



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

DISEASE SURVEILLANCE REPORT

June 2022

Vector-borne Disease Surveillance

Location	Date	Number of Mosquitoes	Type of Trap	# of Traps	Mosquitoes per Trap Night	Pools Submitted	WSW Virus Test Result
Chumash Park, Pismo Beach, SLO	5/31-6/1	55	EVS	3	18.3	2	-
Pismo Creek, SLO	5/31-6/1	11	EVS	1	11	1	-
Pismo Creek, SLO	5/31-6/1	4	Gravid	1	4	1	-
North Beach Campground, SLO	5/31-6/1	1	Gravid	1	1	0	-
North Beach Campground, SLO	5/31-6/1	16	EVS	1	16	1	-
Pismo Beach Golf Course, Oceano, SLO	5/31-6/1	59	EVS	3	19.7	4	
Oceano Dunes, SLO	5/31-6/1	37	EVS	3	12.3	2	-
Carpinteria Creek	6/1-6/2	105	Gravid	3	35	3	-
Paradise Road	6/8-6/9	189	EVS	7	27	5	-
Paradise Road	6/8-6/9	61	BGP	2	30.3		
Paradise Road	6/7-6/9	7	Gravid	3	2.3		
Pismo Eco Reserve, Oceano, SLO	6/13-6/14	36	EVS	1	36		
Pismo Golf Course, Oceano, SLO	6/13-6/14	91	EVS	1	91	1	-
Oceano Dunes, SLO	6/13-6/14	201	EVS	4	50.25	3	-
Crescent Drive, 93105	6/14-6/15	7	EVS	6	1.2		
Crescent Drive, 93105	6/10-6/15	210	Gravid	4	10.5	6	-
UCSB/SBAir Bluffs	6/17-6/23	73	Gravid	3	4	1	
USCB/SBAir Bluffs	6/20-6/21	88	EVS	8	11	4	-
Islay Park, San Luis Obispo, SLO	6/23-6/24	70	EVS	3	23.3	2	-
Producer's Ditch, San Luis Obispo, SLO	6/23-6/24	210	EVS	3	70	6	-
Laguna Lake Park, SLO	6/23-6/24	58	EVS	3	19.3	1	
San Luis Obispo Water Treatment Plant, SLO	6/23-6/24	15	EVS	3	5	1	-

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Crescent Drive, 93105	6/15-7/1	77	BGS2	1	4.8	0	
Calvary Cemetary, 93105	6/15-7/1	0	BGS2	1	0		
More Mesa/Shoreline, 93110	6/27-6/28	41	EVS	7	5.9		
More Mesa/Shoreline, 93110	6/24-7/1	58	Gravid	2	4.1	3	pending

BGS2=Biogents Sentinel 2

BGP=Biogents Pro

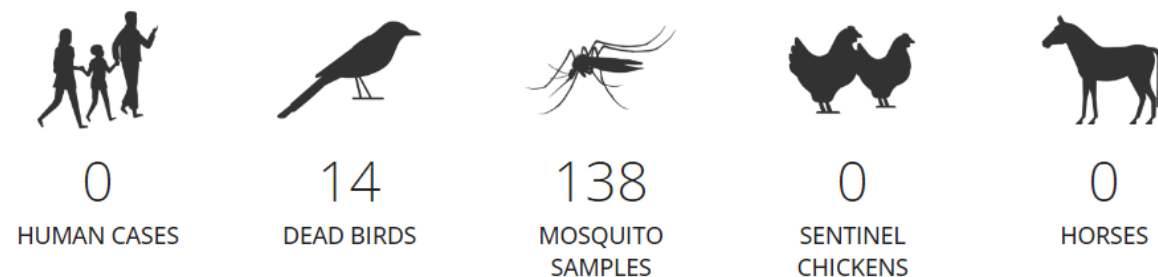
EVS=encephalitis surveillance trap (CO²)

WSW=WNV, SLEV, AND WEE

California Arbovirus Detection

In June, 133 WNV positive mosquito pools were reported in California. Thirteen dead birds also tested positive for WNV; at this time last year, 35 infected dead birds had been found. There have been no WNV detections in horses, humans, or sentinel chickens. Two mosquito pools from Imperial and Kings Counties tested positive for Saint Louis encephalitis virus. No detections of Western equine encephalitis virus have been reported in California this year.

2022 West Nile Virus Activity in California through June



In June, four dead birds were reported in Santa Barbara County. One woodpecker was accepted by the State for testing; results are pending. Nineteen mosquito pools from Santa Barbara County tested negative for encephalitis viruses.

Invasive *Aedes* Mosquito and Zika Virus Update

No *Aedes aegypti* mosquitoes or other invasive *Aedes* species have been detected in Santa Barbara County, thus far in 2022.

Aedes aegypti mosquitoes are present in 22 California counties. *Aedes albopictus* is present in four. *Aedes notoscriptus* occurs in L.A., Orange and San Diego Counties. To date, there have been no human cases of Zika, dengue, or chikungunya in California in 2022.

Plague Surveillance

On June 7th and 8th, staff assisted CDPH biologists with plague surveillance. Blood samples taken from 16 California ground squirrels (CAGS) at Figueroa Campground and 11 CAGS at Upper Oso Campground were tested for *Yersinia pestis* antibodies; all tested negative.



Credit: Ambar Del Moral/Mashable

Mosquito Attractants and Defending Yourself

For National Mosquito Awareness Week*, the *Los Angeles Times* published an article titled “Southern California is now a mosquito zone. Here’s how to defend yourself.” After consulting with the American Mosquito Control Association and the Greater L.A. Vector District, the reporter covered what things attract mosquitoes and how to counteract them; see the chart below.

Attractant	Defense
Bare skin	Wear loose long sleeves and pants, closed-toe shoes Wear light-colored clothing Use repellents containing Deet, IR3535, picaridin, or oil of lemon eucalyptus. Do not apply repellents before applying sunscreen. Area repellents like tiki torches can also be effective.
Dark clothing colors, contrast showing animal shape	
Skin odors	
Skin bacteria	
Exhaled carbon dioxide, breath odors	
Diet and metabolism—possibly grapes, avocados, bananas	
Blood type O	
Time of day—dawn and dusk	Avoid being outdoors at dawn and dusk when most species are most active
Stagnant water in yard for mosquito egg-laying	Eliminate standing water

Each person has a different combination of these attractants, and each of the 24 mosquito species in California has different perceptions and preferences.

When the District sets mosquito traps, carbon dioxide from dry ice is the most effective lure. Light attracts a wide variety of insects, so many traps also use light to guide the mosquito inside. The odor of water containing decomposing organic matter lures mosquitoes that are ready to lay eggs into gravid traps. This pungent scent is made by steeping alfalfa meal fertilizer and yeast in buckets of water for 3-7 days. The company Biogents has developed a trap and lure cartridge for the invasive species that specialize in biting humans, *Aedes aegypti* and *Aedes albopictus*. The lure contains ammonia, lactic acid, and caproic acid in a particular ratio to mimic human skin scent. It also attracts the native WNV vector, *Culex quinquefasciatus*.



BG human scent lure

*The third full week of June. California Mosquito Awareness Week is the third full week of April.