



MOSQUITO and VECTOR MANAGEMENT DISTRICT of SANTA BARBARA COUNTY

DISEASE SURVEILLANCE REPORT

November 2024

Santa Barbara County Vector-borne Disease Surveillance*

No dead birds from Santa Barbara County were reported to the state hotline in November. 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.

Location	Date	Number of Mosquitoes	Type of Trap	# of Traps	Mosquitoes per Trap Night	Pools Submitted	WSW** Virus Test Result
Evans Ave, Summerland	10/30-11/1	16	Gravid	2	4	2	Negative
Montecito Creek x Bonnymede	10/30-11/1	8	Gravid	1	4	2	Negative
Lake Los Carneros	11/4-11/6	17	Gravid	3	2.8	2	Negative

** 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:

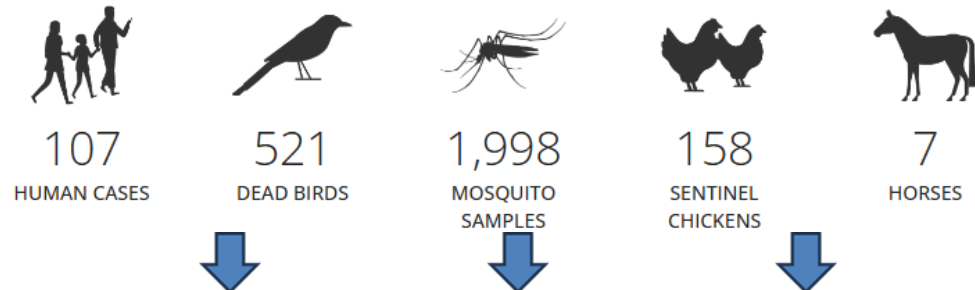
Purple = high (example: *Aedes aegypti*, *Culex tarsalis*); Aqua = moderate; Tan = low.

For specific trap collection data, please email a request to: info@mvmdistrict.org.

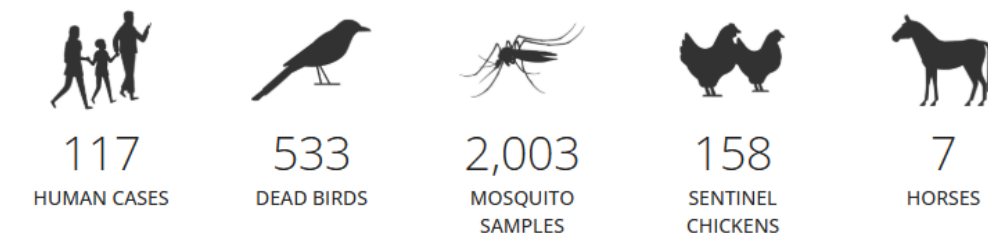
California Vector-borne Disease Surveillance

Weekly arbovirus bulletins from the California Department of Health have finished for the season. Thirty-two counties have reported samples positive for West Nile virus in 2024. Of the 117 human cases of WNV, 90 were neuroinvasive, and 12 were fatal. There were an additional 16 asymptomatic blood donors. More than half of the 533 WNV-positive dead birds in California were collected in Santa Clara County. Thirty-four mosquito pools from five counties have tested positive for SLE; at this time last year there were 728 positive SLE samples across 15 counties. There have been no detections of WEE.

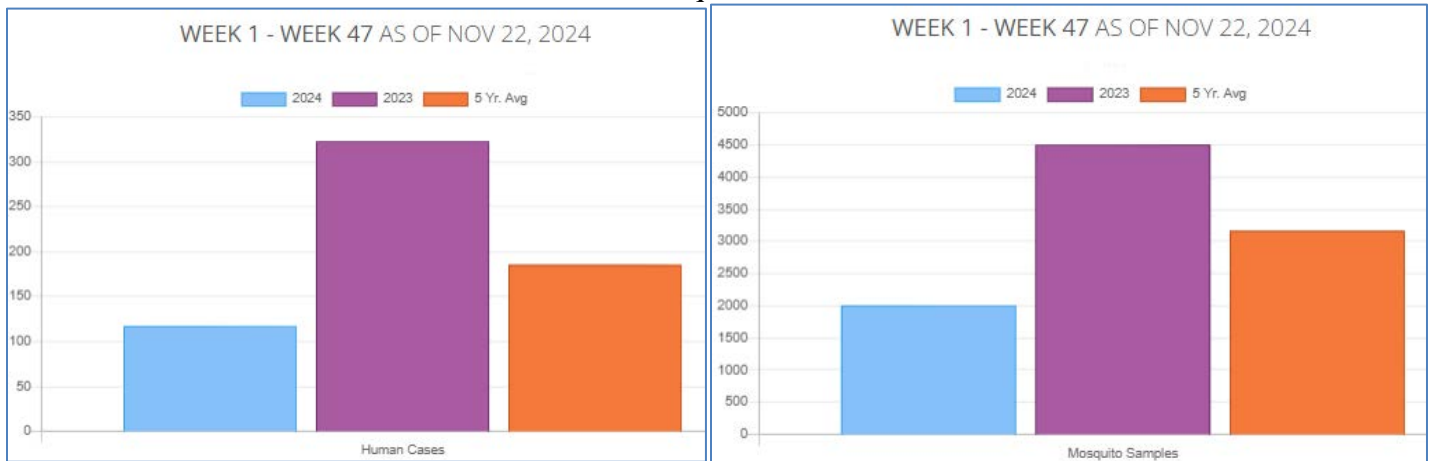
California WNV activity as of November 1, 2024



