



MOSQUITO and VECTOR MANAGEMENT DISTRICT
of SANTA BARBARA COUNTY

DISEASE SURVEILLANCE REPORT

June 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
Goleta Sanitary District, Goleta Valley	6/3-6/6	6	Gravid	1	6	1	Negative
SB Airport, Gate V54	6/5-6/6	2	Gravid	2	1	1	Negative
Lake Los Carneros	6/11-6/14	39	Gravid	4	4.9	3	Negative
Lake Los Carneros	6/13-6/14	35	EVS	7	5	2	Negative
Paradise Road, San Marcos Pass	6/18-6/19	126 >500 black flies	EVS	9	14	3	Pending
Paradise Road, San Marcos Pass	6/18-6/19	22	Gravid	3	7.25	2	Pending
Garrapato Creek, Carpinteria Valley	6/17-6/18	2	EVS	1	2	0	--
Andree Clark Bird Refuge, 93101	6/20-6/21	6	EVS	6	1	3	Pending
El Estero Water Treatment Plant, 93103	6/20-6/21	17	EVS	6	2.8	2	Pending
UCSB/SBAir Bluffs	5/31-6/28	11	BGS2	1	0.4	0	--
UCSB/SBAir Bluffs	6/27-6/28	389	EVS	9	43.2	8	Pending
UCSB/SBAir Bluffs	6/26-6/28	32	Gravid	3	5.3	2	Pending
Shoreline/More Mesa, Goleta Valley	6/27-6/28	36	EVS	3	12	2	Pending

** BGS2=Biogents Sentinel 2; BGP=Biogents Pro; EVS=encephalitis surveillance trap (CO²)

*** 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.

Ticks were surveyed by flagging in one location in June.

- 1) 6/19, Paradise Road, **Snyder Trail** – 14 *Dermacentor occidentalis* (13 females/1 male)

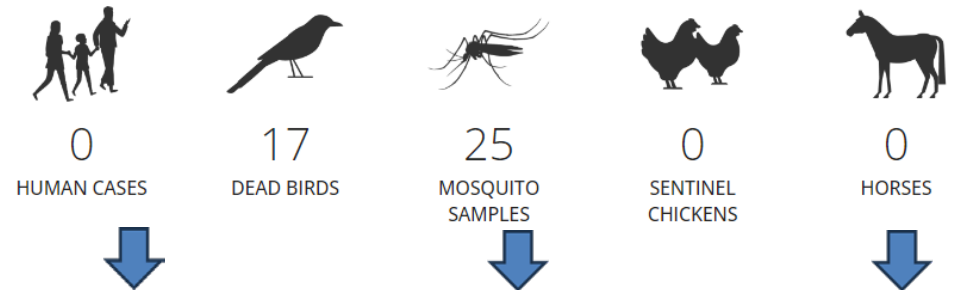
Visit <https://www.mvmdistrict.org/tick-talk> for an explanation of tick flagging and more information about ticks.

No dead birds from Santa Barbara County were tested for WNV last month. One crow near Lake Los Carneros was rejected by the hotline because it had been dead too long. 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.

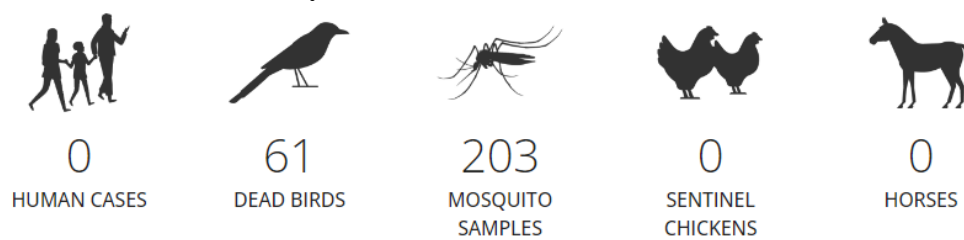
California Vector-borne Disease Surveillance

Eighteen counties have reported samples positive for West Nile virus in 2024. Nine mosquito pools from three counties have tested positive for SLE. There have been no reports of WEE.

