UCDAVIS VETERINARY MEDICINE
California Animal Health and Food Safety Laboratory System

CAHFS CONNECTION

LEADING DIAGNOSTICS NATIONALLY, PROTECTING CALIFORNIA LOCALLY • JUNE, 2016

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Holiday Schedule

In observance of Independence Day, CAHFS will be closed on Monday, July 4, 2016.

Please plan your testing needs accordingly.

Attention **B**ackyard **F**lock **O**wners - CAHFS is developing promotional materials and we would like to use your chicken pictures. If you have any that you are willing to share, please send them to Sharon Hein, slhein@ucdavis.edu. Thank you.

Bovine

Lead intoxication was diagnosed in a 4-month-old beef calf that had acute onset of circling, head bobbing and seizures prior to death. Polioencephalomalacia was ruled out by negative Wood's lamp reaction and histopathology; rabies was ruled out by fluorescent antibody test. Heavy metal screen of the liver detected 7 ppm lead, consistent with intoxication. Batteries were found in the pasture and considered the source of lead exposure.

Equine

Lesions compatible with **pemphigus foliaceous** were found in a 13-year-old Arabian gelding with chronic (2-years), recurrent skin lesions that were temporarily responsive to corticosteroid therapy. The painful skin lesions started in the saddle area but then spread to other regions and were characterized grossly by hair loss, crusting and swelling. Several skin biopsies from different regions collected at different times were necessary to confirm a diagnosis of pemphigus foliaceous by histology.

A 12-day-old foal with history of being unable to rise, hypermetria, stiff head and neck, and horizontal nystagmus, was received for necropsy. Gross findings were minimal and unspecific. Histologically, **Halicephalobus gingivalis** was identified in the brain, mainly in the medulla and cerebellum, accompanied by a severe granulomatous reaction. The parasite was also identified in the medulla of the adrenal gland. Infection by *H. gingivalis* in foals this age is extremely rare, This parasite has been previously reported in California, but never in a foal this young.

Small ruminants

An approximately 45-day-old goat kid with acute onset of disease succumbed to **Clostridium perfringens type D enterotoxemia**. At the time of submission, the kid was the only animal affected in a flock of 150. The kid was found lethargic and with diarrhea in the morning, and the condition progressed to extreme lethargy, drooling, cold mouth and death 8 hours after onset of clinical signs, despite supportive therapy. Grossly, the small and large intestines were filled with abundant, green, watery contents. Histologically, there was segmental, moderate to severe, acute, necrotizing and fibrino-suppuratrive enteritis. The diagnosis was confirmed by detection of *C. perfringens* type D epsilon toxin in the small intestinal contents by ELISA.

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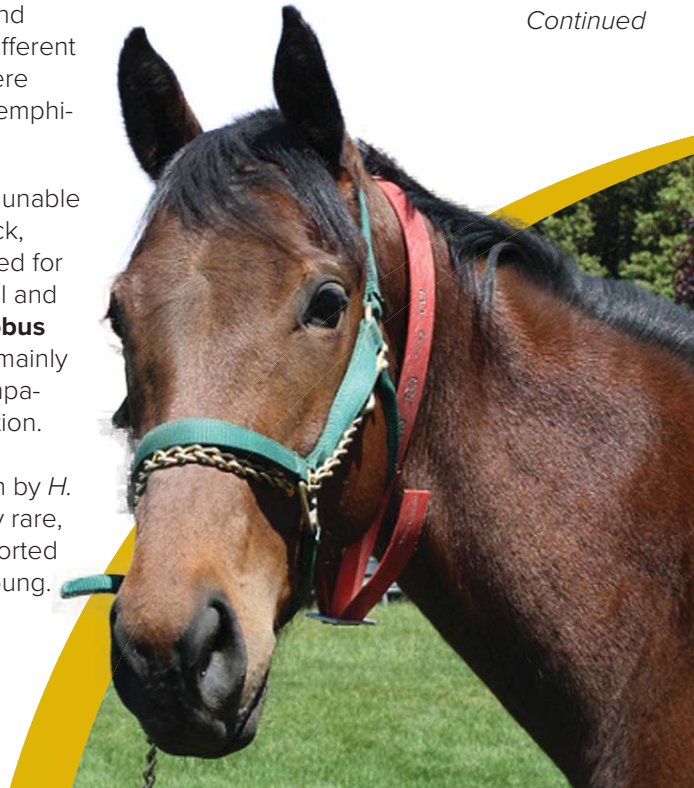

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Pig

After being unable to rise on her own for a 1-week duration, a 2-year-old cross-bred sow was euthanized and submitted to CAHFS for necropsy. An abscess in the proximal lumbar vertebrae with extension bilaterally into the psoas muscles was found on postmortem examination. **Trueperella (Aracanobacterium) pyogenes** was isolated from the abscess.

Small Animal

A domestic cat with history of vision loss and unilateral epistaxis was submitted for necropsy along with an environmental sample for fungal culture. The cat had a large fungal granuloma in the nasal cavity, which perforated the cribriform plate and compressed the olfactory and frontal lobes of the brain. Large numbers of round to oval, 20-40 um diameter fungal yeasts were identified within this granuloma. Fungal culture of the granuloma yielded *Cryptoccus gattii*. The environmental sample culture yielded *Mucor spp.* Both fungi (Cryptococcus and Mucor) are zoonotic pathogens, which are known to affect mainly elderly and immunosuppressed individuals.

Poultry and Other Avian

Pigeon paramyxovirus (PPMV) infection was diagnosed in a group of racing pigeons with nervous system signs consisting of ataxia and droopy wings; followed by rapid death. Necropsy revealed swollen, edematous and sometimes hemorrhagic pancreas. All birds had white spots throughout the liver. In addition, several birds had swollen spleens, cloudy air sacs, congested lungs and fluid in the trachea. Histopathology identified necrosis in the liver, pancreas and spleen. Pharyngeal swabs were positive for avian paramyxovirus by PCR and for PPMV by sequencing.

Announcement - Backyard Poultry

Small flock and backyard poultry are increasingly popular in California. Managing health issues in these flocks can be challenging, and veterinarians (and owners) should be aware of the **principles of appropriate drug use** for these animals in order to safeguard animal and human health, and to prevent residues in eggs and meat. There are only a small number of drugs approved for use in poultry, and even fewer that have been assessed for use in egg-producing females. According to the Animal Medicinal Drug Use Clarification Act (AMDUCA), any detectable drug residue in the eggs of a hen that was treated in an off-label manner is a violation. In addition, the FDA considers all chickens to be food-producing animals regardless of whether they are kept as pets or for production. The Food Animal Residue Avoidance and Depletion Program, FARAD, www.farad.org, provides guidance on available pharmacokinetic/pharmacodynamics data for a variety of food animals and medications and published an informational digest for veterinarians ("Egg residue considerations during the treatment of backyard poultry") in the December 15, 2015 issue of JAVMA which provides additional information and resources on this topic. UC Cooperative Extension also has some information to assist small flock and backyard poultry owners, http://ucanr.edu/sites/poultry.