



MOSQUITO and VECTOR MANAGEMENT DISTRICT  
of SANTA BARBARA COUNTY

**DISEASE SURVEILLANCE REPORT**

May 2024

Santa Barbara County Vector-borne Disease Surveillance\*

Location	Date	Number of Mosquitoes	Type of Trap**	# of Traps	Mosquitoes per Trap Night	Pools Submitted	WSW*** Virus Test Result
Shoreline/More Mesa, Goleta Valley	4/30-5/1	240 (also 15 black flies)	EVS	12	20	0	--
UCSB/SBAir Bluffs	5/2-5/3	167	EVS	9	18.6	2	Negative
Lake Los Carneros	5/7-5/8	86	EVS	11	7.9	1	Negative
Lake Los Carneros	5/8-5/9	1	Gravid	2	0.5	1	Negative
Shoreline/More Mesa, Goleta Valley	5/7-5/15	4	BGS2	1	0.25	0	--
Shoreline/More Mesa, Goleta Valley	5/7-5/9	1	Gravid	1	0.5	1	Negative
Islay Street, 93101‡	5/21-5/22	0	EVS	2	0	0	--
Andree Clark Bird Refuge, 93101	5/21-5/22	20	EVS	6	3.3	0	--
Andree Clark Bird Refuge, 93101	5/21-5/24	6	Gravid	1	2	2	Negative
El Estero Water Treatment Plant, 93103	5/21-5/22	8	EVS	6	1.3	2	Negative
El Estero Water Treatment Plant, 93103	5/21-5/24	19	Gravid	1	6.3	2	Negative
Crescent Drive, 93105	5/22-5/24	3	Gravid	2	0.75	2	Negative
UCSB/SBAir Bluffs	5/23-5/31	28	BGS2	1	3.5	0	--
Shoreline/More Mesa, Goleta Valley	5/30-5/31	73	EVS	4	18.25	2	Pending
UCSB/SBAir Bluffs	5/30-5/31	120	EVS	9	13.3	3	Pending
UCSB/SBAir Bluffs	5/30-5/31	17	Gravid	4	4.25	2	Pending

\*\* BGS2=Biogents Sentinel 2; BGP=Biogents Pro; EVS=encephalitis surveillance trap (CO<sup>2</sup>)

\*\*\* WSW=West Nile Virus; St. Louis Encephalitis Virus; and Western Equine Encephalitis

\*Color indicates the virus-transmitting ability of some or all of the mosquito species caught in the traps:

Purple = high (example: *Aedes aegypti*, *Culex tarsalis*); Aqua = moderate; Tan = low.

For specific trap collection data, please email a request to: [info@mvmdistrict.org](mailto:info@mvmdistrict.org).

‡ Location where *Aedes aegypti* was found in 2020.

Ticks were surveyed by flagging\* in three locations in May.

- 1) 5/20, Toro Canyon County Park, **Toro Canyon Park Loop Trail** – 78 *Dermacentor occidentalis* (39 females/39 males)
- 2) 5/24, **Romero Trail** – 57 *D. occidentalis* (27 females/30 males), 5 *I. pacificus* (3 females/2 males)
- 3) 5/31, School District property behind Turnpike Center, **San Simeon Drive** – 0 ticks

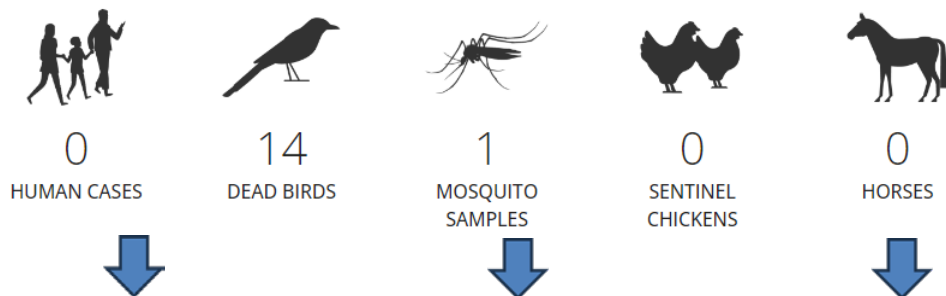
\* Visit <https://www.mvmdistrict.org/tick-talk> for an explanation of tick flagging and more information about ticks.

No dead birds were tested for WNV last month. The CDPH dead bird hotline received multiple reports of at least 20 dead sea birds (brown pelicans, sea gulls, and cormorants) near East Beach on May 6th, but they were not forwarded to the District for collection. Four additional dead birds were rejected by the hotline because they were in the road or the report was made during a weekend. There have been no detections of West Nile virus (WNV) in the County in 2024. St. Louis encephalitis virus (SLE) and Western equine encephalitis virus (WEE) have never been documented in the County.

