Animal Health Branch Chief’s Message

Past, Present and Future

By Kent Fowler, DVM

The origin of the California Department of Food and Agriculture (CDFA) Animal Health Branch (AHB) dates back to the creation of the Office of the State Veterinarian in 1899 “to protect the health of all domestic animals of the state from all contagious and infectious diseases...” Though AHB’s functions have increasingly diversified in response to changes in agriculture and public health events, its mission remains the same. In its infancy, the Office concentrated on inspection of shipments of animals, control and eradication of diseases, and assisted in the creation of livestock organizations. The Office’s time was occupied with control and eradication of tuberculosis, sheep scabies and Texas cattle fever. Other diseases of importance were anthrax, contagious abortion in cows, hog cholera and glanders. By 1914, Texas cattle fever was eradicated.

The Office saw its first major expansion in 1917 with the passing of the Meat Inspection Act, and in 1918 when a new tuberculin testing provision of the State dairy law was enacted. Additionally, in 1918, a diagnostic laboratory was established in association with the Office. In 1919, when the California Department of Agriculture was created by an act of the legislature, several state agencies, including the Office of the State Veterinarian, were organized under the Division of Animal Industry with its Division Chief becoming the State Veterinarian.

Foot-and-mouth disease, a devastating animal disease, was diagnosed in livestock in the San Francisco area in 1924. The disease spread to several counties and to wild deer in the Stanislaus National Forest, and before it was eradicated the following year, over 110,000 animals were lost at a cost of $4,400,000. In 1929, a new outbreak occurred in the Los Angeles area. Evidence showed the disease was most likely introduced by a ship originating in South America. Fortunately, losses from this outbreak were considerably less because the disease was recognized early. Animal health officials, under the direction of the State Veterinarian, responded quickly and thus limited the loss to only 3,600 animals at a cost of $110,000.

Foot-and-mouth disease, a devastating animal disease, was diagnosed in livestock in the San Francisco area in 1924. The disease spread to several counties and to wild deer in the Stanislaus National Forest, and before it was eradicated the following year, over 110,000 animals were lost at a cost of $4,400,000. In 1929, a new outbreak occurred in the Los Angeles area. Evidence showed the disease was most likely introduced by a ship originating in South America. Fortunately, losses from this outbreak were considerably less because the disease was recognized early. Animal health officials, under the direction of the State Veterinarian, responded quickly and thus limited the loss to only 3,600 animals at a cost of $110,000.

Fortunately, we have not seen another incursion of foot and mouth disease into the U.S. in the following 88 years. However, the AHB has continued to stay very busy with numerous other livestock

(Continued on page 2)
disease control and eradication efforts including hog cholera (classical swine fever), brucellosis, tuberculosis, Venezuelan equine encephalomyelitis, exotic Newcastle disease, vesicular exanthema, puerorabies, bovine spongiform encephalopathy, contagious equine metritis, equine piroplasmosis, equine infectious anemia, West Nile virus, vesicular stomatitis, avian influenza (both high pathogenic and low pathogenic), and equine herpes myeloencephalopathy, among the many livestock regulatory diseases. On April 1, 2017, changes to animal disease traceability regulations, including requirements for movement of cattle, identification, documentation, and specific livestock disease, went into effect after months of hard work by staff. California’s Antibiotic Use and Stewardship Program staff and AHB staff are leading the nation in efforts to reduce the pressure towards antibiotic resistance by ensuring responsible use of antibiotics while maintaining our ability to provide timely medical care to livestock and a quality product to consumers.

As the AHB looks into the future, our highest priority remains the continued and successful exclusion of foreign animal diseases from California. The AHB has begun a major initiative, the Secure Food Supply, to implement emergency disease preparedness efforts that focus on strategies to keep businesses operating in the face of a State quarantine that includes orders to stop the movement of animals and their products. Staff have also been working diligently to bolster standard operating procedures and refine Incident Management Teams to better manage an emergency disease incident. Our Emergency Program staff will continue to plan and conduct preparedness and response exercises to best prepare the AHB for the next disease incursion.

Outstanding professional and support staff have been the backbone of AHB disease surveillance and response for years. Our invaluable partnership with the California Animal Health and Food Safety Laboratory System, the United States Department of Agriculture / Animal and Plant Health Inspection Services / Veterinary Services, industry organizations, academia, private practitioners and other state and federal agencies remain the solid foundation for essential collaborative working relationships. These relationships have been notably influential in protecting California’s multi-billion dollar livestock industry from epidemic and foreign animal disease.

The continued dedication and commitment of personnel to the AHB mission is appreciated and will ensure that emerging issues related to animal health, animal care, emergency management, food and agriculture security, production food safety and public health and safety are appropriately met. I continue to be proud to serve with so many competent colleagues and staff. The AHB is committed to continue protecting California as one of the most successful and productive agricultural regions in the world.
Every year, the California Department of Food and Agriculture (CDFA) Animal Health Branch reviews and updates a reportable disease list for animals. The list closely follows the United States Department of Agriculture (USDA) National List of Reportable Animal Diseases, as well as the World Organisation of Animal Health’s list of notifiable animal diseases, though State-specific concerns are also considered during review and update. Maintenance of a list and accurate, timely reporting are important for disease control, surveillance, and trade status. The list includes specific conditions with timeframes for reporting depending on level of concern and severity of animal disease, but it is important to remember to contact CDFA or USDA animal health officials immediately if you see vesicles, unusual or unexplained illness, central nervous system signs, unexplained high morbidity or mortality, or any other signs suspicious of a foreign animal disease.

