MOSQUITO and VECTOR MANAGEMENT DISTRICT of SANTA BARBARA COUNTY

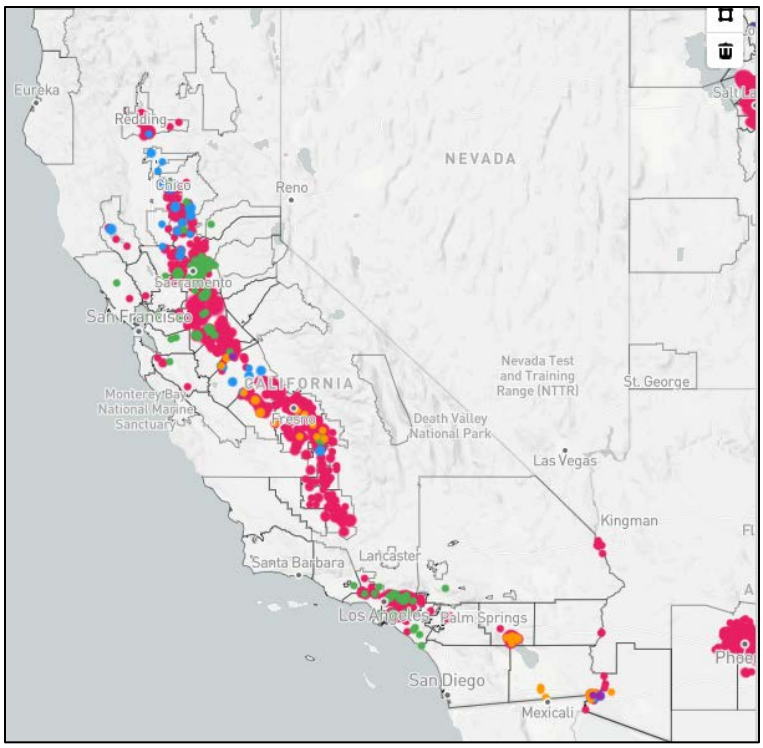
DISEASE SURVEILLANCE REPORT

September 2021

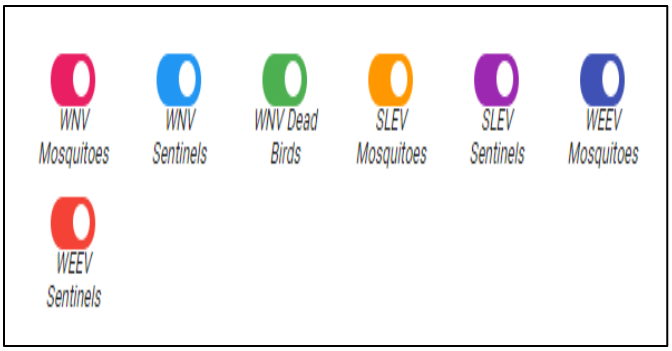
Live Mosquito-Borne Virus Surveillance

Location	Date	Number of Mosquitoes	Type of Trap	# of Traps	Mosquitoes per Trap Night	Pools Submitted	WSW Virus Test Result
Mission Creek, SB 93101, 93105	9/9-9/10	13	EVS	10	1.3	2	Pending
Mission Creek, SB 93101	9/10-9/13	5	Gravid	2	0.83	1	Pending
UCSB Fire Dept.	9/1-9/13	9	BGS2	1	0.75	0	
UCSB Health Bldg.	9/1-9/13	8	BGS2	1	0.08	0	
1199 Hwy 1, Arroyo Grande, SLO 93420	9/14-9/15	0	EVS	3	0	0	
SLO Water Treatment Plant, 93405	9/14-9/15	17	EVS	3	5.7	1	Pending
Laguna Lake Park, SLO, 93405	9/14-9/15	109	EVS	3	36.3	2	Pending
Producer's Ditch, SLO, 93401	9/14-9/15	51	EVS	3	17	5	Pending
Santa Monica Creek, Carpinteria, 93013	9/14-9/15	0	BGP	2	0	0	
Santa Monica Creek, Carpinteria, 93013	9/16-9/17	7	EVS	2	3.5	0	
Lake Los Carneros	9/17-9/23	49	Gravid	2	8	3	Pending
UCSB/SBA Bluffs	9/22-9/23	35	EVS	12	0.4	2	Pending
El Estero Water Treatment Plant, SB 93103	9/23-9/24	9	EVS	4	2.25	1	Pending
El Estero, SB 93103	9/23-9/24	2	BGP	2	1	0	
Shoreline/More Mesa	9/28-9/29	21	EVS	7	3	1	Pending
Crescent Dr., North Hope Area, 93110	9/30-10/1	4	EVS + BG lure	9	0.4	0	
Crescent Dr., North Hope Area, 93110	9/24-10/1	54	Gravid	2	3.6	3	Pending
Crescent Dr., North Hope area, 93110	9/1-9/30	0	BGS2	3	0	0	
Chino St, W side, SB, 93101	9/1-9/30	0	BGS2	3	0	0	

