



ANIMAL HEALTH BRANCH ANNUAL REPORT

2019/2020



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This document and more information about the Animal Health Branch can be found at www.cdfa.ca.gov/AHFSS/animal_health.

TABLE OF CONTENTS

| | |
|---|---|
| Animal Health Branch Chief’s Message for 2021 | 1 |
| The Animal Health Branch | 2 |

PROGRAMS

| | |
|--|----|
| Foreign Animal Disease Investigations (FAD) in California | 3 |
| Emergency Preparedness and Response Section | 4 |
| 2018–2020 virulent Newcastle Disease in California | 7 |
| The California Avian Health and Education Network | 8 |
| Avian Influenza: Continued Vigilance and Response | 11 |
| Rabbit Hemorrhagic Disease | 12 |
| Animal Disease Traceability | 14 |
| Protecting Livestock, Wild Animals, and Human Health | 16 |
| Protecting California’s 534,500 Horses | 19 |
| Equine Medication Monitoring Program (EMMP): Monitoring Horses at Events, Shows, and Competitions..... | 20 |
| Secure Food Supply: Helping Producers Maintain Continuity of Business During an Animal Disease Outbreak | 21 |
| Mexico Border: Liaising with Our Southern Neighbor to Ensure Healthy Livestock..... | 23 |
| Outreach / Education / Accreditation..... | 24 |

DISTRICTS

| | |
|-------------------------------------|----|
| Redding District..... | 25 |
| Modesto District..... | 27 |
| Tulare District..... | 31 |
| Ontario District..... | 33 |
| | |
| Animal Health Branch Directory..... | 38 |

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ANIMAL HEALTH BRANCH CHIEF'S MESSAGE FOR 2021

Happy New Year! I think everyone is happy to see 2020 in the rear-view mirror and look forward to the millions of doses of COVID-19 vaccine being distributed and administered to our national and global population over months to come. The pandemic has been devastating to so many—physically, mentally, and economically. And yet, as a country, as a State, as a Department and as a Branch: we will persevere and appreciate the silver linings that the pandemic presented to us. As California Department of Food and Agriculture (CDFA), Animal Health Branch (AHB) employees, we have instituted the good biosecurity practices on ourselves, our families and our friends, that we have been preaching about for years to protect animal agriculture. We have also learned to conduct business efficiently and effectively while maximizing teleworking from home offices for most of our workweek. I continue to be so impressed with the dedication and ingenuity of AHB staff in protecting animal agriculture in our State and nation.

As a Branch, our highest priority remains the continued and successful exclusion of foreign animal diseases from California. In 2020, after a two-year disease incident marathon, we witnessed the eradication of virulent Newcastle Disease (vND) in California and the end to the regional quarantine in Southern California, allowing poultry to again move freely within the State. This eradication effort had at one point over 300 emergency responders with over 3,000 individual personnel rotations deployed throughout the response. The dedicated responders worked seven (7) days a week and twelve-hour days for nearly the entire response. What a remarkable effort by vND emergency responders from the CDFA, United States Department of Agriculture (USDA), Cooperative Agricultural Support Services Authority (CASS), and the California Animal Health and Food Safety Laboratory, with support from CalOES, California Highway Patrol and others! The California Avian Health and Education Network (CAHEN) has been developed to prevent or minimize another avian disease outbreak in California. A team of State and Federal personnel remains in Southern California and their effort will involve active and passive surveillance, public education and outreach, and preparedness and response plans.

As you read this AHB 2019–20 Annual Report, I have retired from CDFA after a seventeen-year tenure. My “second” career, following twenty-seven (27) years in private practice on the Central Coast of California, as a regulatory veterinarian has really allowed my 44-year veterinary career to come full circle. I have been afforded the pleasure of working under the California State Veterinarians, Dr. Rich Breitmeyer and then, following his retirement, Dr. Annette Jones. Both brought professionalism, leadership and dedication to veterinary regulatory medicine, both were great mentors to me, and both are highly respected by other state veterinarians. For the past sixteen (16) years as AHB Chief, I have also been blessed with a great staff of veterinarians and other AHB professionals. It has been my privilege to work with these staff and will miss the comradery, “git ‘er done” attitude, and friendships (and I hope these to continue for years to come). I have also fostered many wonderful relationships in the California Animal Health and Food Safety (CAHFS) Services Laboratory System, the USDA, industry organizations, academia, private practitioners and other state and federal agencies. I have valued these relationships and will continue to do so. They have been notably influential in protecting California’s multi-billion-dollar livestock industry from epidemic and foreign animal disease. The Animal Health Branch is committed to continue protecting California as one of the most successful agricultural regions in the world.

I thank all of you for the opportunity and privilege to serve as AHB Chief over the past sixteen (16) years. May 2021 find all of you, your family and friends safe and healthy.

Thank you,

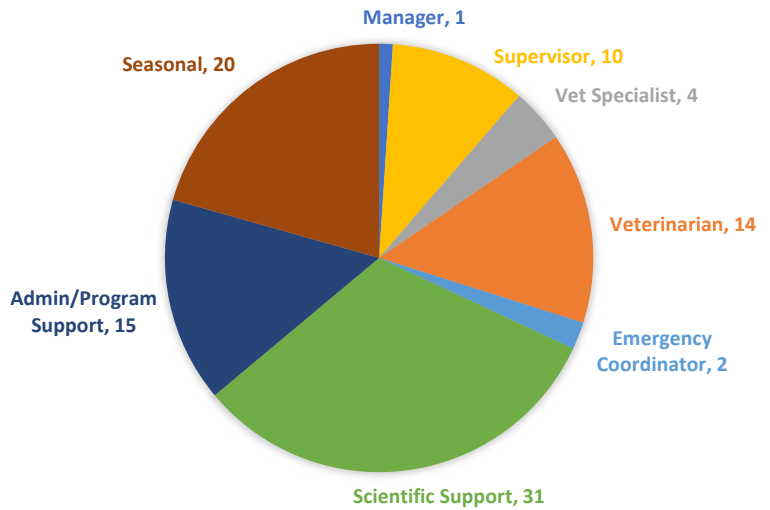
Kent Fowler, DVM
Retired AHB Chief

THE ANIMAL HEALTH BRANCH

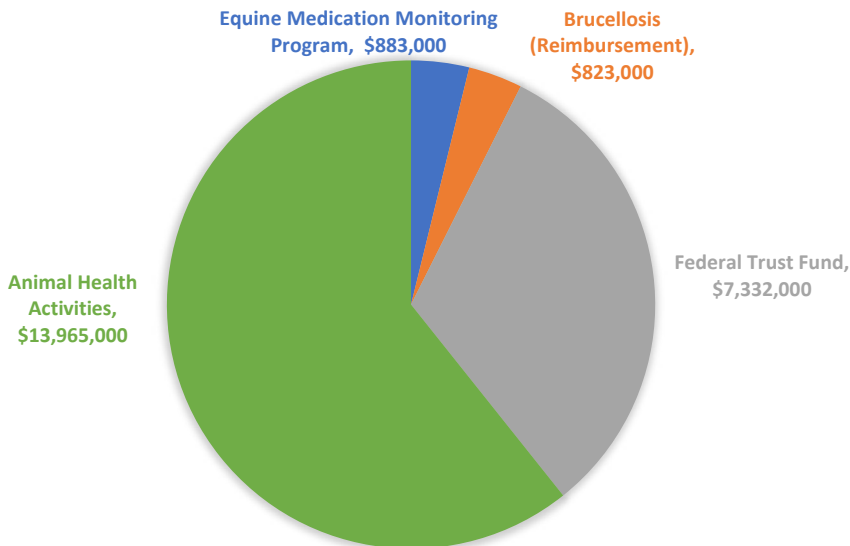
The Animal Health Branch's (AHB) highest priority is to protect California animal agriculture, human health, and the nation's food supply by preventing, detecting, responding to, and eradicating foreign animal diseases from our farms and our food chain. The AHB is the State's organized professional veterinary medical unit that implements programs that protect California livestock industries, consumers, and the economy from catastrophic animal diseases or other livestock health and agricultural problems. Many diseases monitored by the AHB have zoonotic potential meaning they can be transmitted from animals to humans. Finding, isolating, and eliminating diseases that threaten animal health, public health, and the availability of affordable, wholesome food can only be achieved through dedicated, highly trained personnel maintaining programs to rapidly detect and respond to animal disease introductions. This annual report describes the variety of programs and activities in which the

AHB staff were engaged during 2019–2020. The Branch is composed of **ninety-six (96) professionals** including twenty-nine (29) veterinarians (11 of which are epidemiologists) and sixty-seven (67) inspectors, analysts, and support staff organized into four (4) regional offices and headquartered in Sacramento.

AHB Staff Summary
As of December 2020



Animal Health Branch Budget FY 19/20



BUDGET DISBURSEMENT OF FUNDS

| Fund Type | Percentage |
|--------------------|------------|
| General Fund | 61% |
| Federal Trust Fund | 32% |
| Reimbursements | 3% |
| Agriculture Fund | 4% |

FOREIGN ANIMAL DISEASE INVESTIGATIONS (FAD) IN CALIFORNIA

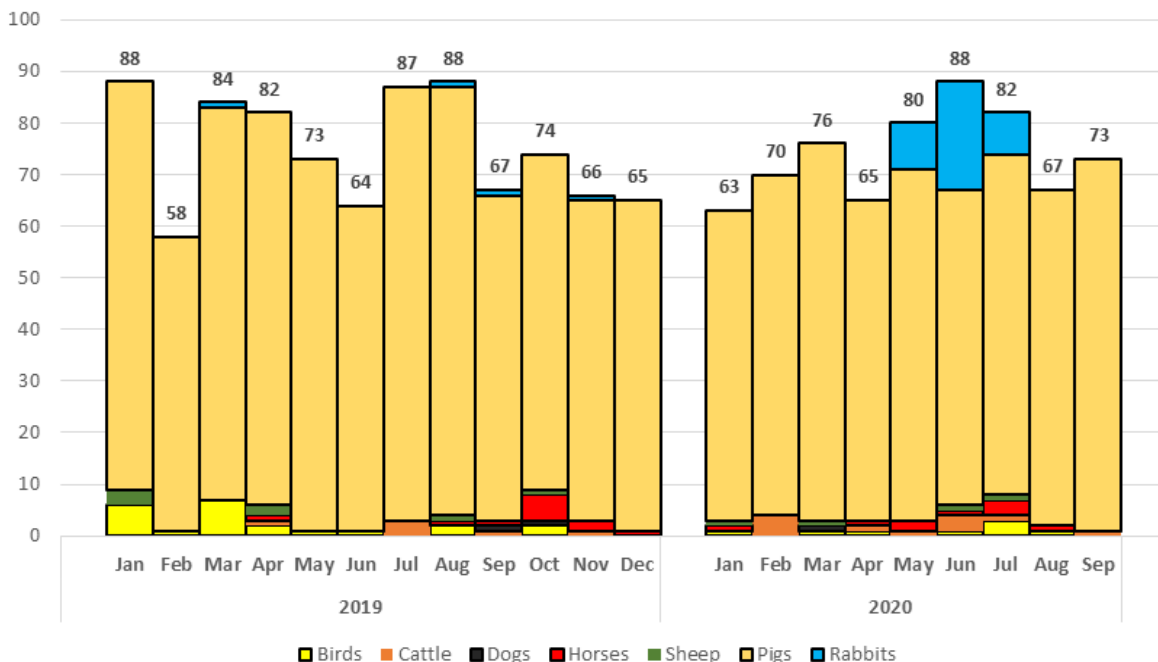
A Foreign Animal Disease is an animal disease or pest, either terrestrial or aquatic, not known to exist in the United States or its territories. When these diseases can significantly affect human health or animal production, and when there is significant economic cost for disease control or eradication, they are considered a threat to the United States. As such, any animal exhibiting clinical signs consistent with a known FAD must be thoroughly investigated by a specially trained Foreign Animal Disease Diagnostician (FADD) veterinarian.

