



# MOSQUITO and VECTOR MANAGEMENT DISTRICT of SANTA BARBARA COUNTY

## DISEASE SURVEILLANCE REPORT

February 2024

### Santa Barbara County Vector-borne Disease Surveillance

Mosquito trapping and disease surveillance will resume in March, weather permitting. Two great blue herons were reported dead, but they had been deceased too long to be tested for West Nile virus. There were no detections of West Nile virus (WNV) in the County in 2023. St. Louis encephalitis virus (SLE) and Western equine encephalitis virus have never been documented in the county.

One trail was surveyed for ticks by flagging\* last month.

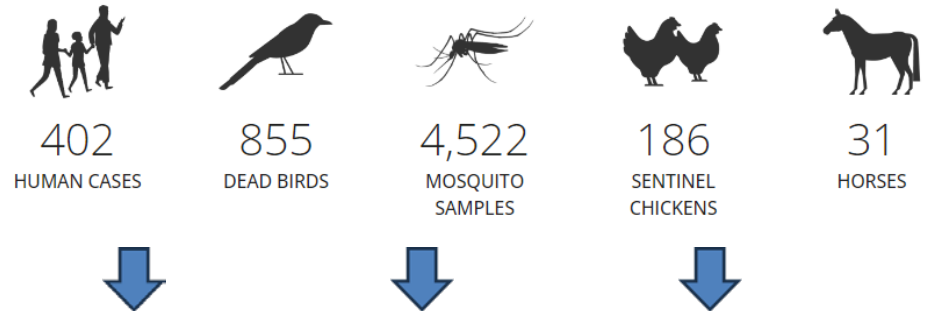
1. 2/22/2024 **Snyder Trail**, Paradise Road: Ixodes pacificus : 1 male  
Dermacentor occidentalis: 4 male, 10 female

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

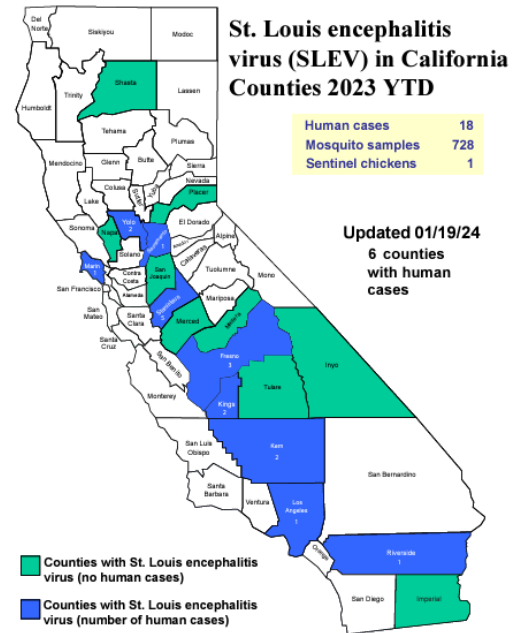
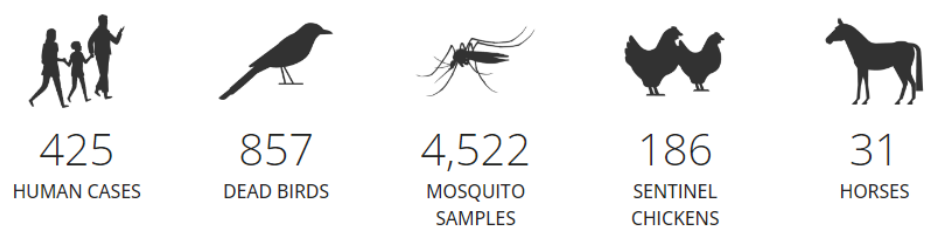
### California Vector-borne Disease Surveillance

For the year 2023, WNV was detected in 41 counties. **Nineteen human cases were fatal.** On October 13, the WNV dead bird program switched to only online reporting and limited testing until April. Eighteen human cases of SLE infection were reported in CA in 2023; 728 SLE-positive mosquito pools were reported in 15 counties. Both neighboring Ventura and San Luis Obispo counties had detections of WNV in 2023. Ventura County had one human case and four positive dead birds. SLO had two humans, one dead bird, and two horses that tested positive.

