



## MOSQUITO and VECTOR MANAGEMENT DISTRICT of SANTA BARBARA COUNTY

# DISEASE SURVEILLANCE REPORT

**September 2019**

### Live Mosquito-Borne Virus Surveillance

Trap catch numbers were high in areas near coastal marshes and lagoons. Warm to hot daytime temperatures and mild nighttime temperatures provided favorable conditions for continual mosquito activity. In residential areas, stagnant water created by “urban drool” (water runoff from irrigation, leaks, vehicle and sidewalk/driveway washing, etc.) continued to serve as mosquito sources. Fountains, bird baths, ornamental ponds, various types of containers in yards, neglected swimming pools, etc. also provide prime mosquito production sites.

Location	Date	Number of Mosquitoes	Number of Traps	Mosquitoes per Trap Night	Pools Submitted	Result
<b>Santa Barbara County</b>						
UCSB/SB Airport Bluffs*	9/10 – 9/11	991	12	83	20	Negative
Devereaux Slough*	9/11 - 9/12	150	12	12.5	3	Negative
Jalama Beach County Park*	9/18 – 9/19	7	5	<2	None	---
Gaviota Rest Area, South Bound	9/18 – 9/19	1	1	1	None	---
Refugio State Beach	9/18 – 9/19	78	3	26	2	Negative
El Capitan State Beach	9/18 – 9/19	1	2	<1	None	Negative
UCSB/SB Airport Bluffs	9/25 – 9/26	509	12	42	3	Negative
<b>San Luis Obispo County</b>						
Producer’s Ditch, SLO <sup>a</sup> *	9/24 – 9/25	113	2	56.5	5	Negative
Johnson Park/YMCA, SLO*	9/24 – 9/25	1	1	1	None	---
Sinsheimer Park*	9/24 – 9/25	36	4	~8	2	Negative
Fixlini Ave. x Johnson St., SLO*	9/24 – 9/25	9	1	9	None	---
Laguna Lake Park	9/24 – 9/25	197	3	66	3	Negative

\*Encephalitis Virus Survey (CO<sub>2</sub>) trap

<sup>a</sup> 3567 – 3575 Sacramento Dr.

### West Nile Virus Activity

Three crows, one pigeon, one screech owl and one gull were reported to the Dead Bird Hotline. None met the criteria for testing (e.g. covered with ants, dead more than 24 hours, non-target species). The number of dead birds in California that have tested positive for WNV in 2019 nearly doubled in September from 91 to 175. Five counties reported WNV-positive birds for the first time in 2019 for an overall total of 18 counties that have reported infected birds. The Dead Bird Hotline will stop taking live calls for the fall and winter beginning Oct. 11. However, our District will continue to pick up dead birds during this period. Citizens can file a report online at: [http://www.westnile.ca.gov/report\\_wnv.php](http://www.westnile.ca.gov/report_wnv.php) Callers to the hotline will be directed to file an online report as well.

The number of human WNV cases doubled from 57 to 112, including 59 cases of neuroinvasive illness and 3 fatalities. Five counties reported human WNV cases for the first time this year: Amador (1) Merced (2) Madera (1) San Luis Obispo (1) and Orange (1). Other counties reporting cases of human WNV infection in California this year

are: Butte (4), Fresno (44), Imperial (3), Kern (12), Los Angeles (7), Riverside (5), San Bernardino (4) San Diego (3), San Joaquin (4), Solano (1), Stanislaus (9), Tulare (10). There have been 13 cases of infected horses in 10 counties this year: Fresno (2), Kern (2), Madera (1), Merced (1), Riverside (1), San Bernardino (1), San Joaquin (1), Stanislaus (2), Tulare (1) and Ventura (1). No WNV activity has been detected in Santa Barbara County this year, to date.

### **St. Louis Encephalitis Virus Activity**

CDPH reported single cases of humans infected with SLEV in Fresno and Kern counties adding to the three human cases reported in August (one in Fresno Co., 2 in Imperial Co.). Positive mosquito pools were reported for the first time from L.A., Madera, Merced, Orange, and San Bernardino counties. Fresno, Kern, Kings, Imperial, Riverside, Stanislaus and Tulare counties also had positive pools. A total of 320 positive mosquito pools have been reported in 2019, 142 from last month alone. SLEV activity has never been confirmed in Santa Barbara County, to date.

### **Zika Virus and Invasive *Aedes* Mosquito Update**

As of October 4, there have been 733 travel-associated Zika virus infections in California since 2015. Three new infections were reported in September. 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 reportable WEE activity in California for September.

### **Sentinel Chicken Flocks**

The District currently 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 on 9/4, 9/5, 9/16, and 9/17 all tested negative for the presence of WNV, SLEV and Western Equine Encephalitis virus.



Photo credit: San Mateo County Mosquito & Vector Control District

Tule mosquito, *Culex erythrothorax*

This reddish-orange mosquito with golden-yellow stripes on the abdomen is common in our region at many wetland sites such as the Andrée Clark Bird Refuge, Lake Los Carneros, Goleta Slough, and SB Airport marshes. It is known as the “tule mosquito” because females lay their eggs and the immatures complete their development in wetlands with dense stands of cattails and tules growing out of the water. Females bite at night seeking blood from birds and mammals, including humans, but do not fly far from their breeding sources. While the tule mosquito is known to carry West Nile Virus, it is not considered to be a strong vector. The tule mosquito overwinters in the larval stage, which differs from many other *Culex* species that spend the winter as adults.