Between January 1, 2019 and September 30, 2020, the AHB conducted **1,560 FAD investigations** in poultry (avian species), cattle (bovine), dogs (canine), horses (equine), sheep (ovine), pigs (porcine), and rabbits (lagomorphs) to rule out the possibility of an FAD. During this time, the primary FAD investigations were conducted in pigs where Senecavirus A, a viral disease of minimal consequence in pigs that causes signs similar to Foot and Mouth Disease, a highly contagious and economically devastating disease of livestock, has arisen among market hogs coming into California in recent years. Other FAD investigations to note during this time included the outbreak of Virulent Newcastle disease in poultry in southern California, two (2) small detections of Avian Influenza in 2019, and an outbreak of Rabbit Hemorrhagic Disease in California rabbits that began in Summer 2020 killing both wild and domestic rabbits.

CDFA AND USDA/APHIS FADD TRAINED PERSONNEL

| District | Number of FADDs |
|----------------------------------|-----------------|
| Redding (530) 225-2140 | 4 |
| Modesto (209) 491-9350 | 4 |
| Tulare (559) 685-3500 | 4 |
| Ontario (909) 947-5932 | 2 |

Foreign Animal Disease Investigations,
January 2019- September 2020

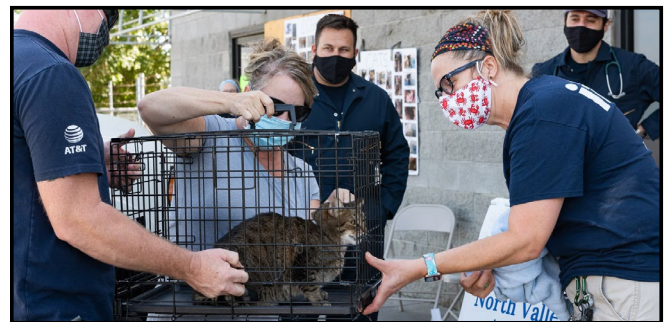


EMERGENCY PREPAREDNESS AND RESPONSE SECTION

The Animal Health Branch Emergency Preparedness and Response Section (EPRS) supports two (2) primary mission areas: **foreign animal disease (FAD) outbreaks and the California Animal Response Emergency System (CARES)** and supports a number of other emergencies impacting the Animal Health and Food Safety Services Division, including food safety, food supply disruptions, and extreme weather events. EPRS is comprised of five (5) functional programs that support the mission areas: Planning, Training, Exercise, Outreach, and Epi/Analysis.

California manages FAD outbreaks in Unified Command with United States Department of Food and Agriculture (USDA) Veterinary Services. EPRS oversees development of a Blended Incident Management Team, with leadership representation in Command and General Staff from both CDFA and USDA personnel. CDFA has deployed the California Blended Incident Management Team for several FAD outbreaks, including the 2015 Highly Pathogenic Avian Influenza (HPAI) outbreak and the 2018-2020 virulent Newcastle disease (vND) outbreak. CDFA members of the California team blended with the National Incident Management Team to continue Unified Command representation throughout the 2018–2020 vND outbreak response.

EPRS also oversees the CARES Program. CARES is a statewide emergency management operational guidance supporting animals in disasters. CARES is supported by a partnership of public and private organizations that commit resources and expertise to preparing for and responding to animals in disasters. CDFA CARES personnel staffed 41 response positions in support of county animals services for four (4) major fires in 2020. CDFA worked closely with the State Operations Center (SOC) to facilitate the counties' requests for mission tasking state resources, emergency management personnel and technical specialists through the emergency management mutual aid system (EMMA), and requests for resources through the Emergency Management Assistance Compact (EMAC). CDFA also deployed staff to Butte County to the North Complex Fire response to support the county animal department operations center (DOC).



Cat reunited during the North Complex Fire.

MAJOR ACCOMPLISHMENTS 2019–2020

- Relunched the **CARES Program** as part of CDFA's core mission; delivered over a dozen outreach presentations and media interviews on the status of the CARES Program; deployed CDFA CARES personnel to support **four (4) major fire responses** in 2020.
- Conducted three (3) **Foot-and-mouth Disease Vaccination planning workshops** designed to outline CDFA's response concept of operations and triggers for employing vaccine during an outbreak.
- Ten (10) of 15 EPRS personnel **served multiple deployments** to the successful virulent Newcastle disease eradication efforts in Southern California.

2020 CDFA CARES FIRE RESPONSE



Horses being evacuated during the North Complex Fire.

- The CDFA CARES program was activated to support four (4) of the 10 largest California fire incidents that each burned more than 5,000 acres. During these incidents, **CARES activated/deployed 41 employees.**
- **More than 135 contacts to governmental and non-governmental entities** were made by CDFA CARES response personnel to facilitate resource deployments and support from several organizations throughout the United States.

2020 CARES RESPONSE TO FIRES

| | Monterey County | Solano County | Butte County | Trinity County |
|---|-----------------|---------------|--------------|----------------|
| Number of Animal Shelters, Including Fairgrounds | 3 | 6 | 3 | ** |
| The Animal Counts of Highest Daily Record | 425 | 1,122 | 556 | ** |
| CARES Contacts* | 20+ | 20+ | 95+ | ** |
| CDFA Employees Activated or Deployed | 12 | 10 | 17 | 2 |

*Contacts made in response to any Mission Request Tasking from CalOES for resource deployment coordination for the respective county.

**Data not available.

PROVIDING STATE SUPPORT DURING THE COVID-19 PANDEMIC

As the Department's resource for Incident Command System-trained personnel, the Animal Health Branch was tasked with standing up and running the CDFA's Department Operations Center (DOC) for the COVID-19 response beginning in March and continuing through May, 2020. During the DOC activation, 13 AHB staff were activated, for the duration of the response, to fulfill roles as DOC Director, Planning Section Chief, Logistics Section Chief, Situation Unit, animal industry liaisons, CARES liaison, and animal testing coordinators. Food supply interruptions and agriculture essential worker issues were coordinated with the animal agriculture industry, tracked, and reported to the CDFA Executive Office. Additionally, many program subject matter experts were involved in developing guidance documents for industry to assist with continuity of business efforts in the face of public health guidance that was evolving during the early months of the response. AHB staff have continued to coordinate nationally and with the California Department of Public Health on animal testing for SARS-CoV2.



Rescued puppy during the North Complex Fire.

EMERGENCY ANIMAL CARCASS DISPOSAL

In support of public health and environmental safety, the Animal Health Branch worked closely with the Meat, Poultry and Egg Safety Branch to develop a **Rendering Disruption Emergency Animal Carcass Disposal Plan**, designed to assist animal agriculture producers with understanding disposal options during emergencies when usual carcass management methods are unavailable. CDFA has activated this emergency plan several times over the past few months for extreme heat and fire response, issuing a State Veterinarian quarantine notice to enable diversion of animal carcasses to alternative disposal methods. To further explore animal disposal technologies, the AHB has led the planning for the University of Maine to host an

animal carcass composting school next year. The school will train 25 animal agriculture responders, including personnel from industry, state, and federal governments to become compost subject matter experts, to understand the scientific process of carcass breakdown, the environmental concerns, the emergency circumstances under which composting should be employed, and understand proper final disposition of composted products. Composting of mammalian tissue is prohibited by statute in California and thus CDFA has worked with a myriad of regulatory agencies to obtain special permission to host the composting school in California.



2018–2020 VIRULENT NEWCASTLE DISEASE IN CALIFORNIA

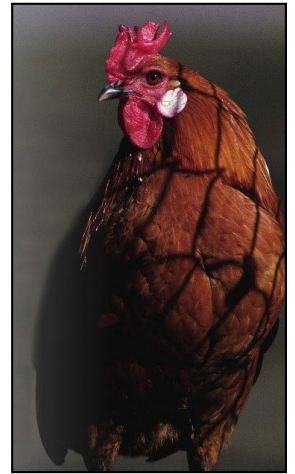
On June 1, 2020, the California Department of Food and Agriculture (CDFA) and the United States Department of Agriculture (USDA) declared freedom from Virulent Newcastle Disease (vND) and together ended the vND quarantine in Southern California, allowing poultry to again move freely within the State. vND is considered a foreign animal disease (FAD) and is a virus that affects birds with particularly lethal effects on poultry, affecting the digestive system, nervous system, and respiratory system. It spreads quickly between birds but is not considered a human health threat. Its presence is so detrimental to poultry health and the food supply that it triggers state, federal, and international regulatory responses. While this virus has been introduced and eradicated from more than fifteen (15) U.S. states since 1950, the largest outbreaks occurred in California in 1971–1974 and 2002–2003 following a similar pattern but with wider spread than the recent 2018–2020 outbreak.

In the most recent outbreak, vND was first detected in May of 2018 in Los Angeles county. By December 2018 the virus had spread extensively within multiple counties in Southern California affecting backyard poultry and commercial flocks. The greater Los Angeles area is the home to 18.7 million people from every culture and background imaginable. Outbreaks of a rapidly spreading virus will always be challenging, but when an outbreak of an FAD occurs in a densely populated area, if not eradicated quickly from backyards, history has demonstrated the disease will spill over into large commercial flocks and spread to other states. This increases the response challenges and economic impact exponentially. During the 2018–2020 vND response, the keys to success were equal emphasis on: outreach to the public, disease detection and elimination, and verified biosecure barriers between

commercial producers and surrounding backyards.

This two (2) year eradication effort, at a government (State and Federal) cost of \$70.1M, had at one point over 300 emergency responders with over 3,000 individual personnel rotations deployed throughout the two (2) year response. The dedicated responders worked seven (7) days a week and twelve (12) hour days for nearly the entire response. vND emergency responders were employed by the United States Department of Food and Agriculture (USDA), California Department of Food and Agriculture (CDFA), the Cooperative Agricultural Support Services Authority (CASS), and the California Animal Health and Food Safety Laboratory (CAHFS), with additional support provided by Cal OES, California Highway Patrol, and others.

The regional quarantine area covered approximately 10,160 square miles. Through the span of the vND outbreak, birds were euthanized on over 2,350 premises to stop the spread of disease, resulting in the death of more than 1.24 million birds. Of those, 130,000 were from small backyard flocks. Despite intensive biosecurity protections, at the height of the outbreak in backyard birds, the virus spilled over into one (1) large pullet farm and nine (9) large layer farms ranging in size from 28,000 to 420,000 hens each. After prolonged disease control efforts, the last confirmed positive case was detected in February 2020. Since then, extensive testing of the regulated area has been conducted and no additional detections of the disease have been identified.



