



MOSQUITO and VECTOR MANAGEMENT DISTRICT of SANTA BARBARA COUNTY

DISEASE SURVEILLANCE REPORT

May 2023

Vector-borne Disease Surveillance

Location	Date	Number of Mosquitoes	Type of Trap	# of Traps	Mosquitoes per Trap Night	Pools Submitted	WSW Virus Test Result
Crescent Drive, 93105	5/11-5/15	61	GRAVID	2	7.6	4	Negative
Lake Marie, Orcutt	5/16-5/17	2	EVS	3	0.7	1	Negative
Orcutt Creek	5/16-5/17	45	EVS	6	7.5	1	Negative
Rice Ranch Rd., Orcutt	5/16-5/17	5	EVS	2	2.5	1	Negative
Shoreline/More Mesa, Goleta Valley	5/16-5/17	121	EVS	3	40.3	1	Negative
West Carpinteria	5/15-5/16	4	BGP	3	1.3	0	---
Crescent Dr., 93105	5/1-5/31	0	BGS2	1	0	0	---
Chino St., 93101	5/1-5/31	0	BGS2	1	0	0	---
UCSB	5/1-5/31	0	BGS2	1	0	0	---

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

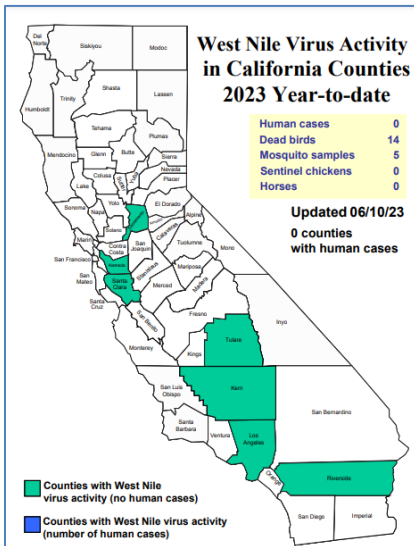
WSW=West Nile Virus, St. Louis Encephalitis Virus, AND Western Equine Encephalitis

*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

Larvae were collected from two *Aedes aegypti*-targeting In2Care stations, but only *Culex* and *Culiseta* larvae were identified.

Four dead birds were reported in Santa Barbara County in May, and the three that were accepted tested negative for West Nile virus.



California Disease Surveillance

Kern County submitted the first mosquito pool to test positive for St. Louis encephalitis virus in California in 2023. Five mosquito pools and 14 dead birds have tested positive for West Nile virus.

Invasive *Aedes* Mosquito and Zika Virus Update

No invasive *Aedes* species have been detected in Santa Barbara County, to date, in 2023. *Aedes aegypti* are found in 25 California counties, and *Aedes albopictus* is found in five.

Insect and Tick Repellents



Repellents work by affecting the blood-feeder's sense of smell, impairing its ability to find a host. These four active ingredients are effective:

DEET: diethyl toluamide, can damage plastic including synthetic fabric, EPA Toxicity Category III "slightly toxic"

Picaridin: synthetic version of a plant compound (piperine), lasts the longest, low level of irritation to skin and eyes

IR3535: 3-[N-Butyl-N- acetyl]-aminopropionic acid ethyl ester, can damage plastics

Oil of Lemon Eucalyptus: plant-based, less effective against no-see-um midges and *Culex* mosquitoes (WNV vector mosquitoes)

The percentage of active ingredient in the product indicates how long it will work rather than how well it will work.

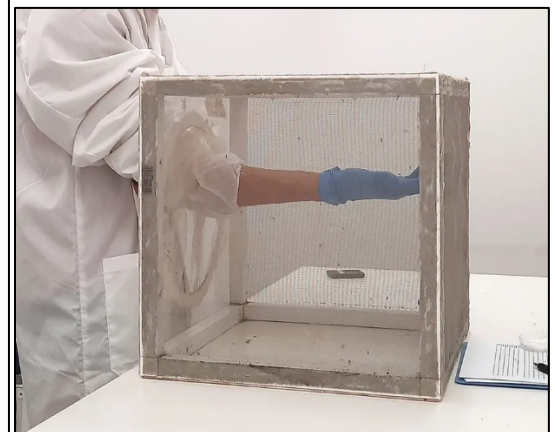
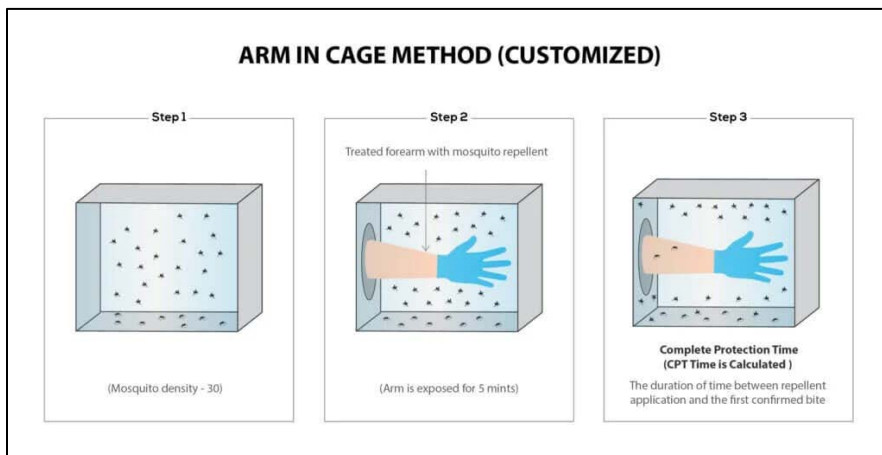
Repellents should be applied on all areas of exposed skin. Wearing long pants and sleeves also helps prevent bug bites. If wearing sunscreen and repellent, it is recommended to apply sunscreen first.

It is not recommended to use repellent on infants younger than two months old.

Always read and follow the instructions on the label.

There is no evidence to support efficacy of clove, lemongrass (citronella), rosemary, wristbands, or ultrasonic devices.

Pyrethrin-treated clothes are also available, but they do not act as a repellent. Pyrethrin is an insecticide derived from chrysanthemum flowers that can kill bugs that touch the treated surface.



<https://microbe-investigations.com/arm-in-cage-test/>

Entomology Today