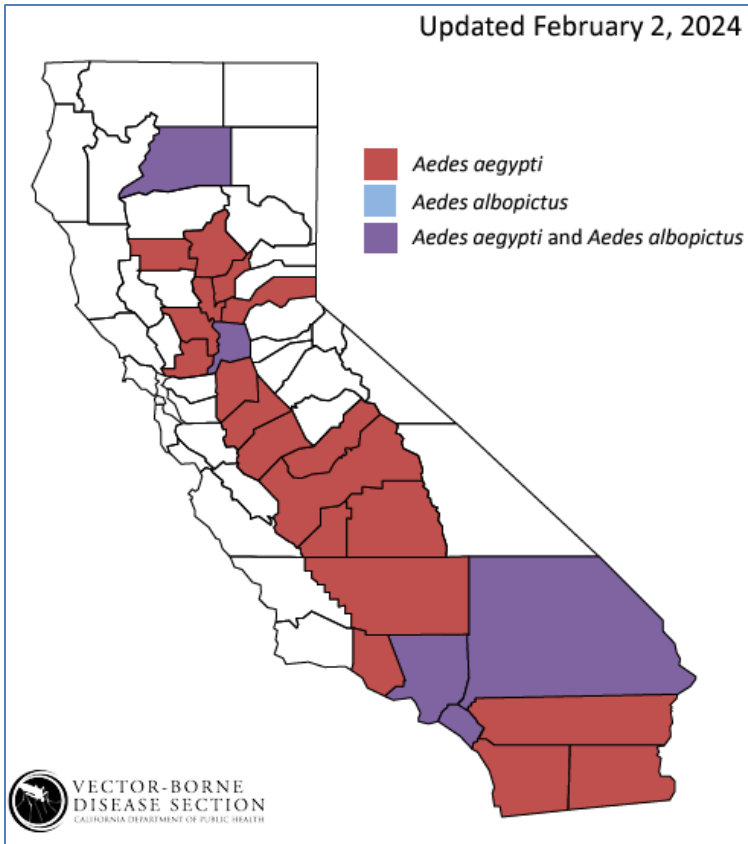
#### California WNV activity as of February 1, 2024



#### California WNV activity as of March 1, 2024



Updated February 2, 2024



### Invasive *Aedes* Mosquito Update

No invasive *Aedes* species have been detected in Santa Barbara County since May 2021. Santa Barbara, along with four other 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 the Los Angeles area in October. Trapping and testing around these finds have not revealed any dengue-positive mosquitoes. Non-native *Aedes* mosquitoes, capable of vectoring dengue, Zika, chikungunya, and yellow fever are common in the LA area. In 2023, there were 177 travel-related human dengue cases in California; Santa Barbara County Public Health has reported three travel-related human cases.

### 2023 Travel-related Cases of Viruses Transmitted by *Aedes aegypti* and *Aedes albopictus*

	Dengue Virus	Chikungunya Virus	Zika Virus
Santa Barbara County	3	1	0
California	177	12	2