THE CALIFORNIA AVIAN HEALTH AND EDUCATION NETWORK



In 2018, a substantial portion of Southern California's backyard and commercial poultry flocks were significantly impacted by a devastating outbreak of virulent Newcastle Disease (vND) that lasted more than two years. The California Department of Food and Agriculture (CDFA) and United States Department of Agriculture (USDA) worked jointly to identify infections and halt rapid spread of the vND virus before its eradication midyear 2020. **As a result of this outbreak and in an effort to prevent more in the future, CDFA established California Avian Health Education Network (CAHEN).** This program is dedicated to offering education, training, outreach, testing, and vaccination options for backyard poultry flock owners, other bird enthusiasts, stakeholders, and everyone dedicated to avian health in Southern California. By working together, CDFA, USDA, University of California extension groups and community partners aim to keep California free of foreign animal diseases to prevent similar devastation in the future.

The mission of CAHEN is to prevent the need for large-scale regulatory response to an emergence of reportable avian disease, as required for the 2018–2020 virulent Newcastle Disease outbreak. This goal will be

accomplished through engaging community members and building effective partnerships between government agencies, academic institutions, avian health experts, bird enthusiasts, various segments of associated industries, and everyone dedicated to avian health in Southern California. The mission is focused towards enhancing avian health, preventing foreign animal disease introduction through education, training and outreach, and vaccination options; supporting early disease detection by implementing consistent and targeted active and passive surveillance; and readiness for rapid response to any new detection of a foreign animal disease in poultry.

Our team consists of twelve (12) CDFA personnel including four (4) veterinarians, three (3) livestock inspectors, one (1) AGPA, and four (4) agricultural technicians, and eight (8) USDA personnel including one veterinarian, one (1) field operations supervisor AHT, and six (6) AHT temps.

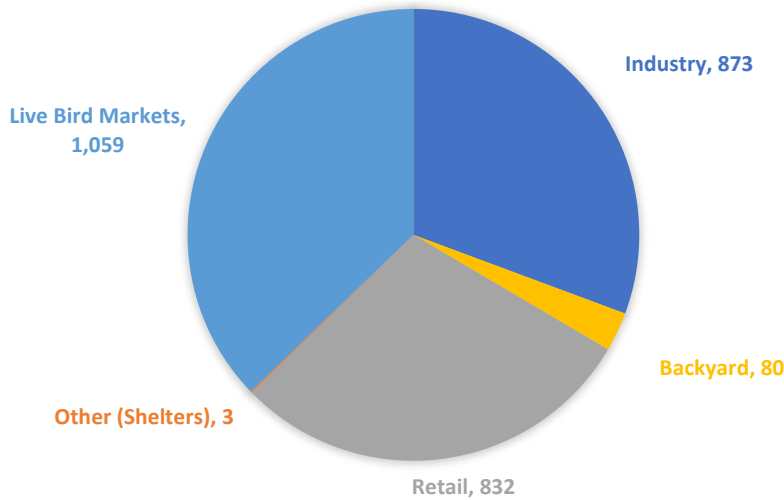
We cover avian health outreach and surveillance for eight (8) counties in Southern California: Los Angeles, San Bernardino, Riverside, Orange, San Diego, Imperial, Ventura and Kern.



Collecting swab samples at a poultry small sales facility.

CAHEN YEAR-END STATISTICS REPORT JUNE 1ST-DECEMBER 15TH

Number of Sample Tubes Submitted Total: 2,847



Swabbing birds at a Live Bird Market.

SURVEILLANCE TESTING (TUBES WITH UP TO 5 POOLED SAMPLES EACH) NUMBER OF TESTS RUN

| | Virulent Newcastle Disease | Avian Influenza (This number is also reflected under Avian Health) |
|--|----------------------------|---|
| Industry | 873 | 158 |
| Backyard | 80 | 62 |
| Retail (Feed, pet stores and auctions) | 832 | 534 |
| Live Bird Markets (LBM) | 1,059 | 950 |
| Other (Shelter) | 3 | 3 |
| Total | 2,847 | 1,707 |

OUTREACH MATERIALS DISTRIBUTED (IN ENGLISH AND SPANISH)

| | |
|--|---------|
| Avian Calendars | 80,725+ |
| Regional Quarantine Release Poster | 397 |
| Magnets | 983 |
| Business Cards | 602 |
| Trifold Brochures | 3,294 |
| Biosecurity Posters | 65 |
| CAHEN Flyer | 1,196 |
| Free testing flyers, sign ups, and slips | 3,731 |
| Avian Disease and Biosecurity Factsheets | 3,284 |
| Traceability Form | 40 |

1,269
Outreach Events
 (completed by CAHEN personnel, including calendar delivery)



Community Website Development

SoCal Nestbox went “live” in September and has 30 articles and blogs written by CAHEN staff with contributions from staff in other districts as well.



Social Media Posts and Followers

139 posts to Instagram or Facebook with 280 followers

5 Ally Emails distributed to 54 subscribers



98

Sick Bird Calls to hotline (all)

52

Responded to by CAHEN



2

FAD Investigations



6

Training Presentations created for Feed Store and Backyard Flock Quality Assurance



23

Quality Assurance Certificates Issued



Handling a Bird with Care at a Live Bird Market.



Gamefowl Wellness Program

250 program flyers and 850 information slips distributed

16 feedstores that cater to the game fowl community were visited

32 gamefowl owners attended the first virtual meeting

16 breeders signed up for the Gamefowl Wellness Program

1 CA Association for the Preservation of Gamefowl convention attended for outreach activities

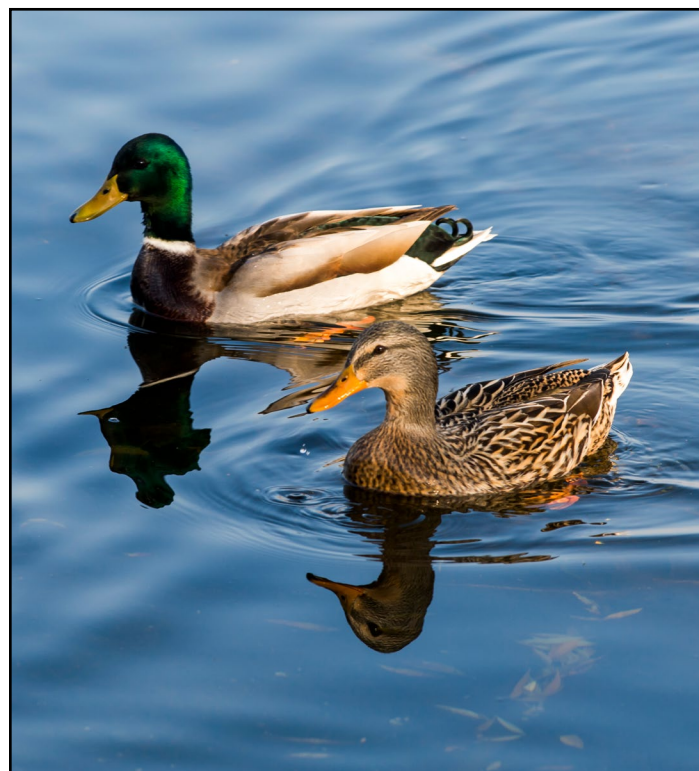
4 educational podcasts recorded with UC Davis and breeder for radio

3 feedstores recruited to distribute vaccine

AVIAN INFLUENZA: CONTINUED VIGILANCE AND RESPONSE

As wild waterfowl and shorebirds in the Pacific Flyway complete their annual migration over California, they often naturally carry the Avian Influenza (AI) virus, commonly called “bird flu”. There are many different types of AI, and some strains can infect chickens, turkeys, pheasants, quail, ducks, geese, and guinea fowl that are a critical part of California’s food supply.

The Animal Health Branch (AHB) works regularly with California’s poultry producers to mitigate the risk of AI to California’s poultry production flocks that provide Californians nutritious meat and eggs. Prevention activities include regular testing, inspections, and outreach and education. Surveillance of domestic birds is critical to ensure that any infection is rapidly detected: **60,409** birds were tested for AI over the last nineteen (19) months by CDFA personnel and in cooperation with the National Poultry Improvement Plan Program.



AHB responds rapidly when California poultry are affected to minimize the impact; activities involve epidemiological investigations, a coordinated emergency response in collaboration with the California Animal Health and Food Safety Laboratories (CAHFS) and the United States Department of Food and Agriculture (USDA).

H5 or H7 AI viruses can be classified as either low pathogenic avian influenza (LPAI) or highly pathogenic avian influenza (HPAI) based on the severity of the illness they cause in chickens. LPAI can cause few clinical signs in infected chickens. In contrast, HPAI causes a severe illness with a high mortality rate among infected birds. Because some LPAI strains have the potential to genetically change into HPAI, our AHB veterinary authorities will rapidly respond to those with LPAI before they have the potential to change to HPAI and cause severe mortality.

In 2019, while CDFA’s AHB and the USDA were in the process of eradicating Virulent Newcastle Disease (vND) in Southern California, they simultaneously responded to and eliminated strains of H5 and H7 LPAI of North American wild bird lineage following California’s LPAI Initial State Response and Containment Plan:

April 2019: An H5N2 LPAI was detected in a duck breeder barn on California’s Central Coast. Following an epidemiological investigation, the infection was contained and eliminated.

June 2019: An H7N3 LPAI was discovered in a duck layer flock as part of regular CDFA testing in California’s Central Valley. It was effectively contained and eliminated.

RABBIT HEMORRHAGIC DISEASE

Rabbit Hemorrhagic Disease (RHD)

is an acute viral disease of lagomorphs, including rabbits, hares, and possibly pikas. It is considered a Foreign Animal Disease (FAD) and is reportable to the United States Department of Food and Agriculture (USDA) and to the California Department of Food and Agriculture (CDFA). RHD does not affect other animal species or humans. In rabbits, RHD causes severe liver damage which can result in massive internal bleeding. Clinical signs include sudden death, fever, yellowing of the skin and gums, and bleeding from the nose or other body openings. It can also cause inappetence, lethargy, muscle spasms, and difficulty breathing. There is no treatment for RHD.



and Wyoming) and Florida, and nine (9) northern Mexican states (Chihuahua, Sonora, Baja California Sur, Baja California Norte, Coahuila, Durango, Zacatecas, San Luis Potosi, and Aguascalientes). It has spread rapidly through wild populations. Movements of wild and domestic rabbits may be playing a role in the spread of this outbreak. In the current outbreak, the fatality rate has been ranging from about 40% to 100% and it is affecting all ages of rabbits. Rabbits which survive often have liver impairment and may shed virus for up to fifteen (15) weeks in their secretions.

RHD can be caused by two (2) related viruses, Rabbit Hemorrhagic Disease Virus serotype 1 (RHDV1) which affects only domestic and wild European rabbits, and Rabbit Hemorrhagic Disease Virus serotype 2 (RHDV2) which appears to be able to affect most species of rabbits and hares. Since detected in New Mexico in March 2020, a strain of RHDV2 has been spreading across the southwestern United States and northern Mexico, affecting both wild and domestic rabbits and hares. RHDV2 has now been reported from eight (8) southwestern U.S. states (New Mexico, Texas, Arizona, Colorado, Nevada, California, Utah,

In April 2020, the Animal Health Branch (AHB) began coordinated response planning for RHD. AHB staff revised disease factsheets and developed new factsheets for biosecurity and prevention for backyard rabbitries, veterinary clinics, and rabbit shows and posted them on a webpage we developed specifically for RHD. AHB staff assisted California Department of Fish and Wildlife (CDFW) in transporting wild rabbit samples to our California Animal Health and Food Safety (CAHFS) lab and triaged many calls from rabbit owners. The Branch responded to over thirty (30) domestic rabbit sick calls, couriered samples to the lab,

quarantined affected and suspect premises, and provided outreach materials and information to rabbit owners, feed stores, and veterinary clinics. AHB staff partnered with UC Davis and with the House Rabbit Society to participate in informational webinars for 4-H kids and advisors and for rabbit owners. AHB instituted a quarantine restricting entry of rabbits from other affected states and requiring a certificate of veterinary inspection for rabbits coming from those states. AHB staff also developed a response plan for RHD and participates in regular reporting of case investigations to USDA.

