



UC DAVIS

VETERINARY MEDICINE
California Animal Health and
Food Safety Laboratory System

CAHFS CONNECTION

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Holiday Schedule

CAHFS will be closed on **Thursday, July 4, 2013** in observance of Independence Day.

Please contact your laboratory to plan your testing needs accordingly.

Bovine

Leptospirosis was the cause of an **abortion** storm in 6-8 month gestation fetuses from one dairy. Serology of the dams at the time of abortion revealed *L. pomona* titers of 1:1600 and greater in four of four aborting cows with low to moderate titers to other serovars. A second dairy had a sporadic abortion eight days after vaccination with a multivalent vaccine containing *Leptospira*. Fetuses submitted from both dairies were icteric with bile stasis, and *Leptospira* was confirmed by fluorescent antibody testing on kidney impression smears.

Atresia coli of the spiral colon was the cause of a **failure to defecate, bloat and death** in multiple dairy calves from two separate premises. Affected calves submitted were less than five days of age. One premise reported a 30 percent incident while all five calves submitted from a second premise were affected.

Nervous coccidiosis was diagnosed in three of five Longhorn heifers with **bloody diarrhea** followed by **spasms, incoordination and seizures**. Two heifers became recumbent, one was paddling before death and the other was euthanized and submitted for necropsy. The third animal recovered. The remaining animals had mild diarrhea or no clinical signs. At necropsy, the heifer had diffuse severe, abomasal edema associated with large numbers of *Ostertagia* sp. and diffuse colitis due to coccidiosis. This animal was also deficient in copper and selenium. The pathogenic mechanisms for nervous coccidiosis are not fully understood and experimentally have not been reproduced.

Hairy vetch toxicosis was the presumptive cause of death of an Angus cow from a herd of 350 where seven had died over a 3-month period. Some herd mates had scaly **skin lesions and weight loss**. At field necropsy one Angus cow was markedly anemic (pale) and the liver and kidney had mottling and hemorrhages. On histopathology, the tissues submitted revealed lymphohistiocytic to granulomatous kidney, liver, heart and lung lesions compatible with hairy vetch toxicosis. The pasture contained hairy vetch.



Cow with hair loss associated with vetch toxicosis

Equine

Salmonella arizonae was the cause of septicemia leading to **meningoencephalitis** and ventriculitis with septic thrombi and necrosis in the brain, pneumonia and hepatitis in a 2-week-old colt. The colt had separated from his dam and developed abnormal flexure of the neck and was **blind**. CBC revealed increased white blood cells and neutrophils.

Streptococcus equi ssp. zooepidemicus was the cause of severe bronchopneumonia in a 10-month-old wild burro filly. The filly was from northwestern Riverside county where as many as 40 other burros had been reported as sick, lethargic and dying with no apparent cause. Extensive testing included PCR on nasal swabs and lung tissue for equine herpesvirus-1 and influenza, both of which were negative. *Streptococcus equi ssp. zooepidemicus* is one of the most common causes of pneumonia in horses submitted.

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We're on the Web
www.cahfs.ucdavis.edu

Small Ruminant

Unilateral mastitis caused by **Streptococcus sp. and Fusobacterium necrophorum** was found at necropsy in a ewe from a flock of 80 in which eight to 10 ewes had unilateral hard udders, anorexia and weight loss. Five ewes had died. The ewe also had lungworms and severe selenium deficiency.

Camelids

Oleander toxicosis was the cause of illness in five llamas out of a group of nine showing acute **respiratory signs, lethargy and anorexia** of which one died and two were euthanized after consuming a bale of hay. One of the dead animals was submitted for necropsy and oleandrin was detected in the stomach contents. It is speculated that only the one bale of hay was contaminated by the oleander leaves. Oleander is the most common toxicosis seen in camelids in California.

Porcine

H3N2 influenza virus was the cause of **coughing** in 100 percent of piglets removed from the farrowing barn to the nursery in a 100 sow farrow to finish operation. The virus was diagnosed by PCR on a tracheal swab of an affected pig and confirmed by H and N typing.

Poultry

Mycoplasma synoviae (MS) infection was diagnosed in a group of 6 1/2-week-old, commercial "organic" **broilers** submitted with a history of increased mortality and depression. At necropsy the birds exhibited **polyserositis** with accumulation of a white-yellowish caseous exudate in multiple organs of the coelomic cavity. Tracheal swabs taken at necropsy were positive for MS by PCR. *Escherichia coli*, causing a secondary bacterial infection was isolated from the heart sac and air sac.

Systemic aspergillosis was diagnosed in multiple submissions of 1- to 10-day-old **turkey poults**. The birds were submitted with a clinical history of lingering high mortality and **breathing difficulty**. At necropsy the birds exhibited multiple, small, whitish nodules mainly in the lungs and air sacs. Few birds had a yellowish exudate in the anterior chamber of the eye (**hypopyon**). Fungal hyphae associated with **pneumonia** and panophthalmitis were seen by histopathological examination. *Aspergillus fumigatus* was isolated from the lung.

Pasteurella multocida was isolated from **breast blisters and synovitis** in 12-week-old turkeys that had increased mortality of 50-200/days. These lesions can be associated with chronic fowl cholera. However, there was no report of previous *Pasteurella* infection in this flock. Most cases of breast blisters are due to *Mycoplasma synoviae* or *Staphylococcus* in turkeys so this was an unexpected finding. **Pasteurella multocida** was also isolated from subcutis in 12-week-old turkeys with **head and neck cellulitis** in an unrelated flock experiencing swollen wattles and increased mortality. Some birds had discharge from the nose and mouth. The birds affected with cellulitis also had enlargement of the liver and spleen.

Lead toxicosis was the cause of an **inability to stand, a twisted neck and not eating and drinking** in a one-year-old backyard chicken that died. Brain and gizzard koilin lesions were found on histopathology. Eggs that were laid by chickens exposed to lead can contain lead leading to human health concern. The egg shell usually contains the highest amount. Several cases of lead poisoning in backyard chickens have been diagnosed by CAHFS in the past few years.

Other Avian

Chlamydia infection (psittacosis) was the cause of weight loss and death in two **parakeets** in a household of 30 birds. The affected birds were one year and five months old respectively and were housed in adjacent cages. Inflammation of the spleen and liver were found at necropsy and Chlamydia was confirmed by fluorescent antibody testing and Gimenez stain.