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Holiday Schedule

In observance of Labor Day, CAHFS will be closed on **Monday, September 3, 2012.**

Bovine

Bovine Herpes virus-1 (BHV-1 aka IBR) was the cause of **abortion** in 12 second calf heifers in a beef herd. The herd was vaccinated four to six weeks earlier with a commercial viral and *Leptospira* multivalent vaccine which contained killed BHV-1 virus and is approved for use in pregnant cattle. All five fetuses submitted had similar lesions consisting of necrosis in the lung and liver typical of IBR with variable involvement of other organs and occasional intranuclear viral inclusions. BHV-1 infection was confirmed by positive fluorescent antibody and/or immunohistochemical stains. Abortions were limited to second calf heifers though the entire herd received annual vaccinations with the same vaccine.

Equine

Colitis by *Actinobacilli equuli* in a horse.

A 3-year-old Thoroughbred gelding presented with severe, acute colic unresponsive to treatment, which resulted in euthanasia. Necropsy revealed severe ulcerative colitis that affected all four portions of the large colon and, to a lesser extent, the small colon. The ulcers were consistently located over the submucosal lymphoid follicles which had severe necrosis. Testing for the common causes of colitis in horses (including *Clostridium perfringens*, *Clostridium difficile*, *Salmonella* spp., parasites and several toxic compounds) was negative, but *Actinobacillus equuli* was isolated from the colon and from several other internal organs. *A. equuli* is a rare cause of intestinal disease in horses. In this case, it was thought that the colitis due to primary infection of the colon was the port of entry for this microorganism which subsequently spread to the rest of the body.



Ulcerative colitis in a horse

Reminder

Effective September 1, 2012, CAHFS will implement a 10 percent increase in fees. In addition, the standard livestock and avian necropsy fee will increase to \$120.00. After hours necropsy fees will continue to be twice the standard necropsy fee except in cases of suspected regulatory disease outbreaks.

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Your feedback is always welcome. To provide comments or to get additional information on any of the covered topics or services, please contact Sharon Hein at slhein@ucdavis.edu.

We're on the Web
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Pig

Porcine reproductive and respiratory syndrome virus (PRRSV) infection was diagnosed in four swine herds in June. One herd experienced an increase of mummified fetuses and **neonatal deaths**. A live born neonate with pneumonia, hepatic necrosis and mild meningoencephalitis was positive for PRRSV by PCR on lung tissue. The other three herds reported clinical signs of hypoxia or respiratory infection in pigs ranging from 2 to 6 months of age; five pigs were submitted from these herds. All affected pigs had **pneumonia** and PRRSV was found by PCR in lung tissue. Concurrent infection with porcine circovirus-2, *Pasteurella multocida*, *Arcanobacterium pyogenes* and *Actinobacillus* sp. was also found.

Small Ruminant

Hepatic encephalomyelopathy in 10 goat kids with congenital portosystemic shunt. Ten, 6-week to 5-month-old goat kids of various breeds were diagnosed with hepatic encephalomyelopathy associated with congenital portosystemic shunt between 1999 and 2011 at CAHFS and the UC Davis Veterinary Medical Teaching Hospital. The animals manifested a combination of two or more of the following signs: ataxia, circling, blindness, seizures, head bobbing, teeth grinding, opisthotonus, decreased menace reflex, nystagmus, recumbency, paddling, general weakness and ill-thrift. Two animals tested had elevated bile acids, and all animals had small liver, decreased fat stores and histologic changes in the liver typical of a shunt and in the brain and cord there were lesions of hepatic encephalopathy.

Poultry

Nutritional encephalomalacia due to vitamin E deficiency was the cause of **neurological disease** and increased mortality observed in three houses of 6-week-old layer pullets. While no gross lesions were observed during necropsy, severe leukoencephalomalacia was observed by histology in the cerebellum of all the pullets from the three houses examined. Vitamin E was undetectable in the liver of the affected chickens, but vitamin A in the livers was twice the normal range. Feed analysis revealed that no vitamin E was present while twice the expected amount of vitamin A was detected.

Very virulent Infectious bursal disease (vvIBDV) was diagnosed in a backyard, multi-use flock experiencing increased mortality from which several dead adult chickens were submitted. Postmortem examination revealed **hemorrhages** in the breast and thigh muscles, eye, sciatic nerve sheath and bursas. One bursa also contained caseous exudate. Bursa samples tested positive for vvIBDV by PCR.

Sample Notification Now Available

CAHFS is now offering e-mail notification for samples received. A single e-mail will be sent at midnight listing all cases received that day. If you would like this service, please contact one of our CAHFS' laboratories.