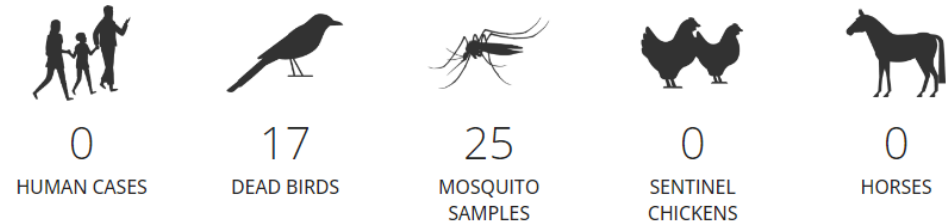
### California Vector-borne Disease Surveillance

Nine Counties have reported samples positive for West Nile virus in 2024. The number of WNV-positive mosquito samples increased from 1 to 25 in May 2024. One mosquito pool from Fresno County has tested positive for SLE. There have been no reports of WEE.

#### California WNV activity as of April 26, 2024



#### California WNV activity as of May 31, 2024

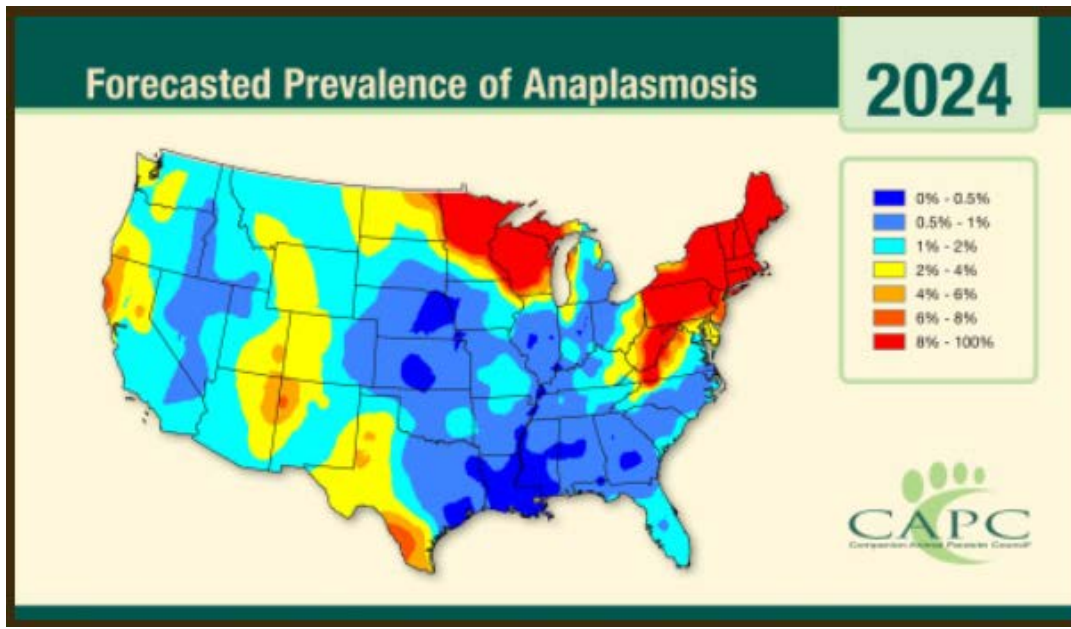


<https://westnile.ca.gov>

### Update on Invasive *Aedes* Mosquito in California

No invasive *Aedes* species have been detected in Santa Barbara County since May 2021. Santa Barbara, along with four other coastal Counties, have been removed from the invasive *Aedes* map because more than two years has passed since the last collection. *Aedes aegypti* is found in 24 California counties, and *Aedes albopictus* is found in five.

Two human cases of locally transmitted dengue virus were discovered in Long Beach and Pasadena in October of 2023. Non-native *Aedes* mosquitoes, capable of vectoring dengue, Zika, chikungunya, and yellow fever are common in the LA area. In 2024, there have been 32 travel-related human dengue cases in California.



*Anaplasma phagocytophilum* is much more common in the Northeast and Midwest United States than in California. There has been forewarning that its prevalence in California is increasing from publications (in 2013 and 2016) and a presentation at the 2024 MVCAC Annual Conference.

## Human Granulocytic Anaplasmosis (HGA) *Anaplasma phagocytophilum*

Anaplasmosis is a tick-borne disease caused by the bacteria *Anaplasma phagocytophilum*. One *Ixodes pacificus* tick collected on March 5, 2024, on the Sweetwater Trail along the shore of Lake Cachuma, tested positive. A black-legged tick must be attached to a person for a minimum of 12 to 24 hours to transmit the pathogen. Symptoms of the disease appear in 5 to 14 days and include fever, chills, headache, body ache, fatigue, vomiting, and diarrhea. The disease is easily treatable with antibiotics, but untreated cases can be life-threatening. Dogs, mice, deer, and other animals can also be infected.

The District advises to avoid tick bites by wearing repellent, staying on hiking trails, avoiding contact with vegetation, and checking for ticks after outdoor activity. Pets should also be inspected for ticks after visiting wilderness areas. To remove an attached tick, grip it with tweezers close to the skin and pull straight out (no twisting, chemicals, smothering with oils or ointments, or fire should be used to remove ticks).



*Anaplasma phagocytophilum*  
inside a white blood cell



Image: Bay Area Lyme Foundation