



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

**DISEASE SURVEILLANCE REPORT**

**March 2022**

**Vector-borne Disease Surveillance**

Cold overnight temperatures, high winds and a surprising rainstorm reduced overall mosquito activity this March. Results are posted below.

<b>Location</b>	<b>Date</b>	<b>Number of Mosquitoes</b>	<b>Type of Trap</b>	<b># of Traps</b>	<b>Mosquitoes per Trap Night</b>	<b>Pools Submitted</b>	<b>WSW Virus Test Result</b>
Palmetto Way, Carpinteria	2/28-3/3	1	BGS2	1	0.33	0	
Raddue Ave., Goleta	3/1-3/2	2	BGP	2	1	0	
MVMD, Summerland	3/11-3/14	2	GRAVID	1	0.67	0	
Chumash Park, Pismo Beach, SLO County	3/16-3/17	24	EVS	3	8	1	Pending
Pismo Creek, Pismo Beach, SLO County	3/16-3/17	57	EVS	2	28.5	1	Pending
North Beach Campground, Oceano, SLO County	3/16-3/17	28	EVS	2	14	1	Pending
Oceano Dunes, SLO County	3/16-3/17	20	EVS	5	4	0	
UCSB/SBAIR Bluffs	3/18-4/1	1	BGS	1	0.07	0	
UCSB/SBAIR Bluffs	3/30-4/1	2	GRAVID	2	0.5	0	
UCSB/SBAIR Bluffs	3/31-4/1	125	EVS	8	15.6	2	Pending

BGS2=Biogents Sentinel 2

BGP=Biogents Pro

EVS=encephalitis surveillance trap (CO<sup>2</sup>)

WSW=WNV, SLEV, AND WEE

No dead birds have been reported in Santa Barbara County in 2022. Five mosquito pools have tested negative for WNV, SLE, and WEE.

The District has now discontinued the sentinel chicken surveillance program, and all chickens have been placed in good homes. The final blood samples from the Goleta Sanitary District, the Mission Hills Community Services District, the Solvang City Wastewater Treatment Plant, and the U.S. Forest Service Fire Station in Carpinteria were taken on February 28 and March 1, 2022; to no one's surprise, all samples tested negative for WNV, SLE, and WEE antibodies. About 30 working hours per month will be freed to complete additional surveillance, prevention, and control tasks.

Tick flagging results are listed in the table below. All ticks collected were adults.

Site	Date	Western Black Legged Tick <i>(Ixodes pacificus)</i>		Pacific Coast Tick <i>Dermacentor occidentlis</i>		American Dog Tick <i>Dermacentor similis*</i>	
		MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
Snyder Trail (Paradise Road, Los Padres National Forest)	3/8	4	3	6	9		
Toro Canyon Trail, (Carpinteria Valley)	3/18	2	1	3	5		
San Marcos Foothills (Goleta Valley)	3/29			4	3		
Laundry Road (UCSB)	3/30					2	

\*formerly *Dermacentor variabilis*

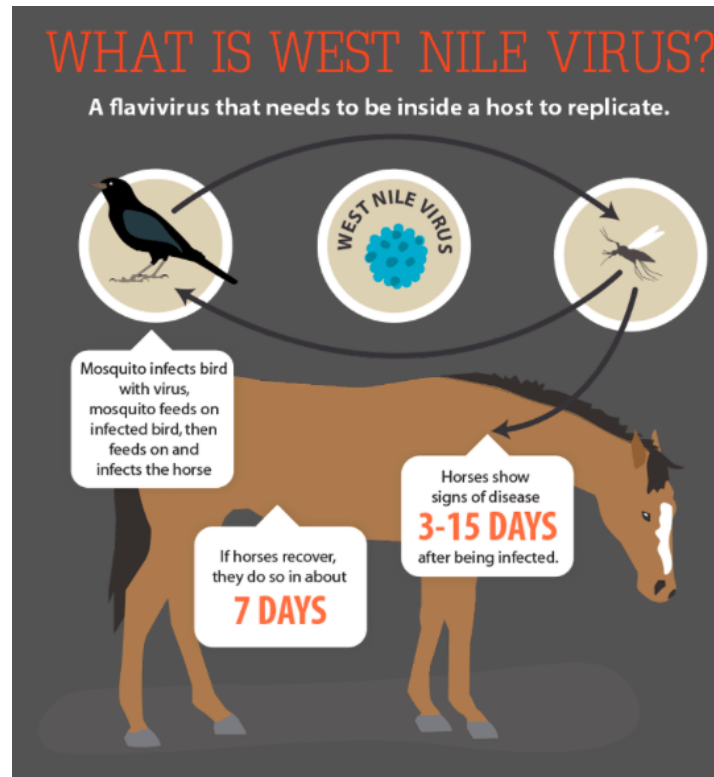
### California Arbovirus Detection

The CA Dept. of Public Health, Vector-Borne Disease Section, usually begins producing their weekly “Arbobulletin” at the end of April each year. Two WNV positive mosquito pools have been reported on [www.westnile.ca.gov](http://www.westnile.ca.gov) this year. In 2022, no detections of Saint Louis encephalitis virus or Western equine encephalitis virus have been reported in California.

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

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

*Aedes aegypti* mosquitoes are present in 22 California counties. *Aedes albopictus* is present in four (one fewer than last year because San Diego County has been removed from the count). *Aedes notoscriptus* occurs in three counties. There have been no human cases of Zika, dengue, or chikungunya in California in 2022.



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### West Nile Virus in Horses

Since 1999, over 25,000 cases of West Nile virus in horses have been reported in the United States. In 2005 and 2006, Santa Barbara County had eight cases; four of them were fatal. Some of the possible signs of WNV infection in horses are stumbling, incoordination, weakness, droopy lip, anorexia, hypersensitivity, grinding teeth, head pressing, muscle twitching, partial paralysis, and/or fever. Horses over the age of 15 years are more likely to be severely affected. About 50% of cases are asymptomatic or mild, but about 33% of infected horses die of the disease. About 17% of horses infected have long-term neurological damage. There is no specialized treatment for WNV, but supportive therapy under the care of a veterinarian can be effective. There are effective vaccines for WNV for horses. Two doses are given about six weeks apart, and yearly boosters are strongly recommended. Horse owners should eliminate standing water where horses are kept to prevent mosquito breeding. Mosquito fish (*Gambusia affinis*) can be placed in water troughs that are not emptied at least every two weeks. Exposure to mosquitoes can be reduced by using fans, using repellants, and keeping horses in a barn or stable from sunset until sunrise. Like humans and other mammals, horses are considered “dead end hosts” because too little WNV circulates in their bloodstream for a mosquito to pick-up during feeding and subsequently infect a susceptible host.