Your role in disease surveillance is critical in protecting California’s agriculture. The 2018 CDFA List of Reportable Conditions can be accessed on our website:

Poster: https://www.cdfa.ca.gov/AHFSS/Animal_Health/pdfs/CA_Reportable_Disease_List_Poster.pdf
Two-pager: https://www.cdfa.ca.gov/AHFSS/Animal_Health/pdfs/CA_Reportable_Disease_List_2pg.pdf
LIST OF REPORTABLE CONDITIONS FOR ANIMALS AND ANIMAL PRODUCTS*

*Pursuant to Section 9101 of the California Food and Agricultural Code, Title 3 California Code of Regulations § 797 and Title 9 Code of Federal Regulations Section 161.4(f)

WHO MUST REPORT: Any licensed veterinarian, any person operating a diagnostic laboratory, or any person who has been informed, recognizes or should recognize by virtue of education, experience, or occupation, that any animal or animal product is or may be affected by, or has been exposed to, or may be transmitting or carrying any of the following conditions, must report that information.

WHAT TO REPORT: Immediately report any animal disease not known to exist in the United States, any event with increased mortality and/or morbidity of unknown cause or source and any toxicology condition likely to contaminate animals or animal products (meat, milk or eggs).

CALL IF YOU SEE: Vesicles, unusual or unexplained illness, CNS signs, mucosal diseases, hemorrhagic septicemias, unusual larve in wounds, uncommon ticks, high morbidity or mortality.

Report any emergency, regulatory, or monitored condition within the provided time frame. Some diseases are listed under the major species of concern; if you see compatible signs for such conditions in another species, please report!

MULTIPLE SPECIES
- Anthrax (Bacillus anthracis)
- Crimean Congo hemorrhagic fever
- Foot-and-mouth disease
- Heartwater (Ehrlichia ruminantium)
- Japanese encephalitis
- Melioidosis (Burkholderia pseudomallei)
- Rabies of livestock
- Rift Valley fever
- Screwworm myiasis (Cochliomyia hominivorax or Chrysomya bezziana)
- Surra (Trypanosoma evansi)
- Vesicular stomatitis
- Livestock exposed to toxic substances
- Unexplained high mortality or diseased animals

BOVINE
- African trypanosomiasis (Tsetse fly diseases)
- Bovine babesiosis (Cattle tick fever)
- Bovine spongiform encephalopathy
- Contagious bovine pleuropneumonia (Mycoplasma mycoides mycoides small colony)
- Foot-and-mouth disease
- Hemorrhagic septicemia (Pasteurella multocida B/Asian or E/African)
- Lumpy skin disease
- Malignant catarrhal fever (wildebeest-associated form)
- Rinderpest
- Schmallenberg virus/ Akabane
- Theileriosis (Theileria parva parva or T. annulata)

CAPRINE/OVINE
- Contagious agalactia (Mycoplasma agalactiae)
- Contagious caprine pleuropneumonia (Mycoplasma capripneumoniae)
- Foot-and-mouth disease
- Nairobi sheep disease
- Peste des petits ruminants (Goat plague)
- Schmallenberg virus/ Akabane
- Sheep pox and goat pox

PORCINE
- African swine fever
- Classical swine fever
- Foot-and-mouth disease
- Nipah virus
- Swine vesicular disease
- Vesicular exanthema of swine virus (VESV)

AVIAN SPECIES
- Avian influenza (HPAI and H5/H7 LPAI)
- Exotic Newcastle disease (velogenic viscerotropic Newcastle disease)
- Turkey rhinotracheitis (Avian metapneumovirus)

EQUINE
- African horse sickness
- Dorine (Trypanosoma equiperdum)
- Glanders (Farcy, Burkholderia mallei)
- Hendra virus (Equine morbillivirus)
- Venezuelan equine encephalomyelitis
- Vesicular stomatitis

CERVIDS/LAGOMORPHS/CAMELIDS
- Viral hemorrhagic disease in rabbits (Calicivirus)

1 Diseases in green, seen in any species, are also reportable to California Department of Public Health (CDPH); CDFA will report these designated zoonotic diseases to CDPH.

For additional information, contact CDFA (email: cavet@cdfa.ca.gov or visit our website at www.cdfa.ca.gov/ah)
**REGULATED CONDITIONS** – Report within Two Days of Discovery

**MULTIPLE SPECIES**
- Brucellosis (*B. melitensis, B. abortus, B. suis)*
- Pseudorabies (Aujeszky’s disease)
- Tuberculosis (*Mycobacterium bovis*)
- Tularemia

**BOVINE**
- Bovine brucellosis (*Brucella abortus*)
- Bovine tuberculosis (*Mycobacterium bovis*)
- Trichomoniasis (*Trichomonas foetus*)

**CAPRINE/OVINE**
- Caprine and ovine brucellosis (excluding *Brucella ovis*)
- Scrapie
- Sheep scabies (Body mange; *Psoroptes ovis*)

**PORCINE**
- Porcine brucellosis (*Brucella suis*)
- Pseudorabies (Aujeszky’s disease)
- Swine enteric coronavirus diseases (excluding transmissible gastroenteritis)

**AVIAN SPECIES**
- Fowl typhoid (*Salmonella gallinarum*)
- Ornithosis (Psittacosis, avian chlamydiosis; *Chlamydophila psittaci*)
- Pulmonary disease (*Salmonella pullorum*)

**EQUINE**
- Contagious equine metritis (*Taylorella equigenitalis*)
- Eastern equine encephalomyelitis
- Epizootic lymphangitis
- Equine herpesvirus myeloencephalopathy (EHM)
- Equine infectious anemia
- Equine piroplasmosis (Babesia caballi or *Theileria equi*)
- Western equine encephalomyelitis
- West Nile virus