In early May 2020, RHDV2 was detected in a wild black-tailed jackrabbit in Riverside county, near Palm Springs. Since then, it has been detected in wild jackrabbits and cottontail rabbits in San Bernardino and Kern counties, and wild cottontail rabbits in San Diego, Orange, and Los Angeles counties. Since July 10, 2020, RHDV2 has been confirmed in three (3) domestic backyard rabbitries in San Bernardino county, two (2) in Riverside county, one (1) in Los Angeles County, and three (3) in Kern county. In many cases backyard detections were in areas near where the disease was previously detected in wild rabbits.

There is no licensed vaccine for RHD available in the United States. Veterinarians licensed in the state of California can apply to the state veterinarian for approval to request a permit from the USDA's Center for Veterinary Biologics to import vaccine from Europe. To date, AHB has assisted the state veterinarian in approving twenty-five (25) California licensed veterinarians to apply to import RHD vaccines. Of these, several have redistributed to other California licensed veterinarians for a total of about eighty (80) veterinarians with vaccine to protect California's rabbits.



ANIMAL DISEASE TRACEABILITY

Animal Disease Traceability (ADT), a form of contact tracing, is defined as the ability to know where an animal was by linking official animal identification with a specific location in time. This knowledge is essential for a prompt response to an animal disease event. ADT may not prevent a disease from being introduced into the state, nor prevent an animal from becoming infected with diseases; however, a robust traceability system facilitates rapid and effective disease control and eradication programs and helps document disease freedom.

The California ADT program protects our state's animal agriculture industry by: (1) reducing the likelihood of disease introduction into the state through enforcement of animal entry requirements; and (2) reducing the impact of animal diseases through rapid tracing of animal movements and identification of exposed or at-risk animals.

Successful traceability depends on official identification of livestock and documentation to track movements, including records of livestock shipments crossing through one (1) of California's sixteen (16) border stations, incoming health certificates (Certificates of Veterinary Inspection, or CVIs), and livestock entry permits. CDFA Animal Health Branch (AHB) staff review these sources of movement data daily and investigate livestock shipments that are noncompliant with California's entry requirements. If any non-compliant movements are detected, the AHB field staff immediately respond to the destination location to investigate the situation.

Additionally, the AHB distributes a variety of official identification (ID) devices, some of which also serve to indicate the animal is vaccinated for or participates in a disease control program (e.g. brucellosis and scrapie). The AHB coordinates the distribution of no-cost electronic ID tags from USDA and wand readers to veterinarians for use in our cattle population.

ANNUAL OVERVIEW



- **52,441** Shipments crossing border stations
- **24,051,730** Incoming animals
- **25** Visits to stations for outreach and training










- **8,619** Livestock Entry Permits issued for incoming shipments
- **964,268** Incoming animals



- **16,296** Health certificates for incoming animals
- **862,129** Incoming animals
- Letters to educate **535** out-of-state veterinarians

OFFICIAL ANIMAL ID TAG DISTRIBUTION (ANNUAL)

| AIN 840 White/Yellow Tags | AIN 840 Brucellosis Orange Tags | NUES Brucellosis Orange Tags | NUES Silver Brite Tags | Scrapie Tags | NUES Plastic Swine Tags | Total Official ID Tags | USDA Backtags |
|---|---|---|---|---|---|------------------------|---|
|  |  |  |  |  |  | |  |
| 2,747,348 | 67,340 | 640,785 | 320,579 | 107,166 | 10,020 | 3,893,238 | 609,000 |

The use of electronic technologies for traceability information is increasing. This includes **electronic health certificates** and **electronic official identification ear tags**, which makes recording animal movements quicker and more efficient.

More than half of health certificates are electronic: **57%** of outgoing and **59%** of incoming health certificates

To encourage the use of electronic forms of official identification, the United States Department of Agriculture (USDA) is providing states with limited supplies of **free Radio Frequency Identification (RFID) cattle ear tags**. Since April 2020, CDFA has distributed **288,010 tags** (223,270 white and 64,740 orange) to private veterinarians. CDFA has also lent **60 RFID wand readers** (6 wand readers and 54 pocket readers), which were purchased with supplemental cooperative agreement funding, to veterinarians in California to be used with the free RFID ear tags.

RFID TAG AND READER DISTRIBUTION IN 2020

| RFID Ear Tags | RFID Tag Readers |
|--|--|
|  <p>Orange</p> <p>64,740</p> |  <p>Green Wands</p> <p>6</p> |
|  <p>White</p> <p>223,270</p> |  <p>LPR Pocket Readers</p> <p>54</p> |



PROTECTING LIVESTOCK, WILD ANIMALS, AND HUMAN HEALTH

Bovine Tuberculosis (TB) is a serious and persistent bacterial disease. Cattle infected with bovine TB may not show signs for years; however, infected animals that appear healthy may still be capable of transmitting infection to other animals. People can acquire TB from animals primarily due to the consumption of unpasteurized dairy products such as raw milk or cheese. If infected with bovine TB, people can become seriously ill and without treatment or detection of the disease can possibly die from the infection. While the possibility of people acquiring bovine TB in California is extremely low, infected cattle, nonetheless

affect consumer confidence in milk and beef products. After decades of disease control in cattle, California attained “Bovine TB Free” status in August 2016 and has remained free of infected herds since then. Ongoing surveillance is critical to ensure that, if bovine TB enters California’s cattle, it is quickly detected and prevented from spreading with the goal of keeping animals and humans healthy. Surveillance is conducted both on live animals via an intradermal skin test and on cattle at slaughter where every carcass is visually examined for lesions or growths (granulomas) consistent with the disease.

BOVINE TB SURVEILLANCE ON CALIFORNIA’S CATTLE: JANUARY 1, 2019 – SEPTEMBER 30, 2020

| | |
|---|----------------|
| Live Cattle Tested | 155,513 |
| Granuloma Samples Collected From Cattle at Slaughter | 919 |

Brucellosis is another serious bacterial infection of cattle. Brucellosis affects thousands of people worldwide causing severe symptoms both at the time of initial infection, as well as with recurring persistent symptoms that can lead to lifelong debilitation. In the US annually 100–120 human infections are reported. 70–75% of these infections are caused by ingestion of unpasteurized dairy products imported from countries where brucellosis is endemic. Avoiding ingestion of unpasteurized dairy products and taking precautions when working with animals or in a laboratory helps to prevent people from becoming infected with brucellosis. California attained “Bovine

Brucellosis Free” status in 1997 after decades of disease control through vaccination and removal of infected cattle. We maintain a vaccination and surveillance program to protect our livestock and human populations and ensure the disease never again becomes endemic in California.

Due to the tremendous effort of surveillance and eradication, CA plans to remove the requirement of brucellosis vaccinations of replacement beef heifer calves in 2021. Dairy replacement heifer calves are not exempt and still require the brucellosis vaccination.

BOVINE BRUCELLOSIS SURVEILLANCE ON CALIFORNIA’S CATTLE: JANUARY 1, 2019 – SEPTEMBER 30, 2020

| | |
|-----------------------------------|----------------|
| Live Cattle Tested | 10,218 |
| Cattle Tested at Slaughter | 140,950 |

| | |
|--|------------------|
| NUMBER OF CALVES VACCINATED AGAINST BRUCELLOSIS: JANUARY 1, 2019 – SEPTEMBER 30, 2020 | 1,503,719 |
|--|------------------|

Bovine Trichomonosis a venereal disease of cattle that leads to devastating economic losses due to abortions and extended calving seasons. While cows generally clear the infection after two (2) to three (3) heat cycles, bulls will remain persistently infected and spread infection from cow to cow during natural service. Bulls over four (4) years old are typically the main reservoir of infection in a herd. There is no treatment for a trichomonosis

infection. The cattle industry designed program relies on surveillance testing of bulls. Trichomonosis tested bulls are identified by having an official ID tag and a second tag that is color coded for the year of testing. It is important to find affected herds and remove infected bulls. These practices help to decrease the spread and financial impact of the disease on California cattle herds.

CALIFORNIA TRICHOMONOSIS INFORMATION: JANUARY 1, 2019 – SEPTEMBER 30, 2020

| | |
|--|---------------|
| Number of Bulls Tested | 19,485 |
| Number of California Trich Tags Distributed | 25,150 |



Scrapie is a fatal, degenerative disease affecting the central nervous system of sheep and goats. It is among several diseases classified as transmissible spongiform encephalopathies, like “Mad Cow Disease,” and infections can be economically devastating to producers. The eradication program relies on surveillance testing followed by removal of infected animals to prevent disease spread.

NUMBER OF CALIFORNIA SHEEP TESTED FOR SCRAPIE: JANUARY 1, 2019 – SEPTEMBER 30, 2020

| | |
|---------------------|--------------|
| At Slaughter | 925 |
| On Farm | 77 |
| Total | 1,002 |

NUMBER OF GOATS TESTED FOR SCRAPIE: JANUARY 1, 2019 – SEPTEMBER 30, 2020

| | |
|---------------------|------------|
| At Slaughter | 137 |
| On Farm | 185 |
| Total | 322 |

Regulated diseases affecting swine populations include **Pseudorabies** and **Brucellosis**, both diseases that have been eradicated from commercial herds but exist and can be reintroduced through exposure to feral swine. **Foot and Mouth Disease (FMD), Classical Swine Fever, and African Swine Fever** are devastating foreign animal diseases (FAD) that will have major impacts on the swine industry if introduced into the U.S. Diligent and continuous surveillance for these diseases is critical to ensure rapid detection and response to disease.



SWINE HEALTH SURVEILLANCE

| | | |
|--|--|--------------|
| Number FAD Investigations on Pigs to rule out FMD | | 1,428 |
| Number Domestic Pigs Sampled at Slaughter | For African and Classical Swine Fever | 651 |
| | For Pseudorabies and Brucellosis | 450 |
| Laboratory Samples Tested from Domestic Pigs | For Brucellosis | 386 |
| | For Pseudorabies | 394 |
| Number Feral/High Risk Pigs Sampled for Classical Swine Fever | | 202 |



PROTECTING CALIFORNIA'S 534,500 HORSES

The Animal Health Branch is a national leader in addressing situations which threaten the health of the equine industry. It is the Branch's responsibility to react promptly to threatening situations and address equine diseases of concern. Private equine veterinary practitioners across the state are trained to identify and report clinical signs or positive test results for these diseases to the Branch Equine Veterinary Specialist. If confirmed, the Veterinary Specialist coordinates with AHB District staff to respond and quarantine the animals if necessary. Two (2) equine specific advisory committees, namely the **Equine Advisory Committee** and the **Equine Medication Monitoring Program Advisory Committee**, assist the State Veterinarian and the Secretary of Agriculture in making informed



decisions on equine health. The committees are comprised of some of the nation's most respected practicing veterinarians, researchers, scientists, and industry leaders.

