



MOSQUITO and VECTOR MANAGEMENT DISTRICT of SANTA BARBARA COUNTY

DISEASE SURVEILLANCE REPORT

November 2019

Live Mosquito-Borne Virus Surveillance

No trapping was conducted in November because the 2019 mosquito trapping season ended in October. Traps may be deployed during the off season for specific situations if necessary. Technicians focused their efforts on pre-treatment of low-lying sites that typically flood after fall and winter rains. Staff will continue to inspect and treat for mosquitoes when necessary during the fall and winter. Next year's trapping season begins in April 2020.

West Nile Virus Activity

One dead house sparrow in Lompoc was reported to the Dead Bird Hotline but was not picked up because the reporting party didn't respond to follow up calls for confirmation. The Dead Bird Hotline is not currently taking live calls during the fall and winter but citizens can file a report online at: http://www.westnile.ca.gov/report_wnv.php. Callers to the hotline will be directed to file an online report as well. The District will pick up dead birds for testing during this period if necessary.

The number of human WNV cases in California increased from 178 to 196 with 130 of these cases having neuroinvasive disease, of which six have been fatal. Kings (2), Placer (1) and Santa Clara (1) counties each reported their first human cases of WNV infection for 2019. As of November 22, 20 other counties have reported human WNV infection: Amador (1), Butte (5), Colusa (1), Fresno (49), Imperial (3), Kern (23), Los Angeles (29), Madera (2), Merced (10), Orange (5), Riverside (10), Sacramento (2), San Bernardino (5), San Diego (2), San Joaquin (7), San Luis Obispo (2), Solano (1), Stanislaus (16), Tulare (17) and Ventura (2).

There have been 15 reported cases of infected horses in 12 counties this year: Fresno (2), Kern (2), Madera (1), Merced (1), Riverside (1), Sacramento (1), San Bernardino (1), San Joaquin (1), Stanislaus (2), Tulare (1) Tuolumne (1) and Ventura (1).

No WNV activity of any kind has been detected in Santa Barbara County this year, to date.

St. Louis Encephalitis Virus Activity

California Department of Public Health (CDPH) reported one human case of SLEV infection from Stanislaus County. There have been 5 other reported human cases of SLEV illness this year from 3 counties: Fresno (2), Imperial (2), and Kern (1). Riverside County had the only positive mosquito pool in November. There have been 356 other positive mosquito pools reported in 2019 from 12 other counties: Fresno (58), Imperial (5), Kern (56), Kings (4), Los Angeles (2), Madera (5), Merced (2), Orange (3), Riverside (108), San Bernardino (4), Stanislaus (13), and Tulare (96). SLEV activity has never been confirmed in Santa Barbara County, to date.

Zika Virus and Invasive *Aedes* Mosquito Update

As of December 1, there have been 744 travel-associated Zika virus infections in California since 2015 with 39 cases reported so far in 2019. Nine new infections in California were reported in November. Neither yellow fever mosquitoes, *Aedes aegypti*, nor Asian tiger mosquitoes, *Ae. albopictus* (both known vectors of the Zika virus) have ever been detected in Santa Barbara County, to date. However, invasive *Aedes* are present in the following counties: Los Angeles, Orange, San Diego, Riverside, San Bernardino, Imperial, Kern, Kings, Fresno, Madera, Merced, San Joaquin, Placer, Sacramento, Stanislaus and Tulare.

Western Equine Encephalitis

There was no reported WEE activity in California for November.

Sentinel Chicken Flocks

The District maintains 5 sentinel chicken flocks in Santa Barbara County located at the Carpinteria Sanitary District, Goleta Sanitary District, Mission Hills Community Services District, Los Prietos Ranger Station in the Los Padres National Forest and the Solvang City Wastewater Treatment Plant. Blood samples collected from chickens on 11/12 and 11/13 all tested negative for the presence of WNV, SLEV and Western Equine Encephalitis virus. Starting in November, blood samples are collected once per month continuing through March 2020. The flock at the Ranger Station will be retired in December due to low average winter temperatures at this site.



Myxomatosis, a highly fatal disease in pet rabbits

Myxomatosis is a viral disease of rabbits that is nearly 100% fatal for domesticated rabbits in California. Unfortunately, infections do occur locally. Rabbits get the virus from the bites of mosquitoes, fleas, midges, mites, and lice. The virus is spread mechanically by a vector's mouthparts. This is unlike many other disease organisms that must propagate and circulate within a specific host before it is transmitted. Myxomatosis can also be spread by people who have handled a diseased rabbit, from direct contact with infected rabbits, and by items that have the virus on them such food or water dispensers. Signs of infection include swollen eyes, fever, discharge from the eyes and nose, swelling at the site where the virus was introduced, lethargy and lack of appetite. The virus does not affect humans or other animals. There is a vaccine for myxomatosis which contains a live virus but it does not have Federal approval for use in the U.S. Preventative measures include keeping pet rabbits indoors, letting them out only in the middle of the day when mosquitoes are least active, covering outdoor cages and hutches with fine mesh screening to keep biting insects out, and avoiding contact with infected rabbits.