**CERVIDS/LAGOMORPHS/CAMELIDS**
- Chronic wasting disease in cervids

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**MONITORED CONDITIONS** – Report within 30 Days of Discovery

**MULTIPLE SPECIES**
- Bluettongue
- Echinococcosis/hydatidosis (*Echinococcus* species)
- Epizootic hemorrhagic disease
- Johne’s disease (Paratuberculosis; *Mycobacterium avium* paratuberculosis)
- Leishmaniosis
- Q Fever (*Coxiella burnetii*)

**BOVINE**
- Anaplasmosis (*Anaplasma marginale* or *A. centrale*)
- Bovine campylobacteriosis (*Campylobacter fetus venerealis*)
- Bovine viral diarrhea
- Enzootic bovine leukemia (Bovine leukemia virus)
- Infectious bovine rhinotracheitis (Bovine herpesvirus-1)
- Malignant catarrhal fever (sheep-associated form)

**CAPRINE/OVINE**
- Ovine campylobacteriosis (*Campylobacter fetus*)
- Caprine arthritis/encephalitis
- Enzootic abortion of ewes (*Ovine chlamydiosis; Chlamydophila abortus*)
- Maedi-visna (*Ovine progressive pneumonia*)
- *Salmonella abortusovis*

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**PORCINE**
- Porcine cysticercosis (*Taenia solium*)
- Porcine reproductive and respiratory syndrome
- Swine influenza
- Transmissible gastroenteritis (Coronavirus)
- Trichinellosis (*Trichinella spiralis*)

**AVIAN SPECIES**
- Avian infectious bronchitis
- Avian infectious laryngotracheitis
- Duck viral hepatitis
- Goose parvovirus
- Infectious bursal disease (Gumboro disease)
- Influenza A viruses
- Mycoplasmosis (*Mycoplasma synoviae* and *Mycoplasma gallisepticum*)

**EQUINE**
- Equine herpesvirus-1 and 4 (excluding EHM)
- Equine influenza
- Equine viral arteritis

**CERVIDS/LAGOMORPHS/CAMELIDS**
- Camelpox in camels
- Myxomatosis in rabbits

**FISH, AMPHIBIAN, CRUSTACEAN, BEE, AND MOLLUSK**

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1 Diseases in green, seen in any species, are also reportable to California Department of Public Health (CDPH); CDFA will report these designated zoonotic diseases to CDPH.
California continues to experience a Senecavirus-A (SVA) outbreak among swine shipped to meat processing plants. The California Department of Food and Agriculture (CDFA) Animal Health Branch (AHB) and the United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) Veterinary Services (VS) personnel have investigated one hundred ninety-four (194) cases with symptoms similar to foreign animal diseases (FADs) since October 2017. This is an increase of more than ten (10) times the number of FAD investigations initiated during the same time period in 2016 (thirteen [13] investigations). While investigations in swine were predominant, one hundred eighty-five (185) out of one hundred ninety-four (194) investigations, there were two (2) interesting investigations conducted on the bovine population to rule out bovine spongiform encephalopathy (BSE) and Schmallenberg virus (Table 1).

The CDFA AHB’s mission is to safeguard the California livestock industry against the intentional/non-intentional introduction of any FADs. Animals presenting similar signs to FADs must be treated as such until FADs can be ruled out. Private practitioners, diagnostic laboratories, animal hospitals and producers must report signs of the emergency conditions outlined in the California "List of Reportable Conditions for Animals and Animal Products" within twenty-four (24) hours by calling the CDFA AHB or the USDA APHIS VS District Office in their area.

Table 1. FAD Investigations During October 1 to December 31, 2017 by CDFA AHB District.

<table>
<thead>
<tr>
<th>AHB Districts</th>
<th>Disease</th>
<th>Species</th>
<th>Sample Type</th>
<th>Number of Investigations</th>
<th>Destination Lab</th>
<th>NVSL Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontario</td>
<td>New World Screwworm</td>
<td>Jack Rabbit</td>
<td>Maggot/ Larvae</td>
<td>1</td>
<td>NVSL</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Vesicular Stomatitis Virus (VSV)</td>
<td>Equine</td>
<td>Swab, Blood</td>
<td>1</td>
<td>NVSL, CAHFS-D</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Foot-and-Mouth Disease (FMD), Senecavirus-A (SVA), Swine Vesicular Disease (SVD)</td>
<td>Porcine</td>
<td>Swab</td>
<td>1</td>
<td>NVSL, CAHFS-D</td>
<td>Positive for SVA</td>
</tr>
<tr>
<td>Modesto</td>
<td>FMD, SVA, SVD</td>
<td>Porcine</td>
<td>Swab</td>
<td>163</td>
<td>NVSL, CAHFS-D</td>
<td>All positive for SVA</td>
</tr>
<tr>
<td>Redding</td>
<td>Influenza A Virus</td>
<td>Avian</td>
<td>Swab</td>
<td>2</td>
<td>NVSL, CAHFS-D</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>FMD, VSV</td>
<td>Bovine</td>
<td>Swab</td>
<td>1</td>
<td>NVSL, CAHFS-D</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Schmallenberg Virus</td>
<td>Bovine</td>
<td>Swab</td>
<td>1</td>
<td>NVSL, CAHFS-D</td>
<td>Negative</td>
</tr>
<tr>
<td>Tulare</td>
<td>VSV</td>
<td>Equine</td>
<td>Swab, Blood</td>
<td>1</td>
<td>NVSL, CAHFS-D</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>FMD, SVA, SVD</td>
<td>Porcine</td>
<td>Swab</td>
<td>20</td>
<td>NVSL, CAHFS-D</td>
<td>All positive for SVA</td>
</tr>
<tr>
<td></td>
<td>Classical Swine Fever</td>
<td>Porcine</td>
<td>Swab</td>
<td>1</td>
<td>NVSL, CAHFS-D</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Bovine Spongiform Encephalopathy</td>
<td>Bovine</td>
<td>Tissue</td>
<td>1</td>
<td>NVSL, CAHFS-T</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>FMD, VSV</td>
<td>Ovine</td>
<td>Tissue</td>
<td>1</td>
<td>NVSL, CAHFS-D</td>
<td>Negative</td>
</tr>
</tbody>
</table>