NUMBER OF CASES OF REPORTABLE EQUINE DISEASES BY YEAR

| Year | Equine Infectious Anemia (EIA) | Equine Piroplasmosis (EP) | EIA/EP Dual Infection | Contagious Equine Metritis (CEM) | Equine Herpes Virus-1 (EHV-1) | West Nile Virus (WNV) | Totals |
|---------------|--------------------------------|---------------------------|-----------------------|----------------------------------|-------------------------------|-----------------------|------------|
| 2010 | 1 | 3 | 0 | 1 | N/A | 19 | 24 |
| 2011 | 1 | 0 | 0 | 0 | 35 | 15 | 51 |
| 2012 | 1 | 0 | 0 | 0 | 22 | 16 | 39 |
| 2013 | 9 | 7 | 2 | 4 | 4 | 8 | 34 |
| 2014 | 26 | 14 | 8 | 0 | 3 | 15 | 66 |
| 2015 | 3 | 0 | 0 | 0 | 5 | 19 | 27 |
| 2016 | 0 | 0 | 0 | 0 | 20 | 21 | 41 |
| 2017 | 1 | 0 | 0 | 0 | 5 | 21 | 27 |
| 2018 | 0 | 0 | 0 | 0 | 13 | 11 | 24 |
| 2019 | 0 | 0 | 0 | 0 | 17 | 15 | 32 |
| 2020 | 1 | 0 | 0 | 0 | 23 | 20 | 44 |
| TOTALS | 43 | 24 | 10 | 5 | 147 | 180 | 409 |

EQUINE MEDICATION MONITORING PROGRAM (EMMP): MONITORING HORSES AT EVENTS, SHOWS, AND COMPETITIONS

California is the only state with an industry-funded program for drug testing targeting sample collections from horses entered in public equine events. The California equine industry sponsored legislation in 1971 to prevent misuse of drugs and medications in equines (horses, ponies, mules, and donkeys) in public shows, competitions, and sales. The intent of the **Equine Medication Monitoring Program (EMMP)** is to ensure the integrity of public horse shows, competitions, and sales through the control of performance-and disposition-enhancing drugs, and to allow limited therapeutic use of drugs at an equine event.

In 2016-2019, the average number of events registered and held under EMMP was 1,451 and 1,189 respectively with a cancellation rate of 18%. In 2020 a drastic decrease of equine events was noticed due to the influence of the COVID pandemic. Only 1,075 events were registered and only 520 held with a cancellation rate of 51%. During 2016-2019, an average of 103,000 horses per year were registered for sale or competition while in 2020, approximately 54,000 horses were registered instead indicating a 48% decrease.

Using an Average from 2016 – 2019:

Number of horses competing annually in CA: **103,568**

Number of events held annually: **1,190**

Number of events tested annually: **365**

EMMP Violations:

2018 - **Twenty-two (22) cases**

2019 - **Twenty-two (22) cases**

2020 - **Three (3) cases**



SECURE FOOD SUPPLY: HELPING PRODUCERS MAINTAIN CONTINUITY OF BUSINESS DURING AN ANIMAL DISEASE OUTBREAK

Program Vision: A Beacon of Hope - **The California Secure Food Supply (SFS)** program is the shield of enhanced biosecurity that protects California agriculture during a Foreign Animal Disease or Notifiable Animal Disease outbreak and provides a pathway to economic survival for the industry through conditions that provide safe, permitted movement of animals and animal products.

The SFS Program is designed to allow business operations that are unaffected by the disease (i.e. negative for the disease) but located within a quarantine Control Area to maintain some business operations to maintain economic viability.



KEY COMPONENTS OF THE SFS PROGRAM:

1. **Enhanced Biosecurity** – Heightened levels of biosecurity in all aspects of the food supply chain including farm premises, haulers, animal product processors, feed mills, and renders to stop the spread of disease amongst operations.
2. **Sampling (e.g. testing)** – Periodic and frequent testing to ensure negative status of a premises or operation.
3. **Flock or Herd Health Monitoring** – Daily health checks looking for signs of illness or increases in mortality.
4. **Training and Documentation** – Train employees and staff on biosecurity protocols; document all movements on and off the premises as well as maintenance and training logs.
5. **Permitted Movement of Animals and Animal Products** – Movement of animals and animal products may be allowed as long as all parts of the movement chain (origin, vehicle, destination) have completed steps 1–4.



CDFA STAFF HAVE DEVELOPED RESOURCES TO HELP PRODUCERS

- **Poultry Farm Comprehensive Biosecurity Plan** template to address daily and enhanced biosecurity to meet three (3) different state and one (1) federal regulatory program.
- **Job Aids** for producers, industry members, and regulatory auditors on program requirements.
- **Interactive Map-Making tool** to help producers create their premises biosecurity map.
- **Example Standard Operating Procedures** addressing key enhanced biosecurity practices.



56 STATE APPROVED POULTRY SECURE FOOD SUPPLY PLANS

- Poultry Farm Premises: **Thirty-one (31)**
- Processors: **Four (4)**
- Poultry Farm Premises with Processor on site: **Twelve (12)**
- Live Bird Markets: **Three (3)**
- Feed Mills: **Three (3)**
- Egg Distributor: **Two (2)**
- Bird Transfer Station: **One (1)**

MEXICO BORDER:

LIAISING WITH OUR SOUTHERN NEIGHBOR TO ENSURE HEALTHY LIVESTOCK

The California Department of Food and Agriculture (CDFA), Animal Health Branch (AHB) staff participate in the Binational Committees (BNC) on Bovine Tuberculosis, Brucellosis, and Cattle Fever Ticks. This includes regular telephone conference calls, and normally, twice yearly in-person meetings. The purpose of these committees is to facilitate the exchange of information between Mexican and U.S. federal agriculture officials, state agriculture officials, and cattle industries. The U.S. imports around one million head of Mexican feeder cattle each year, some of which go to feedlots in California. The Committees have worked for over **twenty-five (25)** years to facilitate cross-border trade in Mexican feeder cattle while at the same time mitigating the risk of introduction of cattle diseases.

Mexican cattle occasionally stray across the U.S.-Mexican border in San Diego County. AHB staff, in conjunction with U.S. Customs and Border Protection (CBP) and the United

States Department of Food and Agriculture (USDA), have participated in seizure, quarantine, testing for diseases such as bovine tuberculosis and brucellosis, inspection for cattle fever ticks, and communication with Mexican agricultural officials and cattle owners regarding these cattle. In the most recent case in 2020, the cattle were successfully returned to Mexico through efforts of USDA and CBP.

AHB staff participate in cross-border outreach to raise awareness about livestock and poultry diseases by manning a booth at the AgroBaja Agricultural Fair in Baja California with the Imperial County Agricultural Commissioner's office. In addition, AHB staff meet with Baja California livestock health officials. Bilingual Avian Health calendars, poultry disease information, and rabbit disease factsheets produced by CDFA have been distributed by AHB staff to feedstores in the U.S. Mexican border region of San Diego and Imperial Counties.



OUTREACH / EDUCATION / ACCREDITATION

Outreach, Education, and Accreditation, three (3) important steps toward maintaining a vigilant veterinary and support staff ready for emergency response and protection of our food supply. CDFA's Animal Health Branch provides ongoing collaborative training programs on several levels to make sure California's public and private veterinarians and their staff are ready to protect California's food supply.

OUTREACH

- Numerous fairs and agricultural events
- 4-H and FFA youth programs
- Cattle and equine health advisory boards
- Public health, environment, wildlife agencies
- International liaison efforts
- Private practitioner and laboratories
- Auctions, sales and markets
- Web and social media presence

EDUCATION

California Veterinary Schools:

CDFA is uniquely embedded within the curriculum in both veterinary schools within the state where AHB staff work with veterinary faculty to develop and deliver regulatory lectures, case-based scenarios, and hands-on laboratories.

ACCREDITATION AND LICENSING

Veterinarians can become accredited with the USDA and receive training on how to recognize foreign, emerging, and notifiable animal diseases in livestock.

Core and Supplemental Accreditation Seminars and Training Modules:

CDFA works alongside the USDA to deliver biannual accreditation lectures to California veterinarians.

License Curriculum Programs:

In collaboration with the CA Veterinary Medical Board, CDFA presents a state overview of regulatory medicine and animal emergency response structures as part of the twice-yearly offered California Curriculum Course in order to allow qualified veterinarians to obtain licensure in California.

VETERINARIANS IN CALIFORNIA

| | |
|--|--------|
| Currently licensed veterinarians in CA | 15,066 |
| Accredited veterinarians | 9,271 |
| Newly accredited veterinarians since January 1, 2019 | 688 |



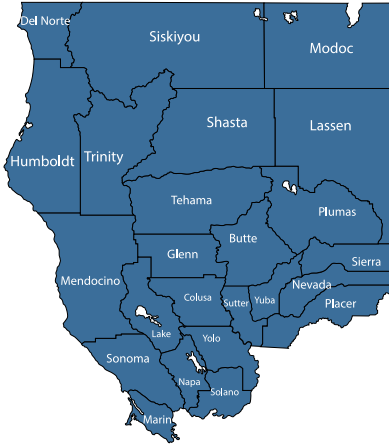
Outreach Booth at an Agricultural Event.

REDDING DISTRICT

DISTRICT STATS



24 Counties

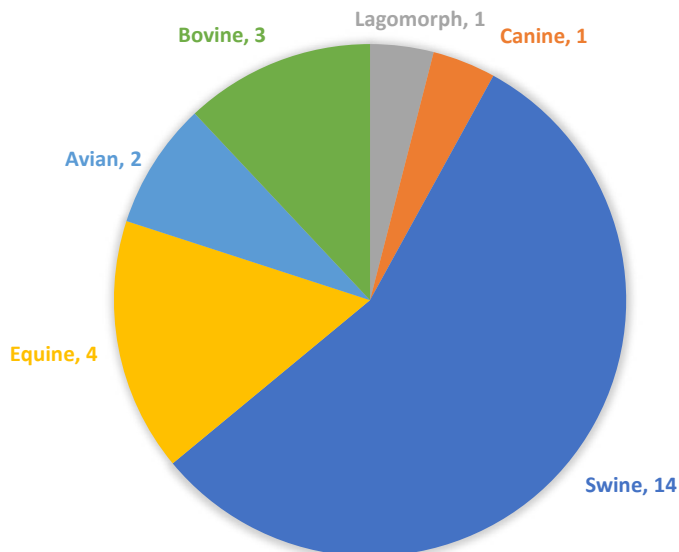


- Three (3) **CDFA Veterinarians**
- One (1) **CDFA Sr. Livestock Inspector**
- Two (2) **CDFA Livestock Inspectors**
- One (1) **Program Technician III**
- Two (2) **USDA Veterinarians**
- Three (3) **USDA Animal Health Technicians**