California WNV activity as of November 22, 2024



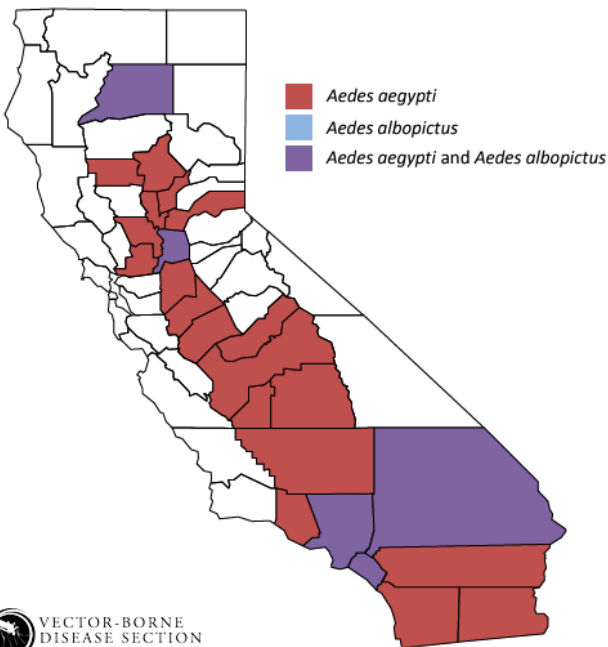
2024 California West Nile Virus in Humans and Mosquitoes



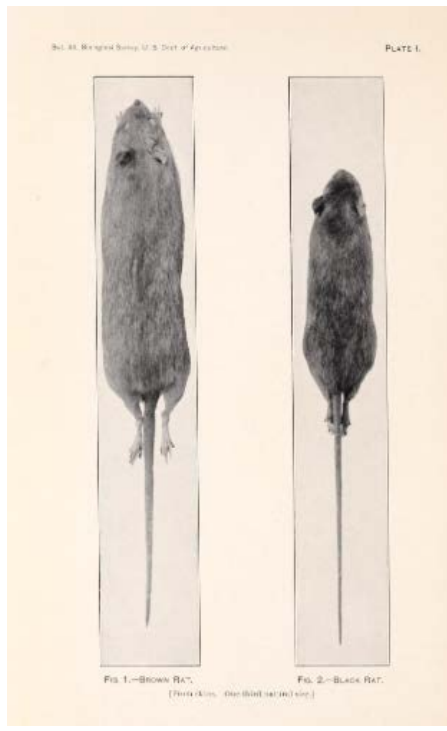
<https://westnile.ca.gov>

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.



There have now been 15 locally transmitted cases of dengue virus in Los Angeles County (12), San Bernardino County (1), and San Diego County (2) in 2024. Non-native *Aedes* mosquitoes, capable of vectoring dengue, Zika, chikungunya, and yellow fever are common in the LA area. As of December 1, 2024, there have been 451 travel-related human dengue cases in California; there have been 16 travel-related cases of chikungunya virus and three travel-related cases of Zika virus. This year in California, 1,415 mosquito pools have tested negative for DENV, CHIKV, and ZIKA. There have been five cases of travel-related dengue in Santa Barbara County this year. Worldwide, the number of dengue cases has almost doubled—6.5 million in 2023 to 12.3 million in 2024.



From The Brown Rat in the United States by D. Lantz, 1909



FIELD or HOUSE MOUSE (*Mus musculus*)

Rodent Myths

FALSE: Rodents love cheese.

True: Oil-based processed “cheesefood” (highly processed cheese-like products like single-sliced and canned cheese products) is preferred. Peanut butter, mayonnaise, seeds, nuts, fruits, avocados, chocolate, chips, insects, snails, pet food, and other rodents are on the menu. Rodents often eat what they ate while growing up.

FALSE: Rodents are nocturnal and can see in the dark.

True: While they are mostly nocturnal, rodents are often active in the daytime. Rodents use their whiskers and sense of smell to find their way in the dark.

FALSE: Rodents gnaw wires to prevent their teeth from getting overgrown.

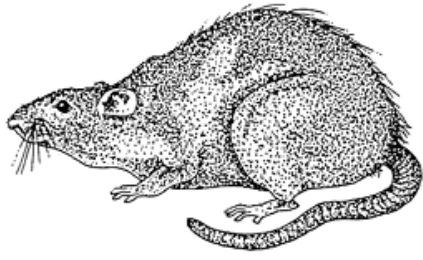
True: This is usually nesting behavior. Also, some wire insulation made from soy is edible. Growth of teeth can be managed by just grinding their teeth together.

FALSE: Rodents that have eaten poison bait go outside to look for water and die.

True: It is likely that poisoned rodents will die in their nesting location, including inside walls, underneath a home, or in the attic. This can lead to a foul odor and/or an insect infestation as the carcass decomposes.

FALSE: Rodents have flexible bones, so only the skull needs to fit through an opening.

True: Rodent skulls are the same width as their shoulders and hips. (mice $\frac{1}{4}$ inch, rats $\frac{1}{2}$ inch)



NORWAY RAT



ROOF RAT