

MOSQUITO and VECTOR MANAGEMENT DISTRICT of SANTA BARBARA COUNTY

DISEASE SURVEILLANCE REPORT

August 2020

Live Mosquito-Borne Virus Surveillance

Mosquito activity along the south coast of Santa Barbara was low to moderate. Trapping at the Oceano Dunes Campground and Lagoon, however, resulted in some of the highest catch numbers in the District's history.

		Number of	Type of	Number	Mosquitoes per	Pools	
Location	Date	Mosquitoes	Trap	of Traps	Trap Night	Submitted	Result
Santa Barbara							
County							
Santa Barbara	8/4-8/7	2	gravid	3	0.22	1	Negative
Airport at Gate V54							
El Estero	8/12-8/14	17	gravid	3	2.8	2	Negative
Wastewater							
Treatment Plant							
El Estero Water	8/13-8/14	195	CO2	9	21.67	4	Negative
Treatment Plant							
Lake Los Carneros	8/17-8/19	32	gravid	3	5.3	3	Pending
Lake Los Carneros	8/21-8/22	23	CO2	8	2.875	4	Pending
UCSB West Campus	8/25-8/26	2	CO2	4	0.5	0	
Stables							
UCSB/SB Air Bluffs	8/25-8/26	161	CO2	8	20.125	4	Pending
UCSB/SB Air Bluffs	8/25-8/28	18	gravid	1	6.0	1	Pending
San Luis Obispo							
County							
Oceano Wetland	8/10-8/11	4,335	CO2	9	481.67	35	Negative
Chumash Park	8/10-8/11	105	CO2	3	35.0	2	Negative
Oceano Wetland	8/26-8/27	19,174	CO2	12	1597.8	38	Pending

West Nile Virus Activity

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

There have been 35 reported cases of human infection with WNV this year in California from 10 counties. Fatalities have been reported from Madera (1) and Los Angeles (1) Counties.

One dead woodpecker in Santa Barbara County was reported to the hotline in August. It was not accepted for testing because it had been infested with ants. So far this year, 142 birds have tested positive for WNV in California in 17 counties. A total of 1420 positive mosquito pools were reported from 26 counties this year; this time last year, there were 2516 positive pools.

St. Louis Encephalitis Virus Activity

No cases of humans infected with SLEV have been reported in California this year. As of 8/28/2020, 268 positive mosquito pools were reported from eight counties.

Zika Virus and Invasive Aedes Mosquito Update

There has been no reportable Zika virus activity in California in August. 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, Shasta, Stanislaus, and Tulare. Shasta County is a new addition to this list after identifying both *Aedes albopictus* and *Aedes aegypti* for the first time this month.

Western Equine Encephalitis

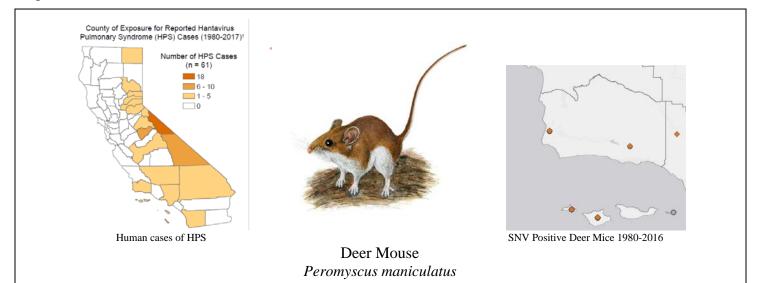
There was no reportable WEE activity in California for August.

Sentinel Chicken Flocks

The District currently maintains four sentinel chicken flocks in Santa Barbara County located at the Goleta Sanitary District, Mission Hills Community Services District, the Solvang City Wastewater Treatment Plant, and the U.S. Forest Service Fire Station in Carpinteria. Blood samples were collected from these chickens the weeks of August 3 and August 17, and all tested negative for the presence of WNV, SLEV and WEE antibodies. In 2020, 41 sentinel chickens from six California counties have tested positive for WNV.

Hantavirus

On August 31, the District was informed that a 34-year-old man in the City of Buellton has tested positive for hantavirus. The patient has fully recovered. Biologists from the California Department of Public Health, Vector Borne Disease Section, will be inspecting the probable site of infection sometime in the second week of September.



The deer mouse, *Peromyscus maniculatus*, is the primary reservoir and vector of Sin Nombre virus in California. Hantavirus is the name of a group of viruses carried by rodents, some of which cause hantavirus pulmonary syndrome (HPS). Sin Nombre virus (SNV) is the specific hantavirus that causes HPS in the Western United States. HPS is 30% fatal to humans. Similar in size to the house mouse, the deer mouse is present throughout most of North America. Their fur is brown to gray on top and white underneath. Their large ears do not have fur. They are typically found in wild areas but will enter structures for food, water, or shelter. An infected mouse will look and behave as normal. SNV is transmitted through contact with infected rodent urine, feces, or saliva. Airborne transmission can also occur when infected droppings, saliva, or urine are stirred-up, i.e. when swept or vacuumed in a poorly ventilated space. Other possible routes of transmission are through a rodent bite or contact with a dead rodent.