*NVSL: National Veterinary Services Laboratory
CAHFS: California Animal Health and Food Safety Laboratory
D: Davis
T: Tulare
Requirements of Pre-existing Laws as They Relate to the New Antimicrobial Use and Stewardship Law  
By Roselle Busch, DVM

Implementation of the Antimicrobial Use and Stewardship Law began on January 1, 2018. Currently, a prescription or Veterinary Feed Directive from a California licensed veterinarian (within a valid veterinarian-client-patient relationship [VCPR]) is required for the sale and use of all medically important antimicrobial drugs (MIADs) for livestock in California (4.5 FAC § 14400-14408).

As a veterinarian, you play an essential role in helping California’s fight against antimicrobial resistance. Therefore, it is necessary for you to know what is required by existing laws regarding a valid VCPR, prescriptions and what options producers may have for purchasing the appropriate drug you have deemed necessary to treat, control and, in some cases, prevent disease in a timely manner. The list of drugs that changed from over-the-counter to prescription status with the new law can be found here.

As a veterinarian, you may dispense MIADs to your patients within a valid VCPR, however you may choose not to maintain large quantities of antibiotics in stock. Producers have options for purchasing a prescription drug intended for use in livestock. This resource helps explain the various facilities that can provide prescription drugs to food-animals. Some of these facilities have store fronts while many ship medications directly to your client – livestock producers – with whom you have a valid VCPR. The aforementioned resource contains searchable databases provided by the California Board of Pharmacy can help you determine what options are available in your area.

Please feel free to contact the Antimicrobial Stewardship and Use Program with any questions or concerns by email at cdfa_aus@CDFA.ca.gov or by phone at (916) 576-0300.

No Cases of Classical Scrapie Diagnosed in the United States Since April 2016  
By Hector Webster, DVM, MS

No cases of classical scrapie have been diagnosed in the United States since April 2016, an important landmark in the eradication of this disease from the nation. However, finding the last scrapie case requires veterinarians and producers to be vigilant and report mature sheep or goats that have neurologic signs to the California Department of Food and Agriculture (CDFA) Animal Health Branch (AHB), and submit samples (heads) from animals that die of unknown causes for diagnostics. Scrapie is typically diagnosed by finding abnormal prion protein accumulation in the brain and/or lymphoid tissue of infected sheep or goats. Diagnostic tests for scrapie require brain or lymphoid tissue, and samples can be submitted to your local California Animal Health and Food Safety Laboratory. Procedures for collecting samples are available at the United States Department of Agriculture Animal and Plant Health Inspection Service Veterinary Services (USDA APHIS VS) website.

The goals of the scrapie program are to eradicate classical scrapie from the U.S. and meet the World Organization for Animal Health criteria for disease freedom. Your submission of samples from sheep and/or goats over eighteen (18) months of age found dead or euthanized on your farm is extremely important. Without your help, we will not be able to declare the U.S. free of scrapie.

To learn more about scrapie and the National Scrapie Eradication Program, visit the CDFA, Animal Health Branch Website, USDA APHIS VS Scrapie Website and www.eradicatescrapie.org.
Recent Bovine Tuberculosis Investigation
By Anita Edmondson, BVM&S, MPVM, MRCVS

The herd of origin of a tuberculosis (TB)-infected dairy cow slaughtered in California in June 2017 was TB-test negative in October 2017. The herd remains quarantined and will be retested in January 2018. If this test is also negative, the herd will be released from quarantine and require an additional herd TB-test in twelve (12) months. The TB strain isolated from this cow is not closely related to any previous affected U.S. herd, and the investigation into the source of infection is ongoing.

All U.S. states are classified as “Bovine TB Free” by the the United States Department of Agriculture (USDA) except for parts of Michigan classified as “Modified Accredited”. In fiscal year 2016-17, ten (10) cattle herds (three [3] dairy and seven [7] beef) were detected with TB: four (4) in Michigan, two (2) in New Mexico, three (3) in South Dakota and one (1) in Indiana. These affected herds and one (1) large Texas dairy affected in 2015 remain on a test and removal schedule for TB.

The TB-gamma interferon test is still being evaluated by the USDA because of problems with test sensitivity and specificity. Performance testing is ongoing; we hope the test will again be available for use sometime in 2018.

California’s Bovine Brucellosis Program
By Anita Edmondson, BVM&S, MPVM, MRCVS

California has been classified as “Bovine Brucellosis Free” since 1997, with its last affected dairy herd in 1996 and last affected beef herd in 1992. The long eradication program, consisting of vaccination and risk management, has successfully eradicated disease from domestic livestock; all states are now officially “free” of bovine brucellosis. However, infection remains in wild bison and elk in the Greater Yellowstone Area (GYA).

