



**MOSQUITO and VECTOR MANAGEMENT DISTRICT
of SANTA BARBARA COUNTY**

DISEASE SURVEILLANCE REPORT

June 2020

Live Mosquito-Borne Virus Surveillance

Mosquito activity was moderate to high in some areas located near larger bodies of standing water. Mosquitoes were active and breeding based on the high numbers of mosquito larvae seen during routine inspections throughout the south coast. San Luis Obispo County requested trapping at the Cypress Ridge development in Arroyo Grande due to numerous mosquito complaints.

| Location | Date | Number of Mosquitoes | Number of Traps | Mosquitoes per Trap Night | Pools Submitted | Result |
|--|---------------|-----------------------------|------------------------|----------------------------------|------------------------|---------------|
| Santa Barbara County | | | | | | |
| Lake Los Carneros | 06/03 – 06/06 | 13 | 2** | 2 | 2 | Negative |
| Hermosillo Rd., Montecito | 06/17 – 06/20 | 2 | 1** | 1 | 0 | --- |
| Lake Los Carneros | 06/19–06/20 | 45 | 12* | 4 | 2 | Negative |
| Lower Mission Creek | 06/26 –06/27 | 14 | 2* | 7 | 1 | Negative |
| UCSB/Santa Barbara Airport | 06/24–06/26 | 12 | 2** | 12 | 3 | Negative |
| UCSB/Santa Barbara Airport | 06/26 – 06/27 | 47 | 2** | 23.5 | 2 | Negative |
| UCSB/Santa Barbara Airport | 06/26 – 06/27 | 405 | 7* | 57 | 7 | Negative |
| San Luis Obispo County – Arroyo Grande* | | | | | | |
| Cypress Ridge Rd. x Widgeon | 06/11 – 06/12 | 62 | 1 | 62 | 2 | Negative |
| Cypress Ridge x Auklet Ct. | 06/11 – 06/12 | 14 | 1 | 14 | 1 | Negative |
| Cypress Ridge Golf Course | 06/11 – 06/12 | 4 | 4 | 1 | 0 | --- |
| Hwy 1 x Woodland Hills Rd. | 06/11 – 06/12 | 2 | 1 | 2 | 0 | --- |
| Hwy 1 x Chica Dr. | 06/11 – 06/12 | 44 | 1 | 44 | 1 | Negative |
| Hwy 1 x Tienda Pl. | 06/11 – 06/12 | 5 | 1 | 5 | 0 | --- |
| 1199 Hwy 1 | 06/11 – 06/12 | 221 | 1 | 221 | 5 | Negative |
| Hwy 1 x Callender Rd. | 06/11 – 06/12 | 0 | 1 | 0 | 0 | --- |
| 2260 Callender Rd. | 06/11 – 06/12 | 11 | 1 | 11 | 0 | --- |

*Encephalitis Virus Survey (CO₂) traps.

** Gravid trap – a tray with water infused with decaying organic matter such as grass, leaves, hay. Above the tray is a fan and container housed in a plastic box. Female mosquitoes that fly in to lay their eggs in the water are pulled up by the fan suction into the container.

West Nile Virus Activity

Three dead birds found in north Santa Barbara County were reported to the hotline but none were tested due to the poor condition of the bird carcasses.

The first case of human infection with WNV this year in California was reported from Stanislaus County. As of 5/29/20, six (6) birds have tested positive for WNV in California, four (4) from Santa Clara County, one (1) from Sacramento County and one (1) from Napa County. No horses have tested positive for WNV in California. One (1) positive mosquito pool was reported from Los Angeles County, one (1) from Tulare County, and two (2) from Stanislaus County. No WNV activity of any kind has been detected in Santa Barbara County this year, to date.

St. Louis Encephalitis Virus Activity

No cases of humans infected with SLEV have been reported in California this year. Forty (40) positive mosquito pools have been reported from California this year. Riverside reported 19 positive pools in June.

Zika Virus and Invasive *Aedes* Mosquito Update

As of June 1, there have been 746 travel-associated Zika virus infections in California since 2015. No new cases were reported in May. 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 June.

Sentinel Chicken Flocks

The District currently maintains 3 sentinel chicken flocks in Santa Barbara County located at the Goleta Sanitary District, Mission Hills Community Services District, and the Solvang City Wastewater Treatment Plant. Blood samples collected from chickens at these three sites on 6/10, 6/11, 6/22 and 6/23 tested negative for the presence of WNV, SLEV and WEE viruses. Currently, there are no sentinel chicken flocks at the Los Prietos Ranger Station in the Los Padres National Forest and the U.S. Forest Service Fire Station in Carpinteria due to COVID-19 restrictions.



Tropical rat mite, *Ornithonyssus bacoti*

Adult rat mites are about the size of a period on a printed page making them very hard to see but their bites can be hard to ignore. Their primary hosts are rats but when the rats die or permanently leave the nesting site, the mites will disperse to find a new host. If the nest or dead rat is located in or close to a dwelling the mites can invade the structure and start biting the occupants, especially at night when they are asleep. Bites typically occur where clothing fits tightly or close to the body around the waist, shoulders and neck. Bites can result in small, intensely itching pustules but reactions can vary from intense, burning itches to mild discomfort or no itching at all. Preventing rats from entering or nesting in, on, or near a structure is extremely important for preventing problems with rat mites.