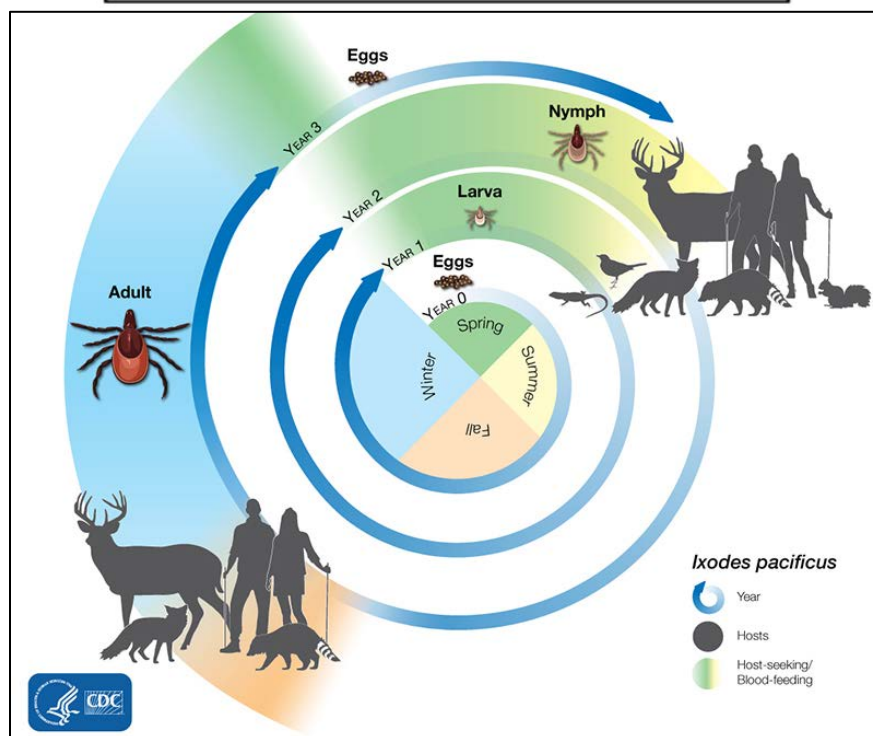
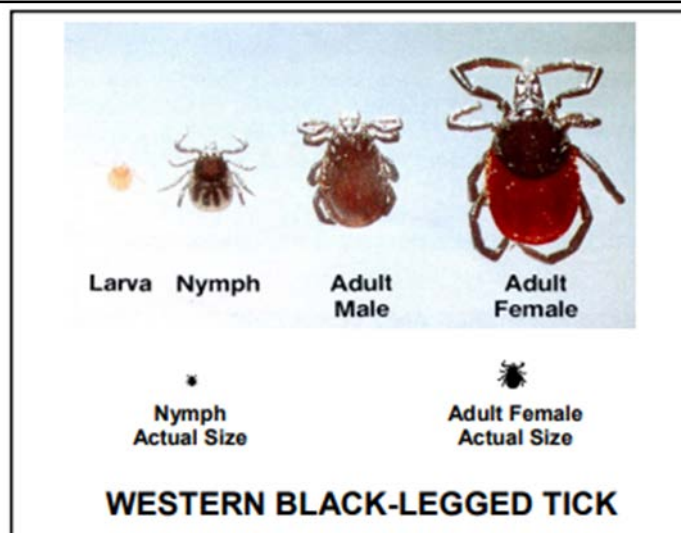
CA CDPH



*Aedes aegypti*



*Aedes albopictus*



### Western Black-Legged Tick *Ixodes pacificus*

Members of the public are often surprised to see staff collecting ticks between late fall and early spring, but that is the time in California to find adult ticks questing for their final host, mating, and laying eggs. *Ixodes pacificus* is the Western U.S.'s vector of *Borrelia burgdorferi*, the spirochete bacteria that causes Lyme disease. Luckily for us, Lyme is not as common in Santa Barbara County as it is in Northern California or New England.

Both male and female ticks feed on blood. Western black-legged ticks feed on one host during each life stage (larva, nymph, and adult). After feeding, larvae and nymphs drop off of the host and molt; adult ticks feed and mate on the host before the female drops off to lay up to 3,000 eggs. Larvae hatch with six legs; after they molt into nymphs they have eight legs for the rest of their lives.

PBS has a great video on how ticks penetrate our skin at [https://www.youtube.com/watch?v=IoOJu2\\_FKE](https://www.youtube.com/watch?v=IoOJu2_FKE)