To manage the risks of brucellosis transmission from wildlife, a “Designated Surveillance Area” (DSA) was established in 2010, incorporating areas of Idaho, Montana, and Wyoming. The boundaries of the DSA have expanded beyond the original area to adjust to detections of brucellosis infection. The primary host and major transmitter of \textit{B. abortus} to cattle in the GYA is elk; the seroprevalence of brucellosis in elk populations in the DSA is 10-40 percent (National Academies of Sciences, Engineering, and Medicine, 2017). Approximately twenty-three (23) cattle herds and five (5) privately-owned bison herds in this area have been infected from wildlife since 2002.

To reduce the risks of brucellosis entering and spreading, California maintains a brucellosis vaccination program and requires sexually intact cattle moving from the DSA to have a negative blood test within thirty (30) days before entering.

\textbf{Approximately 900,000 heifer calves (~800,000 dairy and 100,000 beef) are vaccinated for brucellosis in California each year.}

To rapidly detect brucellosis if it should enter, California maintains a brucellosis surveillance program in cattle. Surveillance and testing of California elk populations, performed by the California Department of Fish and Wildlife, is also important to help determine the risk of brucellosis transmission from wildlife to cattle. Recent surveillance has not detected any brucellosis positive animals.
Table 2. Brucellosis Surveillance of Cattle in California

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Blood Samples Tested from Slaughter Cattle</th>
<th>Number of Adult Cattle Slaughtered</th>
<th>Number of Blood Samples Tested from Live Cattle</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-15</td>
<td>125,811</td>
<td>793,411</td>
<td>8,709</td>
</tr>
<tr>
<td>2015-16</td>
<td>126,349</td>
<td>780,458</td>
<td>7,244</td>
</tr>
<tr>
<td>2016-17</td>
<td>127,407</td>
<td>855,223</td>
<td>8,246</td>
</tr>
</tbody>
</table>

Table 3. Brucellosis Surveillance of Elk in California Since 2000¹

<table>
<thead>
<tr>
<th>Year</th>
<th>Rocky Mountain Elk</th>
<th>Roosevelt Elk</th>
<th>Tule Elk</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>“Total” Population²</td>
<td>Sampled Per Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>3</td>
<td>36</td>
<td>44</td>
<td>83</td>
</tr>
<tr>
<td>2001</td>
<td>6</td>
<td>3</td>
<td>44</td>
<td>53</td>
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<tr>
<td>2002</td>
<td>7</td>
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<td>24</td>
<td>32</td>
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<td>2004</td>
<td>0</td>
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<td>2005</td>
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<td>59</td>
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<td>2007</td>
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<td>2016</td>
<td>13</td>
<td>0</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>2017</td>
<td>16</td>
<td>18</td>
<td>47</td>
<td>81</td>
</tr>
<tr>
<td>Grand Total</td>
<td>49</td>
<td>58</td>
<td>444</td>
<td>551</td>
</tr>
</tbody>
</table>

¹ Elk surveillance data from the California Department of Fish and Wildlife
² Based on estimates of total elk populations currently supported in California
Trichomonosis Approved Veterinarians

If you wish to continue sampling bulls for trichomonosis in California, you must renew your agreement with the Animal Health Branch. Renewals are sent every two (2) years, and were due to the California Department of Food and Agriculture (CDFA) by December 31, 2017. As a Trichomonosis Approved Veterinarian, you agree to abide by the requirements of the California Code of Regulations, Title 3, Division 2, Chapter 2, Article 12, §820-820.8. If you have questions about your renewal, please contact Beth Francia at Elizabeth.Francia@cdfa.ca.gov.

Trichomonosis Approved Laboratories

Approval from the Animal Health Branch is required to test, read or diagnose samples for trichomonosis. If you have a Trichomonosis Approved Laboratory, you have agreed to employ a person trained by the California Animal Health and Food Safety Laboratory to test, read and diagnose samples for trichomonosis collected by a CDFA Trichomonosis Approved Veterinarian. Trichomonosis Approved Laboratory status is renewed every two (2) years. Your approved laboratory status expires when you no longer employ an approved trained person at your clinic. If you have questions about laboratory renewals, please contact Beth Francia at Elizabeth.Francia@cdfa.ca.gov.

Cattle Health Advisory Task Force Meeting

The Cattle Health Advisory Task Force will meet on January 10, 2018 from 10:00 a.m.-3:00 p.m. in Room 101 at 2800 Gateway Oaks Drive, Sacramento, California. This group advises the Department of Food and Agriculture on the control and eradication of cattle diseases in California. The meeting is open to the public, and the agenda is posted at https://www.cdfa.ca.gov/ahfss/ahfss_meetings.html.
Equine West Nile Virus Cases in California

For 2017, a total of twenty-one (21) horses have been confirmed positive for West Nile Virus (WNV). The positive horses were located in Contra Costa, Fresno, Glenn (2), Kern (2), Lassen (3), Los Angeles, Plumas, Riverside (4), Sacramento, San Diego, San Joaquin (2), Tehama & Tuolumne counties. Fifteen (15) horses were unvaccinated and six (6) horses had unknown vaccination status. Eight (8) horses died or were euthanized and thirteen (13) horses are recovering.

The California Department of Food and Agriculture (CDFA) continually monitors and investigates equine neurologic cases for the presence of WNV in California. CDFA urges horse owners to consult their veterinarian concerning a WNV vaccination program to ensure maximum protection of their horses.

For more information visit: https://www.cdfa.ca.gov/ahfss/Animal_Health/WNV_INFO.html.