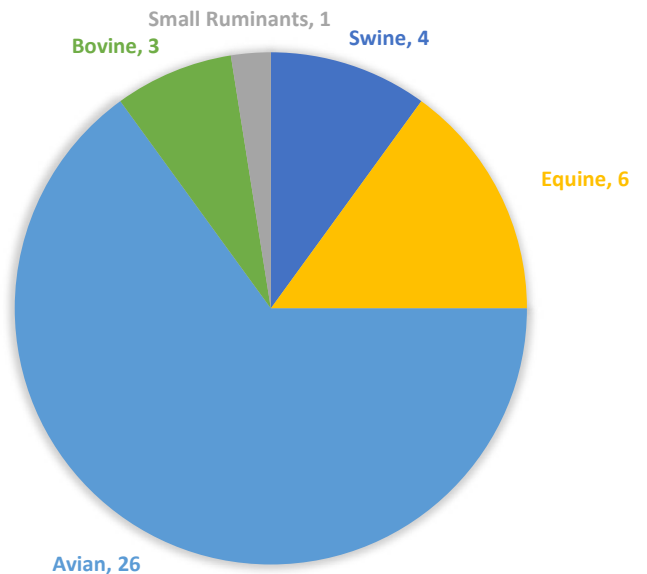
MAJOR WORKLOADS & ACCOMPLISHMENTS

- **Multiple vND Deployments** in the Operations Section. District Veterinarians were assigned to Operations Section Chiefs and Livestock Inspectors were assigned to Depopulation and Surveillance teams.
- **Enforcement of animal import requirements.** Routine Border Station visits by District Veterinarians and Livestock Inspectors: 375 compliance follow-ups.
- Along with a Special Investigator, **resolved multiple animal importation issues** involving improper documentation, testing, and permitting.
- **Disease investigations:**
 - Twenty-one (21) FAD investigations in USDA FY 19/20
 - Four (4) FAD investigations in USDA FY 20/21
 - Forty (40) Non-FAD, Non-Regulatory investigations

FADs



Non-FADs



- **Worked with UC Davis Extension and County Ag Commissioners on composting.** Along with Tulare District, Redding District cooperated with the University of Maine and CDFA Emergency Programs in developing a mammalian tissue composting trial.
- **Twenty-nine (29)** private practitioners were accredited.
- Completed National Animal Health Monitoring Service survey on over **forty (40)** goat herds.
- **Comparative Cervical follow-up testing** on cattle Tuberculosis suspects.
- **Inspections of our five (5) Livestock Auctions** for ID compliance and USDA certification.
- **Garbage Feeding swine facility** monthly inspections.
- **Designated Essential Workers:** Wildfires, COVID-19, inclement weather and power outages interfered with district work, but did not prevent it.
- **Promotion and Instruction** on the Antibiotic Use & Stewardship program.

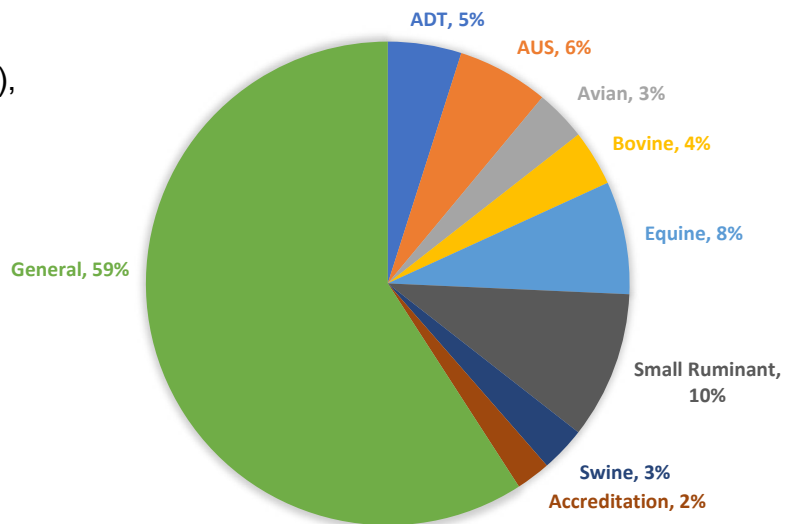
OUTREACH

Outreach continues to be one of the primary duties. Daily interaction with Private Practice Veterinarians, Producers, UC Extension, School Ag Programs (4-H and FFA), and Law Enforcement.

New **Animal Disease Traceability** official animal identification requirements and **Radio Frequency ID** tag distribution were major component of veterinarian and producer outreach in 2019 and 2020. Instruction was given on the necessary technology for the use and reporting of the RFID tags.



1,260 CONTACTS



Communication with California Animal Health and Food Safety Laboratory on disease issues and follow up on regulatory diseases:

- **17** Positive trichomonosis herd investigations
- **1,116** Trichomonosis test accessions
- **9,788** Bulls tested for trichomonosis
- **9,729** Bulls negative for trichomonosis
- **36** Bulls positive for trichomonosis
- **32** Bulls indeterminant for trichomonosis
- **Seven (7)** Suspect positive Equine Infectious Anemia samples: All negative on confirmatory testing.
- **Three (3)** Positive Equine Herpes Myeloencephalopathy cases

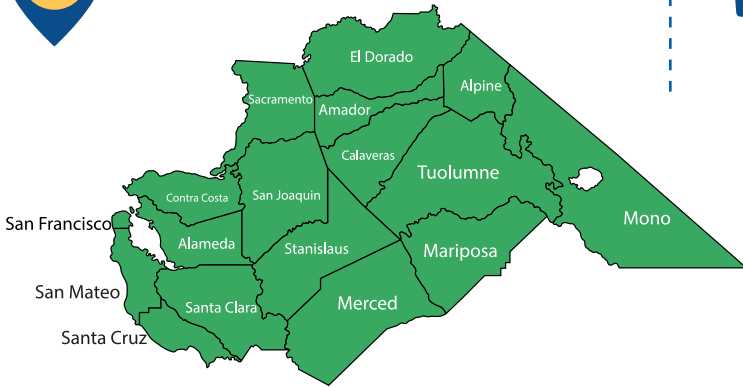


MODESTO DISTRICT

DISTRICT STATS



17 Counties



- Three (3) **CDFA Veterinarians**
(1 vacant position)
- One (1) **CDFA Sr. Livestock Inspector**
- Two (2) **CDFA Livestock Inspectors**
(1 vacant position)
- One (1) **Program Technician III**
- One (1) **USDA Veterinarian**
- Three (3) **USDA Animal Health Technicians**

VIRULENT NEWCASTLE DISEASE (vND)

- There were **multiple deployments** of Modesto District Staff to the Southern vND eradication efforts
- There was a positive vND premise found via a private practitioner that resulted in a **collaborative effort** between AHB veterinarian and special investigator, and local law enforcement in attempts to locate remaining birds (if any) in the index flock since the owner was uncooperative. Although the balance of the flock was not found (and was likely dead) epidemiologic contact birds and additional pullets raised by the owner were found, tested negative, and euthanized. No spread was detected.

FOREIGN ANIMAL DISEASE (FAD) INVESTIGATIONS

District Veterinarians follow up on all potential foreign animal disease investigations. There was a total of **751** FAD Investigations during the fiscal year:

- 734 (98%) Porcine, 100% diagnosed as Seneca Valley Virus (SVV)
- Three (3) Bovine, Four (4) Equine, Five (5) Avian, Five (5) Rabbit (4 domestic, 1 wild)



Severe Bovine Papular Stomatitis in a heifer



Snout Vesicle - Seneca Valley Virus

Total miles traveled
58,747

Total hours spent for these investigations
2,484

NON-FAD INVESTIGATIONS OF INTEREST

Botulism in a Dairy herd: A private practitioner reported a suspect botulism case in a dairy milking approximately **1,000 cows**. Necropsies were performed on a couple of dead cows. Of course, this happened on a Saturday and a definitive diagnosis of botulism is very difficult in ideal circumstances and samples would not be able to get to the San Bernardino laboratory in a timely manner. Through collaboration with the CAHFS laboratory in San Bernardino we drove the samples down at 2:00 am on Sunday morning to expedite the diagnostics. The efforts were successful and Botulism type C was confirmed. Milk from the affected string was discarded during the die off, a total of **twenty-two (22)** cows died.



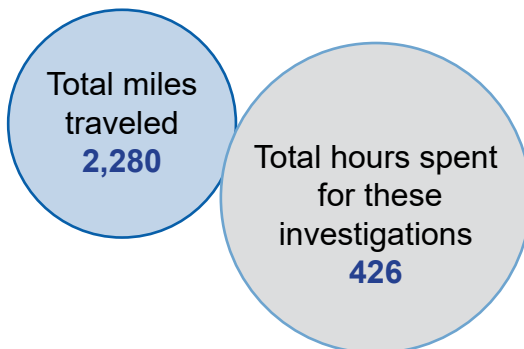
Suspected Botulism Cow

Unexplained Death loss in Range Goats: A district veterinarian followed up on a goat herd from which **thirty (30)** goats died over a short period of time. Toxic plants were the likely source of the death loss, but definitive confirmation was not achieved.



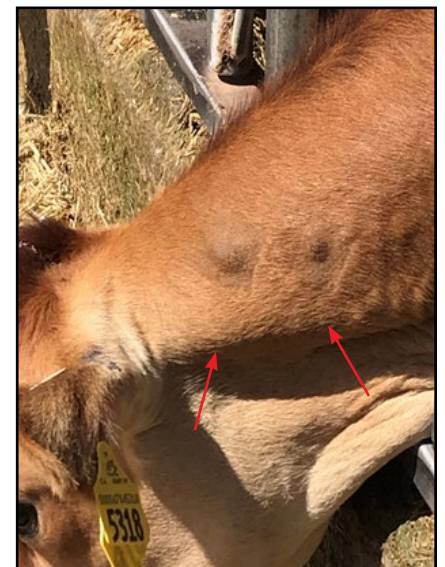
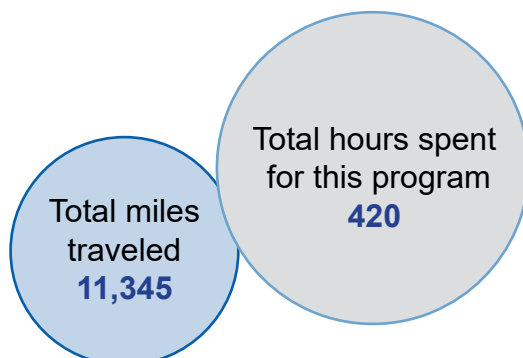
Range Goats

Sick Bird Calls: There were a total of **sixty-six (66)** sick bird calls (“backyard” birds), most of which were directed to the district from the Sick Bird Hotline.



COMPARATIVE CERVICAL TESTING (CCT)

District veterinarians made **160 farm visits** to administer CCT tests (391 head) to follow-up on private practitioner TB testing.



Comparative Cervical Test on “read-day”

SMALL RUMINANTS

Goat National Animal Health Monitoring Service (NAHMS)

- District personnel surveyed **forty-nine (49)** goat herd owners.
 - Questionnaire and follow-up biologics sampling completed on participating herds.

Scrapie Surveillance

A total of **1,064 sheep and 200 goat heads** were examined, with 155 sampled, respectively. All samples were negative.

Total miles traveled
9,193

Total hours spent for these programs
797

SWINE

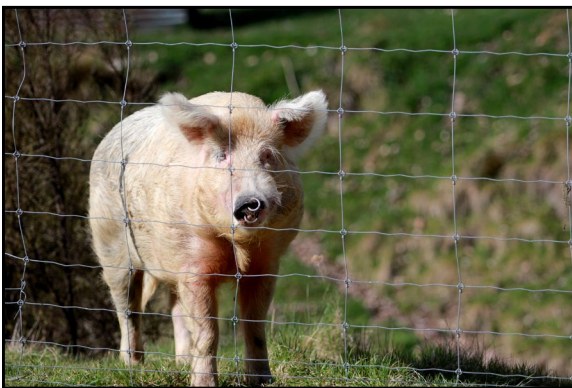
Pseudorabies (PRV) Herds

- There were **two (2)** PRV-infected herds, one (1) located in Tuolumne County and one (1) located in San Benito County (Tulare District) that were depopulated.
 - The herd in Tuolumne County was derived from the San Benito county herd – the source of the infection was feral swine.
 - Controlled marketing of market hogs over time and euthanasia and burial at landfill for the breeding herd.
- This took a lot of collaboration with landfill and slaughter facility owners/managers.
- Removed swine were indemnified using values established from prior market prices.



