



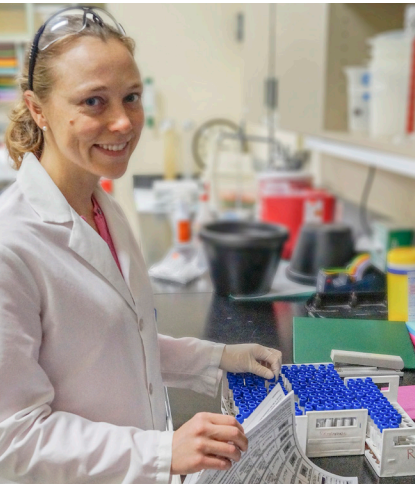
**UC DAVIS**

**VETERINARY MEDICINE**

California Animal Health and  
Food Safety Laboratory System

# CAHFS CONNECTION

LEADING DIAGNOSTICS NATIONALLY, PROTECTING CALIFORNIA LOCALLY • JUNE, 2021



## Inside this issue:

- **Rabbit hemorrhagic disease update**
- **Equine**
  - Septic tenosynovitis
- **Bovine**
  - Lead toxicosis
  - Chondrodysplasia and hypochondroplasia
- **Small Ruminant**
  - *Clostridium perfringens* type D enterotoxemia
- **Pig**
  - *Streptococcus suis* septicemia
- **Poultry/Other Avian**
  - Infectious Coryza (chicken)
  - Enteritis and colibacillosis (turkey)
  - *Streptococcus gallolyticus* (duck)

## Rabbit Hemorrhagic Disease Update

Rabbit hemorrhagic disease (RHD) caused by RHD virus 2 (RHDV2) continues to spread in Southern California. RHD is a serious and extremely contagious viral disease of rabbits and other lagomorphs. Morbidity and mortality rates are high in unvaccinated animals; in some groups of infected rabbits, most or all may die. The disease has been known to cause dramatic declines in some wild rabbit populations. After the initial diagnosis in a black-tailed jackrabbit made by CAHFS in May 2020, the disease is now considered endemic in Kern, Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. In addition to detection of RHD in wild cottontail rabbits and jackrabbits, RHDV2 has been confirmed in domestic rabbits on 50 premises, including a detection in a feral domestic rabbit. CDFA recommends that rabbit owners prevent contact with wild rabbits and jackrabbits, and if possible, keep domestic rabbits indoors in areas with known disease. Outdoor rabbits should be kept off the ground when possible. Owners are also asked to practice biosecurity to prevent accidentally spreading the RHDV2 virus to their rabbits. Avoid feeding hay grown or stored outdoors in areas where wild rabbits are affected is recommended. Apparently healthy rabbits can spread the disease, so rabbit owners should avoid direct or indirect contact between their animals and other rabbits.



photo by Don Preisler

There is no licensed RHDV2 vaccine approved for use in the United States; however, CDFA is allowing California licensed veterinarians to import European vaccine to protect against RHDV2. Veterinarians may send an email to [AHBFeedback@cdfa.ca.gov](mailto:AHBFeedback@cdfa.ca.gov) to receive an approval letter and instructions on how to apply for a USDA import permit. Please report dead domestic rabbits to CDFA at 909-947-4462 and/or submit to your local CAHFS laboratory for a diagnostic work-up. Consult your private veterinarian if your domestic rabbit is sick. You may report dead wild rabbits on the [California Department of Fish & Wildlife web site](#) or by calling 916-358-2790.

## Equine

**Septic tenosynovitis** associated with *Staphylococcus aureus* infection was diagnosed in a 3-year-old Thoroughbred gelding after suffering a deep laceration of the plantar aspect of the left hind pastern. A retrospective study on the outcome after laceration of the flexor tendons and suspensory ligaments in horses, found a high survival rate, but only 55% of affected horses were able to return to their previous activity level. *Staphylococcus* spp. are reportedly responsible for 50-69% of cases of equine septic arthritis/tenosynovitis.

blind. All deaths had occurred in one field only. Laminar cerebral cortical necrosis (polioencephalomalacia) was identified histologically. Liver lead levels were 26ppm.

## Bovine

**Lead toxicosis** was the cause of neurologic signs in a yearling Angus heifer from a group of 120 cattle that was on pasture for at least four months. Two others had died this year and three died last year with the same signs. The heifer had a slight head twitch, was depressed and possibly





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### Chondrodysplasia and hypochondroplasia

were diagnosed in two Holstein calves from a farm experiencing a high rate of deformed calves born to first calf heifers only (as many as three per week). On gross examination, a severely affected calf had prognathism, a short skull, hydrocephalus, and short long bones with prominent epiphyseal cartilage. Bovine viral diarrhea virus was ruled out. The serum manganese levels from the dams were low, but the level of this metal in liver of the calves was within normal range. Manganese deficiency during gestation has been associated with bone malformations in cattle. The type of skeletal malformation depends on the stage of gestation in which the deficiency occurs. In this case it was suspected that manganese deficiency was the cause of the lesions found.

### Small Ruminant

#### *Clostridium perfringens* type D enterotoxemia

was the cause of death in two, 2-day-old Nigerian dwarf goat kids. The kids were standing and nursing within an hour after birth but by 2 days of age, they became weak and anorexic and died. Necropsy revealed segmental mucosal hemorrhage in the cecum and colon with marked mesocolonic edema. One of the kids also had an acute jejunal intussusception. Histology revealed severe necrosuppurative colitis with numerous intralesional, gram-positive bacilli. ELISA for epsilon toxin on colon content was positive. *C. perfringens* type D enterotoxemia is uncommon in neonatal animals due to the low trypsin activity in the intestinal contents as a result of the trypsin-inhibitory action of colostrum. Trypsin is required to activate epsilon toxin.

### Pig

#### *Streptococcus suis* septicemia

was the cause of death in a 2-year-old Kunekune sow with a 2-day history of fever up to 105.9°F and red blood seen at the tip of the ears. Ear tip bleeding became profuse shortly before death. Another pig that was sick 2-3 weeks earlier developed necrotic ear tips. Gross and histopathology confirmed disseminated

intravascular coagulation (DIC) with thrombi noted in lung and kidney glomeruli. *S. suis* was isolated from lungs, spleen and liver and was considered the inciting cause of DIC, which lead to the ear tip hemorrhage and necrosis.

### Poultry and Other Avian

**Infectious Coryza** was diagnosed in 44-day-old broiler chickens presenting with severely swollen heads, increased mortality and decreased water consumption. Gross findings included caseous sinusitis, catarrhal tracheitis, and severe cellulitis of the face, wattles and neck. *Avibacterium paragallinarum*, the causative agent of infectious coryza, was isolated from the trachea and infraorbital sinus; the identity of this microorganism was confirmed by real-time PCR. The presentation of severe cellulitis of the head and neck, in addition to infraorbital sinusitis could be due to the susceptibility of broiler chickens to this pathogen, the virulence of the organism or the presence of co-infections such as infectious bursal disease.

**Enteritis and colibacillosis** was the cause of dehydration and increased mortality in 3- to 10-day-old turkey poults from three flocks with about 7,500 birds each. Turkey astrovirus 2 was identified in the intestine by PCR.

***Streptococcus gallolyticus*** was the cause of **septicemia** in 14-day-old Pekin ducks with clinical signs of ataxia, paralysis, torticollis and increased mortality. Necropsy and histopathology revealed severe meningoencephalomyelitis, conjunctivitis, optic neuritis, hepatitis, splenitis and pericarditis. *S. gallolyticus* was isolated from most of these organs. Most of the birds also had severe lymphoid depletion in the bursa of Fabricius.