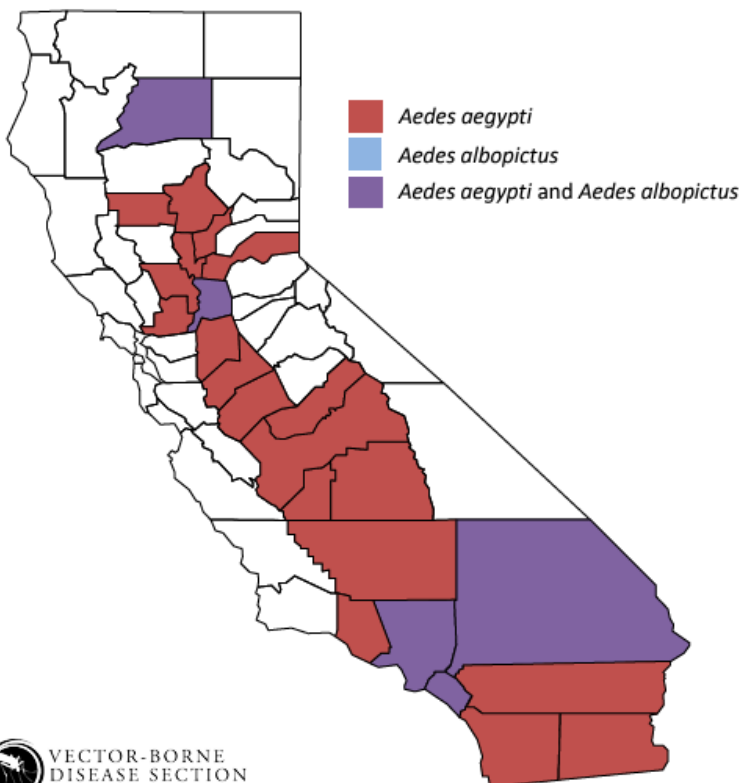
California WNV activity as of **May 31, 2024**



California WNV activity as of **June 28, 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 40 travel-related human dengue cases in California; there has been one travel-related case of chikungunya virus and two travel-related cases of Zika virus.

Collection Date: 2024-03-05
County: Santa Barbara
Location: Toro Canyon County Park (Toro Canyon Park loop)
Submitter: Sarah Billeter
Collection Notes: Walked the 1.2 loop trail flagging on both sides of the trail.

The following tick(s) have tested positive:

1. 24-2582 - RT PCR - *Anaplasma phagocytophilum*
2. 24-2585 - RT PCR - *Borrelia burgdorferi* sl

Collection Date: 2024-03-07
County: Santa Barbara
Location: Bodger Trail
Submitter: Sarah Billeter
Collection Notes: Flagged for approximately 1/4 of a mile on the uphill slope.

The following tick(s) have tested positive:

1. 24-3447 - RT PCR - *Borrelia burgdorferi* sl

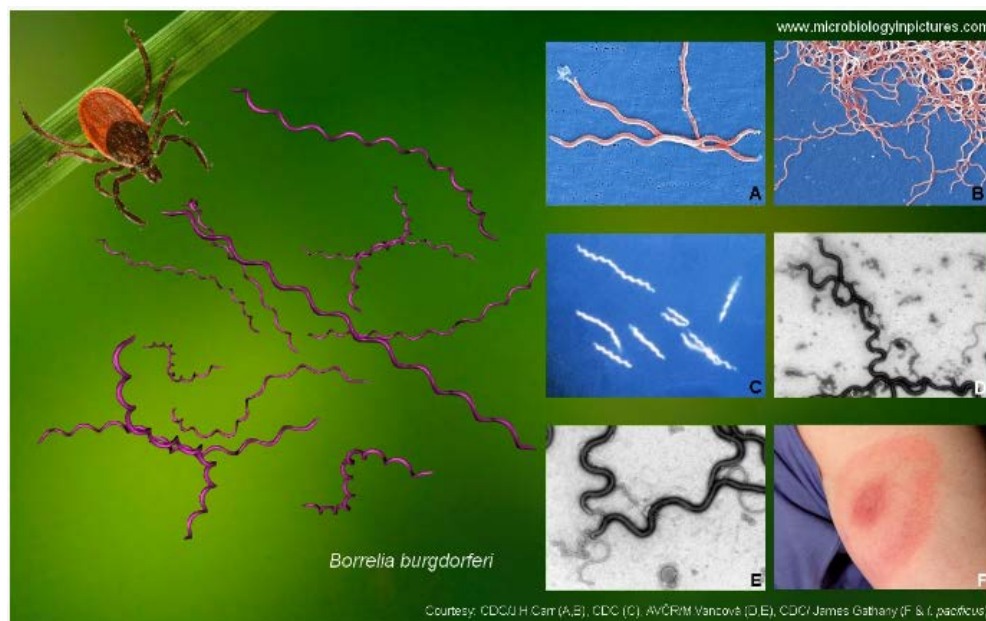
sl stands for sensu lato, which means “in the broad sense” in Latin. Sensu stricto (ss) translates to “in the strict sense.”

Sensu Lato (sl), Sensu Stricto (ss) *Borrelia burgdorferi*

Two Western black-legged ticks (*Ixodes pacificus*), collected in March of 2024 in Santa Barbara County, tested positive for *Borrelia burgdorferi* sensu lato (sl). *B. burgdorferi* sensu stricto (ss) is the tick-borne bacteria that causes Lyme disease. It is one of the 18 spiral-shaped bacteria in the species complex classified as *B. burgdorferi* sl and can only be identified with DNA analysis.

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/flame should be used to remove ticks).

For further information, visit the District’s “Tick Talk” web page: <https://www.mvmdistrict.org/tick-talk>



Spiral-shaped bacteria like *Borrelia burgdorferi* are called spirochetes.