Equine Infectious Anemia Case in California

In November 2017, one (1) horse in Riverside County with links to Quarter Horse racing tested positive for equine infectious anemia (EIA). Thirty (30) exposed horses at the premise were tested and all were negative for both EIA and Equine Piroplasmosis. The infected horse was euthanized, and Animal Health Branch personnel are investigating where the horse was infected and if there are any other exposed horses.

Equine Medication Monitoring Program Regulation Change Proposal

The Equine Medication Monitoring Program (EMMP) is proposing to amend the existing “violations matrix” in §1280.11, Title 3, California Code of Regulations. The updated penalties should better protect horse welfare and safety at equine events and sales in California, and align EMMP penalties with those of national equestrian oversight organizations. Public comments on this proposal began December 1, 2017, and ends at 5:00 p.m. on January 15, 2018. Additional materials can be found at: http://www.cdfa.ca.gov/ahfss/regulations.html. Inquiries and written comments can be sent to Dr. Katie Flynn by phone at (916) 900-5039 or via e-mail at Katherine.Flynn@cdfa.ca.gov.

Equine Disease Communication Center

Are you aware of recent outbreaks of EIA in Kansas, Montana and Alberta, Canada? Or equine herpesvirus-1 myeloencephalopathy incidents in Washington, Pennsylvania, Oregon and New Jersey? The latest on these and other equine disease outbreaks can be found at the Equine Disease Communication Center (EDCC) website at http://www.equinediseasecc.org/. In November, the National Equine Health Plan was posted to this website; we encourage all stakeholders to review this document.

The EDCC works to protect horses and the horse industry from the consequences of inaccurately reported diseases incidents in North America. The goal of the EDCC is to alert members of the horse industry about disease outbreaks to help them mitigate and prevent the spread of disease. Ultimately, frequent and accurate information about diseases outbreaks improves horse welfare and helps to prevent the negative economic impacts that can result from reduced horse use due to a fear of spreading infection.
United States Equestrian Federation Isolation Rule

As of December 1, 2017, all United States Equestrian Federation (USEF) sanctioned competitions must have an isolation protocol for horses. Competition management is responsible for ensuring that all officials and staff are aware of the accident preparedness and isolation plan for horses. The plan shall be given to the Steward or Technical Delegate prior to the start of the competition, and they must submit a copy of the plan to the Federation along with his/her Steward or Technical Delegate report. We encourage practitioners to assist event management in developing this plan; your expertise is essential. For more information, visit the USEF rules and regulations website at: https://www.usef.org/compete/resources-forms/rules-regulations/rulebook

CDFA Encourages the Use of Microchips in Equines

As highlighted by the recent fires in California, equine microchips can be an essential tool for verifying the identity of horses in a disaster. An equine microchip is a radio frequency identification device (RFID) with a unique 15-digit number for the horse. The benefits of equine microchips include:

• A low-cost, permanent identification system.
• A method which cannot be altered.
• A low stress identification method.
• An asset for equine traceability in a disease outbreak.

Some organizations already require microchips. The Jockey Club (the primary breed registry for Thoroughbreds in North America) requires all foals born in 2017 or later to be microchipped before they can be registered with the Jockey Club. Beginning December 1, 2017, the United States Hunter Jumper Association (USHJA) requires all horses competing in USEF-licensed and/or USHJA-sanctioned competitions to be microchipped to receive points.

Implanting the microchip is not the only step to ensure traceability. The microchip, with correlating horse and owner information, must be recorded in a searchable database such as veterinary records, a breed registry or the microchip manufacturer system. Recording this information in a database ensures the identified horse can be reunited with its owner.

To protect the health and wellbeing of the equine industry, CDFA encourages the use of equine microchips for identification of horses.

Do you write any small animal CVIs?

Take note – Some states no longer accept the APHIS-VS Form 7001 for small animal CVIs. Remember to check with the destination state to determine what form is acceptable.
2017 Update on Wild Bird Surveillance for Avian Influenza
By Sarah Mize, DVM and Felicia Pohl, Research Scientist II

The State’s wild bird surveillance program, conducted by the United States Department of Agriculture Wildlife Services, in coordination with the California Department of Fish and Wildlife, continues to monitor for avian influenza (AI)—specifically highly pathogenic avian influenza (HPAI) and H5/H7 serotypes.

From July 1, 2017 to December 21, 2017, biologists have collected 22,970 samples nationally from live birds, hunter harvested birds and mortality surveillance; 1,283 of these samples were collected in California.

In March 2017, two (2) outbreaks of HPAI (H7N9) in domestic birds were reported in Lincoln County, Tennessee. In addition, five (5) states (Georgia, Wisconsin, Tennessee, Alabama and Kentucky) reported cases of low pathogenic avian influenza (LPAI) (H7N9) in domestic birds during 2017. One outbreak of LPAI (H5N2) was reported in Wisconsin in 2017. All cases are thought to be due to disease introduced by wild birds. (Source: https://www.dshs.texas.gov/idcu/disease/influenza/)

Waterfowl hunter harvest sampling will continue through the winter 2017/18 hunting season. The Animal Health Branch monitors this wildlife surveillance because HPAI or LPAI in wild birds increases the disease risk to domestic poultry in surrounding areas. If HPAI is detected, enhanced targeted biosecurity outreach to commercial and backyard poultry producers would begin. LPAIs have been detected this year, as they are every year in hunter harvested birds in California. Commercial and backyard producers should always be aware of the disease risks from wild bird populations. Federal and State agencies continue to collect wild bird samples to define the extent of AI infection in specific avian species groups. (Source: https://www.aphis.usda.gov/animal_health/downloads/animal_diseases/ai/2017-hpai-surveillance-plan.pdf)
Turkey Vultures Poisoned by Euthanasia Drugs
By Ben Gonzales, DVM, MPVM & Deanna Clifford, DVM, MPVM, PhD
with the California Department of Fish and Wildlife Wildlife Investigations Laboratory