Risk Analysis – FMD Introduction from Landfill Feral Swine

- Ongoing effort in collaboration with USDA -Wildlife Services and UC Davis.
- A district veterinarian visited bay area landfills, trappers, etc.



Swine Flu (CSV) Surveillance

A total of **200 tonsil samples** were collected from a local slaughter plant and submitted for CSV surveillance. We work very closely with this plant on many endeavors and assist them with processing the samples and expediting the paperwork.

Total miles traveled
2,552

Total hours spent for these programs
195

AVIAN

Live Bird Markets:

- Routine Sampling: A total of **155 facility visits**, 434 sample submissions:
 - Weekly sampling – 197 submissions
 - Monthly sampling – 203 submissions
 - Quarterly sampling – Thirty-four (34) submissions
- Down Day Inspections – Twenty-four (24) inspections

Avian Calendar Outreach

District personnel drove **2,086** miles and spent **156** hours distributing **12,000** calendars and doing outreach to **156** premises.



LIVESTOCK AUCTIONS

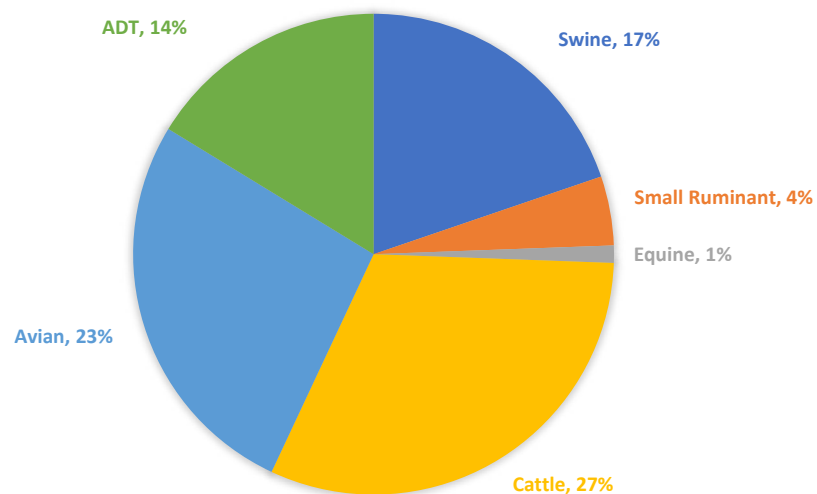
District Livestock Inspectors are assigned and visit **sixteen (16)** auctions every week.



OUTREACH

In addition to the outreach efforts listed above, there were **473** additional outreach events during the fiscal year.

Outreach

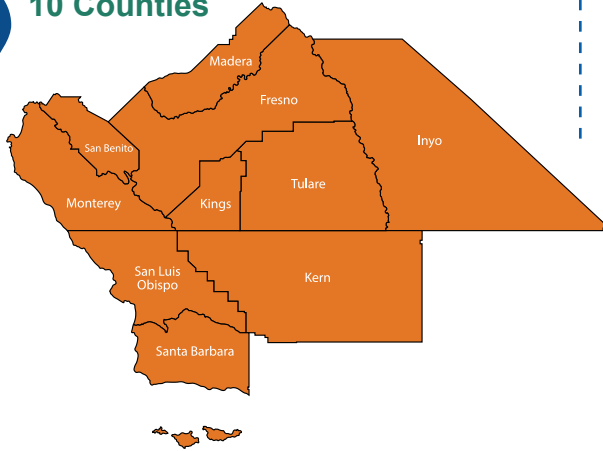


TULARE DISTRICT

DISTRICT STATS



10 Counties



Three (3) **CDFA Veterinarians**
(2 vacant positions)

Two (2) **CDFA Sr. Livestock Inspectors**

Three (3) **CDFA Livestock Inspectors**

One (1) **USDA Veterinarian**

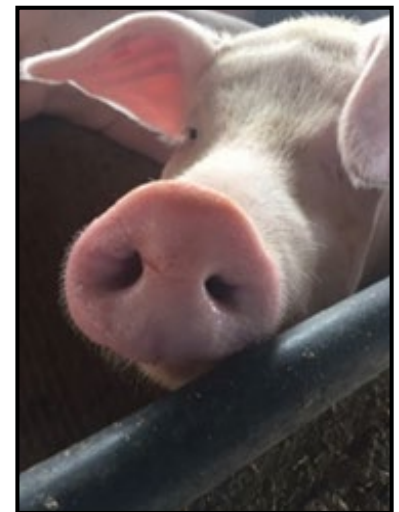
Four (4) **USDA Animal Health Technicians**

FOREIGN ANIMAL DISEASE (FAD) INVESTIGATIONS

Tulare continues to conduct at least **one (1)** FAD investigation per week on imported slaughter pigs at a Fresno slaughterhouse. Other FAD investigations have included Vesicular Stomatitis, Rabbit Hemorrhagic Disease, Highly Pathogenic Avian Influenza, and Virulent Newcastle Disease.

VIRULENT NEWCASTLE DISEASE (vND) ERADICATION

Tulare staff supported the vND eradication efforts in So. Cal with **numerous deployments** to the IMT in Ontario and Riverside from the Spring of 2018 through the Winter of 2020. Every Tulare staff member deployed at some point. Some outstanding responders were Diane Luiz with eight (8) deployments, Vickie Conger with thirteen (13), and Dr. Ledbetter with fifteen (15).



Swine Health



Team Meeting Prior to Livestock Surveillance

SECURE FOOD SUPPLY PLAN

Given the importance/necessity of Secure Food Supply Plans as evidenced in the vND outbreak, Tulare has continued to be a **resource for producers** interested in developing their own plans. Additionally, staff has worked closely with industry critical points such as slaughter plants and feed mills to ensure readiness in the event of a disease outbreak in the Central Valley.

TUBERCULOSIS TESTING

Tulare staff was pleased to conduct the 5th and final annual follow up test on the last positive TB herd in California in the Fall of 2019. To overcome government travel bans, Tulare stepped up and helped facilitate two (2) Comparative Cervical Test (CCT) trainings, normally conducted by the USDA in Ames, Iowa. In March 2020, three (3) new CDFA veterinarians and one (1) USDA veterinarian received training necessary to conduct CCT tests and in October 2020, three (3) additional new CDFA and two (2) USDA veterinarians were trained. All of the veterinarians appreciated getting a taste of Tulare's substantial dairy industry.

In spite of COVID-19 and a reduced staff due to retirements/departures, Tulare District has been able to keep up with normal inspecting and testing demands. Long time Tulare District Livestock Inspectors, Greg Sammons and Todd Perez retired this past spring. Former AHB HQ Livestock Inspector, Vickie Conger, stepped up to replace Greg as our Senior Livestock Inspector and we have just hired Madera resident, Katie McDougald to replace Todd.



TB Testing a Dairy Herd



Tulare District Staff

ONTARIO DISTRICT

DISTRICT STATS



7 Counties



- Four (4) **CDFA Veterinarians**
- One (1) **CDFA Sr. Livestock Inspector**
- One (1) **CDFA Livestock Inspector**
- One (1) **Agriculture Technician I**
- Three (3) **USDA Veterinarians**
- Two (2) **USDA Animal Health Technicians**

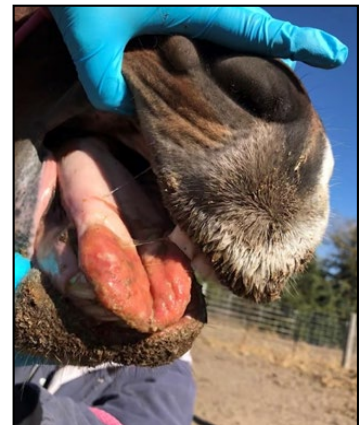
Virulent Newcastle Disease was detected in Ontario District in May 2018 and successfully eradicated in June 2020. In addition to participating in the disease control efforts, Ontario District staff performed the following activities:

152
Private Practitioner Accreditations

DISEASE INVESTIGATIONS

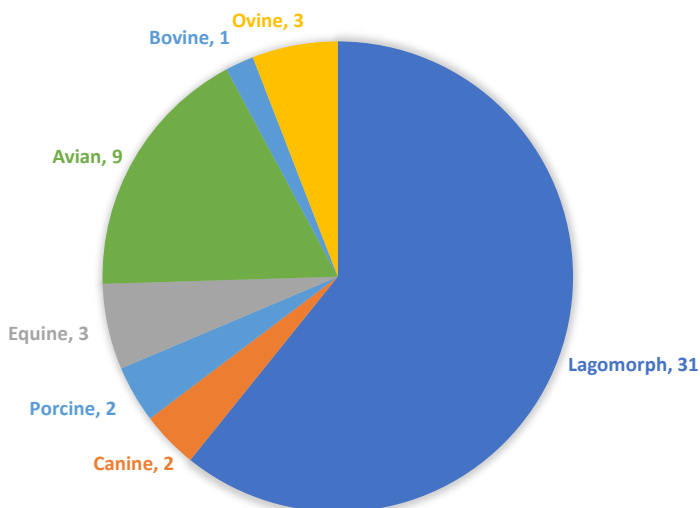
Fifty-one (51) FAD investigations in USDA FY 19/20 and USDA FY 20/21

Eighty (80) Non-FAD, Non-Regulatory investigations

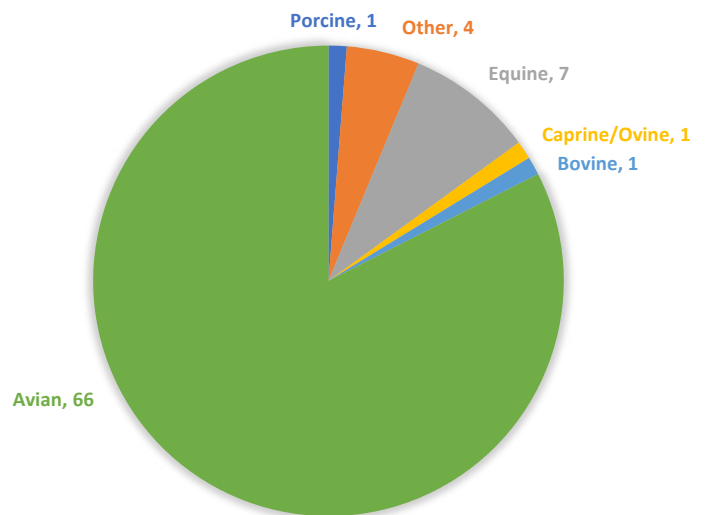


Tongue Lesions in a Horse

FADs



Non-FAD/Regulatory



FOUR EQUINE HERPES MYELOENCEPHALOPATHY (EHM) /EQUINE HERPESVIRUS OUTBREAKS

Equine Herpesvirus Myeloencephalopathy (EHM) is another name for the neurologic disease associated with equine herpesvirus (EHV) infections. Neurological signs appear as a result of damage to blood vessels in the brain and spinal cord associated with EHV infection. Interference with the blood supply leads to tissue damage and a subsequent loss in normal function of areas in the brain and spinal cord. Ontario District staff provided onsite risk assessment, biosecurity education and enforcement, affected horse isolation plans and protocols, and collaboration with private practitioners for sample submission to California Animal Health and Food Safety Laboratory.

