinary Medicine Teaching and Research Center (VMTRC) and setting up offices and laboratories to restart diagnostic services. We are grateful to the VMTRC leader-ship and staff for accommodating our needs as we return to spaces that were the CAHFS Tulare home for many years.

We currently have some <u>services restored</u> including Shipping and Receiving, Bacteriology, Immunology, and Parasitology (fecal examinations). We are unable to receive carcasses or tissues at the VMTRC until we finish renovating the old necropsy and histology facilities, and we hope to have onsite necropsy and histopathology services up and running in 2-4 months. In the meantime, we have rolled out a <u>field necropsy service</u> and we now have almost a week of field necropsies under our belts! We have two trucks and two necropsy teams ready to provide on-farm/ranch mammalian necropsies, with food-animal cases and events with significant morbidity/mortality, risks to herd health or public health prioritized. Other types of cases (including equine and hobby or backyard livestock) will be triaged and covered by our teams as time and resources allow. We will not be performing avian (including poultry) field necropsies; clients are encouraged to submit avian cases to the Davis, Turlock or San Bernardino laboratories. Field necropsies will continue until either the weather becomes untenable (the south valley gets quite warm in the summer) or our VMTRC facilities are available. **Please call the Tulare branch (559-668-7543) with field necropsy requests or any other question about our diagnostic services; we will work with you to find the best solution for your problem! We are very grateful to all of our clients for your incredible patience while we navigate this ever-evolving event.**





Lab Locations:

CAHFS – Davis

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CAHFS – Turlock

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Contributors

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CAHFS is proud to welcome **Dr. Nicolas Streitenberger** as a diagnostic pathologist in the Davis Laboratory effective May 1st, 2023. Dr. Streitenberger obtained his DVM (2012) and PhD (2020) degrees from the National University of La Plata, Argentina. His PhD was on Bovine Respiratory Disease in feedlot cattle, with particular interest in viral infections. He completed his residency training in Anatomical Pathology at the San Bernardino Laboratory of CAHFS (2020-2023).

Avian

Between August 2022, when the first diagnosis of highly pathogenic avian influenza (HPAI) was made in California, and the end of February 2023, CAHFS tested 13,619 samples for HPAI. Samples were mainly submitted through the California Department of Food and Agriculture HPAI taskforce, the United States Department of Agriculture Wildlife Services Surveillance Program, the California Department of Fish and Wildlife Wild Birds Hotline, the California Avian Health Education Network, the California Department of Public Health, and CAHFS necropsy and general submissions programs. The majority of samples tested originated from chickens, of which only 0.68% tested positive for HPAI clearly indicating that chickens are not the driver in this outbreak. Wild bird species that tested positive for HPAI were pelicans (73.1%), vultures (64.58%), hawks and geese (47%), and owls (36%). The high number of wildlife species that tested positive is likely associated with the fact that most of these animals were submitted as part of mortality investigations. Avoid touching sick or dead wild birds; they may carry HPAI and/or other diseases, which you may transmit to your own birds.

Bovine

Campylobacter jejuni was the cause of late term abortion in 3 Holstein cows from a group of 200 dry cows in which 20 had aborted approximately 8 month gestation fetuses over a one month period. All three fetuses submitted had pneumonia and hepatitis compatible with a bacterial infection. *C. jejuni* was isolated from abomasal fluid of 2 of the 3 fetuses. *C. jejuni* infects the fetus following bacteremia in the cow, after infection originating in the intestinal tract.

Equine

Catastrophic fracture of the left third metacarpal bone was diagnosed in two Thoroughbred racehorses. The injury occurred during training in one horse and racing in the other one. Both horses had a history of pulling up during exercise when the fracture occurred. They both had open, complete, comminuted, displaced, transverse, and longitudinal fractures of the diaphysis and the proximal epiphysis of the left third metacarpal bone. Both horses had mild to moderate dorsal metacarpal disease, which was thought to be a predisposing factor for the catastrophic fractures. Third metacarpal bone fractures are responsible for 3% of Thoroughbred and 5% of Quarter Horse musculoskeletal fatalities in California. These fractures are more common in young animals due to trauma (e.g. kicks and falls), but are also associated with stress fractures due to repetitive and cyclic microdamage, that results in dorsal metacarpal disease (bucked shins) as in these two cases.