The California Department of Fish and Wildlife (CDFW) requests assistance from veterinarians in preventing secondary exposure of scavenging wildlife to the veterinary euthanasia drug sodium pentobarbital. Recently, several turkey vultures were poisoned by sodium pentobarbital in the Simi Valley area of Ventura County. The source of the sodium pentobarbital remains unknown, but ingestion of tissue from chemically-euthanized animals is suspected. Turkey vultures are protected by the federal Migratory Bird Treaty Act and California Fish and Game Code. Chemically-euthanized carcasses also pose a danger to other scavenging wildlife, including federally endangered California condors as well as bald and golden eagles, crows, bears, cougars and coyotes.

Who is responsible for the safe disposal of euthanized animals? The animal's owner is the responsible party. However, veterinarians may also be held liable if the owner does not dispose of the body in a proper or timely manner. Veterinarians also have a professional responsibility to educate clients who may not be aware of hazards associated with improper carcass disposal. Some cases appear to be caused by poor communication between the veterinarian and client, so clear and specific communication regarding this issue is essential!

How should an animal that has been euthanized with sodium pentobarbital be disposed of? Ideally, the means of disposal should be identified before euthanasia to prevent prolonged storage and possible scavenging. Recommendations for carcass disposal include incineration and deep burial (see links below for additional information). Carcasses should be buried at least three (3) to four (4) feet deep (or deeper if required by local regulations), and care should be taken to observe required distances from surface and groundwater. Depending on the local soil type or presence of larger potential scavengers, such as bears, deeper burial may be necessary to prevent scavenging of euthanized animals. Some landfills accept carcasses, but please ensure that the landfill is burying the carcasses immediately upon delivery. Rendering of euthanized carcasses is not acceptable because rendering does not destroy drug residues and rendered material may be used for animal feed.

For information on proper disposal of livestock, please contact the California Department of Food and Agriculture Meat, Poultry and Egg Safety Branch at 916-900-5004.

Additional information regarding this topic can be found in the following documents:
The American Veterinary Medical Association Guidelines for Euthanasia of Animals (go to page 16)
JAVMA News-2002-Euthanatized animals can poison wildlife: Veterinarians receive fines
United States Fish and Wildlife Service Fact Sheet: Secondary Pentobarbital Poisoning of Wildlife
Full Letter from California Department of Fish and Wildlife:
https://www.cdfa.ca.gov/ahfss/pdfs/ca_vet-pentobarbital_ventura.pdf
When animals and livestock are involved in a disaster there are two (2) “types”—those in which the animals are the disaster, such as in a disease outbreak, and those in which the animals are affected by the disaster, such as in a wildfire or other natural disaster. The California Department of Food and Agriculture (CDFA) is involved in the response to both types of disasters, but plays a different role depending on the type. During a disease outbreak, CDFA is the primary lead agency and is heavily involved in the statewide coordination efforts as well as the boots-on-the-ground response. In contrast, during a natural disaster, CDFA works through the State Operations Center (SOC) and assists with coordination of statewide resources.

The end of 2017 saw much of California affected and impacted by wildfires. The October fires in Northern California burned more than 245,000 acres, destroyed 8,900 structures, and were responsible for forty-three (43) human deaths. Recovery efforts were underway when a second round of wildfires broke out in Southern California in early December. As of January 3, 2018, the Thomas Fire in Southern California, which is the largest wildfire in California history, has destroyed 281,893 acres and 1,063 structures and is 92 percent contained.

During a statewide natural disaster response such as was required by these incidents, the SOC was activated to coordinate resources to support the communities affected by the fires. State, local and federal agencies worked together to support the response and recovery efforts. CDFA had agency representatives deployed to the SOC for both of the 2017 wildfire incidents. CDFA’s role during these incidents was to coordinate resources needed to assist with livestock and to provide technical guidance on carcass disposal. Examples of CDFA efforts included coordination with multiple county Agricultural Commissioners to address livestock issues; law enforcement to allow feed, milk and water trucks to cross road blocks to reach dairy, beef and poultry facilities; the fairgrounds that were serving as evacuation centers for people and livestock; the United States Department of Agriculture counterparts; and partners at the California Veterinary Medical Association for deployment of the California Veterinary Medical Reserve Corp.

The CDFA Animal Health Branch (AHB) has an active Emergency Management program. While much of the focus of the program is on the prevention, detection, immediate containment and eradication of emergency animal diseases, the program also prepares staff to serve as agency representatives. With ongoing training and refinement of policies and procedures, the AHB continues to support our agricultural and livestock communities in times of disaster.
As part of the California Blended Incident Management Team (IMT) ongoing foreign animal disease response/ preparedness efforts, the Animal Health Food Safety Services (AHFSS) Division, together with the United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) Veterinary Services/District 6 (VS/D6), participated in the state of Kansas’ annual foreign animal disease (FAD) preparedness exercise held on December 18-20, 2017. The purpose of this exercise was to allow states to test current FAD plans (state, local and industry) on how to respond to a highly contagious animal disease event. Several states took part in this event, testing various aspects of their plans, policies and procedures. California’s focus was two-fold: 1) to test the capabilities of the public information messaging and 2) to test the capabilities of the California IMT regarding making decisions to ensure that efficient, safe continuity of business policies are in place when there is a confirmed positive FAD in North America.