One (1) quarantine premises with EHV-1 Neuropathogenic form in San Bernardino county.

Two (2) quarantined premises with non-neuropathogenic EHV-1 causing neurological signs, one (1) in Los Angeles County and one (1) in Ventura county.

One (1) quarantined premises in Imperial county with EHV-4 causing neurological signs.



Blood Being Drawn from a Horse for Disease Investigation

RABBIT HEMORRHAGIC DISEASE

The **first positive domestic rabbits** in California were detected in San Bernardino, Riverside, and Los Angeles counties. Ontario District staff quarantined and provided biosecurity guidance for affected premises.



ADT OUTREACH AND EDUCATION

- **Eighty-five (85)** dairy premises, **seven (7)** private practitioners, and **one (1)** calf ranch
- Distribution of over **50,000** RFID tags
- **Eight (8)** tagging site agreements

NATIONAL ANIMAL HEALTH MONITORING SYSTEM (NAHMS) SMALL RUMINANT STUDY

Surveyed and collected biological samples from **fourteen (14)** goat producers



TB Testing a Cow



Taking a Blood Sample from a Goat



Demonstrating the Allflex Smartphone App and Pocket Reader Used to Record Official Identification

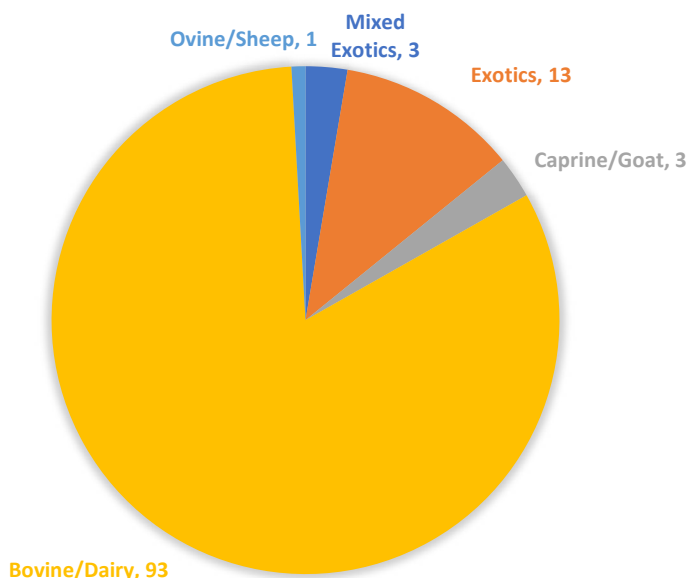
BOVINE TUBERCULOSIS

Comparative Cervical follow-up testing on Tuberculosis suspects: **Twenty-three (23)** tests with **113** animals tested

TRICHOMONOSIS

Twenty-six (26) tests/accessions with **102** bulls tested

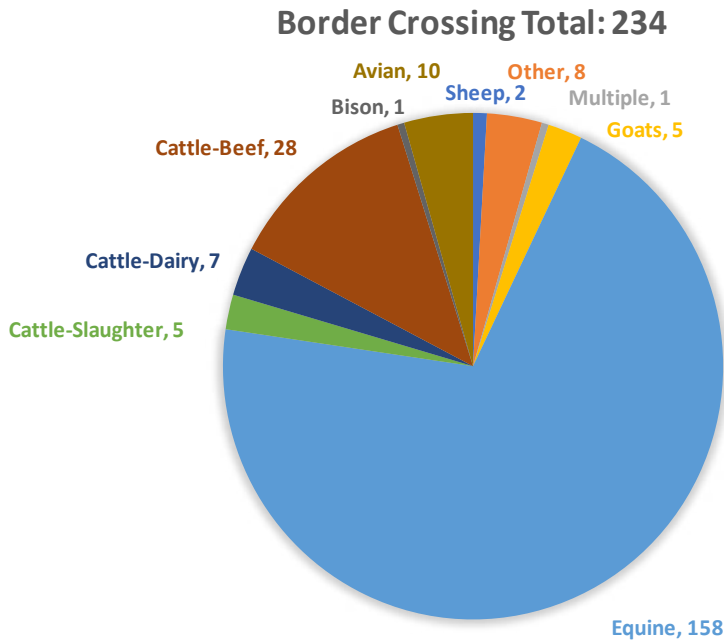
TB CCTs Total



ENFORCEMENT OF ANIMAL IMPORT REQUIREMENTS

234 routine border station investigations and follow-ups by District Veterinarians and Livestock Inspectors.

924 contacts with producers

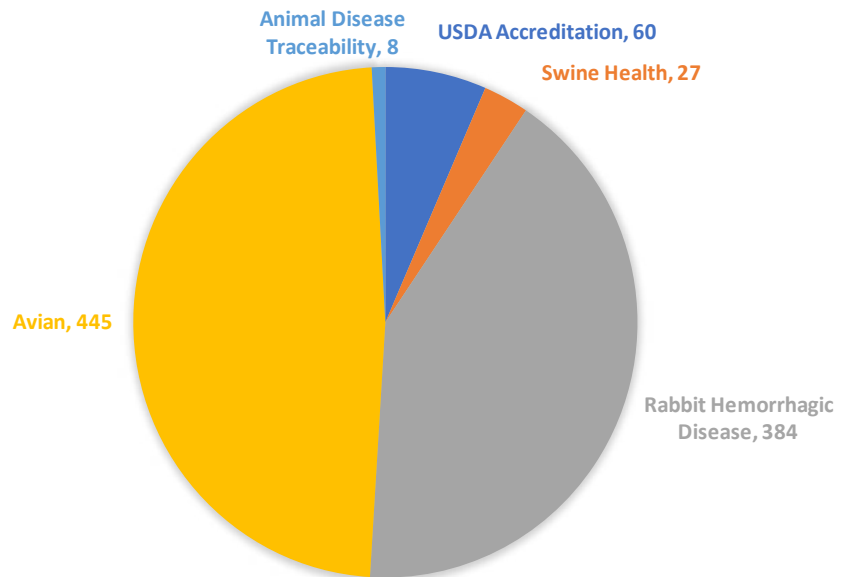


Disease Surveillance on a Goat Premises



*Dr. Andrea Mikolon;
U.S. Mexico Liaison*

Outreach Contacts Total: 924



OUTREACH

Developed the **two (2)** Rabbit Hemorrhagic Disease outreach and education factsheets and provided outreach to Southern California Feedstores, Animal Control Agencies, and Veterinary Clinics in seven (7) counties.



Developed a power point presentation on **RFID application** and capturing data with the **Allflex smartphone application** for bovine private practitioners.



Developed **Sick Swine Reporting** factsheet



Provided **biosecurity recommendations** and collaborated with San Bernardino and Riverside County officials, and animal control in a press release to notify the surrounding equine communities of an Equine Influenza outbreak in **wild burros**.



ANIMAL HEALTH BRANCH DIRECTORY

AS OF DECEMBER 2020

SACRAMENTO HEADQUARTERS

2800 Gateway Oaks Drive
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Le, Tue
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Velez, Angelina
Webster, Hector, DMV, MS

Title

Veterinarian General
Veterinarian General
Livestock Inspector
Branch Chief
Senior Livestock Inspector (Specialist)
Agricultural Program Supervisor I
Research Scientist II
Associate Governmental Program Analyst
Associate Governmental Program Analyst
Livestock Inspector
Veterinarian Specialist
Special Investigator
Supervising Veterinarian
Veterinarian Specialist
Research Scientist II
Management Services Technician
Associate Governmental Program Analyst
Office Technician (Typing)
Office Technician (Typing)
Veterinarian Specialist
Associate Governmental Program Analyst
Research Program Specialist II

EMERGENCY PREPAREDNESS RESPONSE SECTION

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Faulk, Jessica
Femino, Andy
Fong, Rachelle
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Johnson, Mandy
Johnson, Nick
Lalum, Robert
Novelich, Nicholas
Quiroz, Lisa
Soberano, Gustavo, DVM, MPVM, DACVPM
Villalobos, Diego

Program Manager II
Research Scientist III
Research Analyst I
Associate Governmental Program Analyst
Research Program Specialist I
Associate Governmental Program Analyst
Research Scientist III
Senior Emergency Services Coordinator
Livestock Inspector
Senior Environmental Scientist Specialist
Senior Emergency Services Coordinator
Program Manager II
Supervising Veterinarian
Research Data Analyst II

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Mott, Meghan, DVM
Poulos, Michael, DVM
Shepherd, Stacey
Spiker, Mike
Wong, Stacy, DVM

Title

USDA Animal Health Technician
USDA Veterinary Medical Officer
Livestock Inspector
USDA Veterinary Medical Officer
USDA Animal ID Coordinator
Veterinarian General
Livestock Inspector
USDA Animal Health Technician
Veterinarian General
Veterinarian in Charge
Program Technician III
Senior Livestock Inspector (Specialist)
USDA Veterinary Medical Officer

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Granholm, Deanna
Konciewicz, Angelina
Lopez, Justin
Lytle, Carla, DVM
Mcelveen, Freddrianna, DVM
Shepherd, Lacy

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Livestock Inspector
Program Technician III
USDA Animal Health Technician
Veterinarian General
USDA Veterinary Medical Officer
Livestock Inspector

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Schonmann, Marcello, DVM, MPVM
Sumpter, Debra

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Staff Services Analyst
USDA Animal Health Technician
Livestock Inspector
Senior Livestock Inspector (Specialist)
Livestock Inspector
Veterinarian in Charge
Veterinarian General
Senior Livestock Inspector (Specialist)
USDA Animal Health Technician
Livestock Inspector
USDA Veterinary Medical Officer
USDA Animal Health Technician
Veterinarian General
USDA Animal ID Coordinator

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Garbaba, Andrea, DVM
Genes, Kym
Gusman, Lani, DVM
Kloepfel, Joshua, DVM

Title

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Agricultural Technician I
USDA Veterinary Medical Officer
Senior Livestock Inspector (Specialist)
USDA Animal Health Technician
Veterinarian General
USDA Animal Health Technician
Veterinarian General
Veterinarian General

Loc, Raymond, DVM
Lopez, Daysi
Lopez, Warren
Marquez, Robert
Mikolon, Andrea, DVM, MPVM, PhD
Olmstead, Alisha, DVM
Short, Davina

USDA Veterinary Medical Officer
Associate Governmental Program Analyst
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Veterinarian Specialist
Veterinarian in Charge
Office Technician

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Ikelman, Ann, DVM
Johnson, Phillip
Marcelino, Erika
Marquez, Lupe
Mendoza, Monique "Destiny"
Quezada, Olga
Rivera, Charlene, DVM
Serrano, Onica
Solis, Marco
Sterba, Elise
Tabares, Lydia

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Livestock Inspector
Veterinarian General
USDA Animal Health Technician
Livestock Inspector
USDA Animal Health Technician
USDA Animal Health Technician
Agricultural Technician III
Veterinarian General
Supervising Veterinarian
Agricultural Technician III
Agricultural Technician III
USDA Animal Health Technician
Agricultural Technician III
Associate Governmental Program Analyst
Veterinarian General
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Livestock Inspector
USDA Animal Health Technician
USDA Animal Health Technician

ANIMAL HEALTH BRANCH