BGS2=Biogents Sentinel; EVS= CO_2 trap; WSW=WNV, SLEV, AND WEE; BGP=Biogents Pro



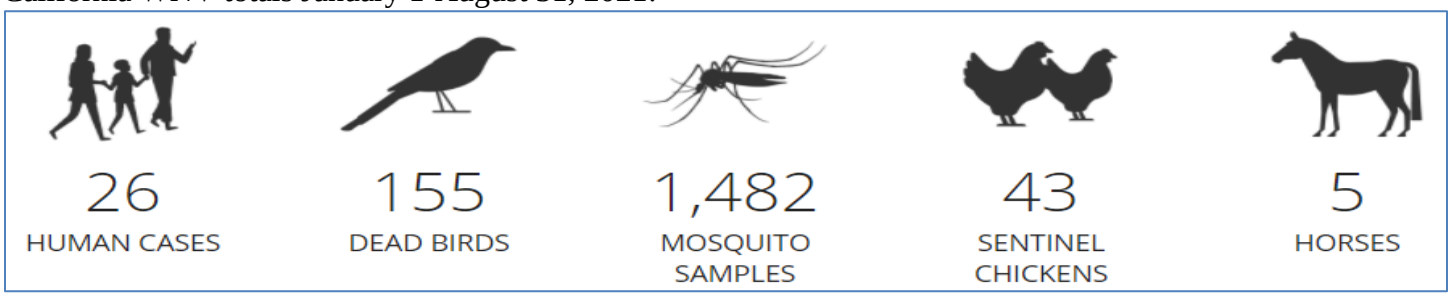
Positive Detections in California



California Arbovirus Detection

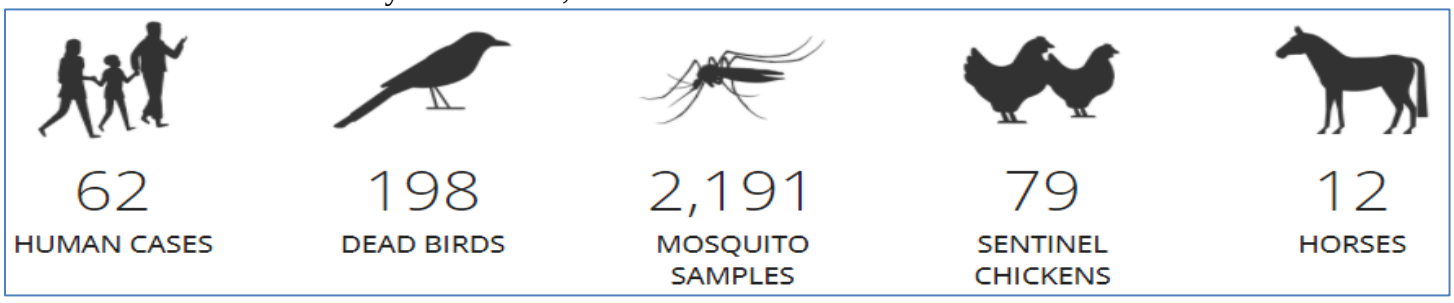
California is in peak season for West Nile virus. However, the positive surveillance numbers are lower than they were on this date last year.

California WNV totals January 1-August 31, 2021:



One month

California WNV totals January 1-October 1, 2021:



One human case of St. Louis encephalitis was reported in Fresno County last month. Thirty-six mosquito pools have tested positive for SLE in eight California counties in 2021.

Arbovirus Activity in Santa Barbara County
Last month, two dead birds from Santa Barbara County were tested for West Nile virus, and the results were negative. Two other birds were reported but not accepted for testing. Eleven mosquito pools from five sites tested negative for WNV, SLE, and WEE; results are pending for 19 pools from nine sites.

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 taken the weeks of September 13, and September 27; all samples tested negative for WNV, SLE, and WEE.

Zika Virus and Invasive *Aedes* Mosquito Update
Despite attempts with four autocidal gravid ovitraps, four gravid autocidal traps, 39 ovicups, eight BG Sentinel traps, four BG Pro traps, and nine BG-lure-enhanced-EVS traps, no *Aedes aegypti* mosquitoes were collected in Santa Barbara County in September.

Aedes aegypti mosquitoes are present in 23 California counties. One person has tested positive for Zika virus in California in 2021 to date; the infection is travel-associated. There have also been 10 cases of dengue fever and three cases of chikungunya, all travel-associated.

B. Cabrera
A sheep ked found on a wool rug.

Piotr Naskrecki
A bat fly feeding on a bat in Mozambique.

Hippoboscids
Common names—louse flies, keds

Last month, a fly in the family Hippoboscidae was caught in one of the District's CO_2 traps near Arroyo Grande (SLO County). These stout-legged blood-feeders are ectoparasites commonly found on sheep, deer, horses, bats, and birds. Most species shed their wings after finding a host.

They belong to the super family Hippoboscoidea which includes tsetse flies that vector sleeping sickness in Africa. This group includes the only flies whose females *and* males feed on blood. Another interesting feature of this group is that larvae develop, one at a time, inside the mother's body where they feed from "milk glands." The mother gives birth to the full-grown larva which quickly transitions to the pupal stage.