California Department of Food and Agriculture (CDFA) and APHIS VS personnel participated in this three-day exercise virtually through conference calls and interaction with the Simulation Deck Software Platform. The exercise scenario began with Canada confirming a positive foot-and-mouth disease (FMD) case on a Friday, then the disease was confirmed in Oregon and California on Saturday. Once the initial case was confirmed in Canada, the California Blended IMT was activated by the State Veterinarian. Internal situation briefings took place immediately through conference calls locally and at the national level. The California State Veterinarian and IMT Incident Commanders (IC) participated on those conference calls, which would normally take place in a real event. Both operational tactics and public information messaging was vetted, which allowed all California players to walk through making decisions based on the given scenario.

Many of the conference calls incorporated players from multiple states, such as the National Association of State Departments of Agriculture, National Assembly of State Animal Health Officials, and USDA Agriculture Incident Coordination Group calls. Local calls were between California-only players. Public Information Officer (PIO) players monitored and posted to the Simulation Deck Platform and reported out new information and new posts to the State Veterinarian and IMT during the California-only conference calls. This allowed the IMT to decide what public messaging would be shared by the PIO during the next multi-state conference calls.

Participating in these types of exercises helps to improve preparedness and response capabilities, allowing California animal health regulatory officials to better understand their roles and responsibilities when responding to animal disease outbreak incidents.

In May 2018, California will participate in an APHIS-hosted, full-functional FMD exercise that will allow for a more robust, realistic play to include the following additional players (who would be involved in a real event): the California Animal Health and Food Safety Laboratory; industry (cattle, small ruminants, and pork); and local and state government, including the California Highway Patrol. An after-action briefing will allow the IMT players to take the lessons learned from this exercise and make any necessary adjustments to policies and procedures to ensure that the team is better prepared for future disease incidents.
The California Department of Food and Agriculture (CDFA) Animal Health Branch Chief Dr. Kent Fowler was honored this year by the United States Animal Health Association (USAHA) with its National Assembly Award, presented annually in recognition of outstanding, dedicated service and leadership in regulatory veterinary medicine.

Dr. Fowler was recognized for his work in preparation for potential future outbreaks of foot-and-mouth disease; for his support and acceptance of an official treatment for Piroplasmosis in horses, including efforts to establish a communications infrastructure for equine diseases; and for working closely with public health and animal health officials on bovine tuberculosis issues.

“Dr. Fowler’s many years of distinguished service in California uniquely qualify him for this award,” said California State Veterinarian Dr. Annette Jones. “Besides advocating nationally for new, practical regulatory approaches to disease control, Dr. Fowler’s experience in private practice solidified his understanding of the realities of animal production and the importance of practical solutions to challenging problems.”

Before joining CDFA in 2004, Dr. Fowler practiced large animal veterinary medicine on the central coast of California for nearly thirty (30) years. He attended the University of California Davis, receiving both his Bachelor of Science and Doctorate degrees there.

The USAHA works with state and federal governments, universities, veterinarians, livestock producers, national livestock and poultry organizations, research scientists, the extension service and several foreign countries to control livestock diseases in the United States. USAHA represents all fifty (50) states, four (4) foreign countries and thirty-four (34) allied groups serving health, technical and consumer markets.
Felipe Lerida

Felipe Lerida has over twenty-five (25) years of experience in investigations as a police officer and criminal investigator. His experience includes undercover work, surveillance and interviewing. Felipe’s most recent employment was working as an inspector with the California Department of Food and Agriculture (CDFA) Meat, Poultry and Egg Safety Branch. Felipe will be conducting investigations statewide for the Animal Health Branch (AHB) as a Special Investigator to detect or verify suspected violations of regulations. His home is in our Ontario District, but he will be working throughout California on investigatory matters. Felipe looks forward to working with the AHB in enforcement and is eager to incorporate his skills as a member of the CDFA team.

Dr. Alireza Javidmehr

Dr. Alireza Javidmehr is one of the AHB’s veterinary epidemiologists. He was born in an Azerbaijani family in northwestern Iran, a mountainous area with beautiful scenery and a livestock production hub for the country. After graduation from the Tabriz Veterinary School in December 1994, animal health has been the central focus of his professional life. In September 2007, he immigrated to the United States to enhance his knowledge in Preventive Veterinary Medicine at UC Davis. Later he continued his passion for analyzing and interpreting bioinformatic data completing a Ph.D. program in Epidemiology at the same university. He joined Animal Health Branch Emergency Programs in January 1, 2016.

Dr. Javidmehr regularly uses his expertise to make statewide recommendations relating to the Secure Food Supply and California Animal Health Emergency System (CAHEMS) projects, in some cases influencing national policy through his participation in these efforts. Dr. Javidmehr possesses unique scientific expertise as he has responded while working in Iran as a field veterinarian to foot-and-mouth disease in cattle, a disease not seen in the U.S. since 1929.

Ali’s wife Nasim Tajmand is a postdoctoral researcher at the University of California, Davis focusing on energy saving methods applied to industrial water evaporating cooling systems. She graduated with a Ph.D. degree in civil and environmental engineering in June 2016, a day they both will remember forever since the couple walked into the commencement ceremony together, making a long-time dream come true.

July 19, 2017 is another day in their life that will be treasured forever. The new addition, Alana was welcomed into their life. Currently, Alana takes all their attention and love. Ali is hoping to enjoy outdoor activities such as hiking, bicycling and camping with his wife and daughter in the near future. He enjoys gatherings with family and friends, outdoor BBQ and celebrating Thanksgiving in its true meaning, Americans’ generosity and kindness toward all immigrants!
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