



MOSQUITO and VECTOR MANAGEMENT DISTRICT of Santa Barbara County

DISEASE SURVEILLANCE REPORT

April 2016

West Nile Virus Activity

No West Nile Virus (WNV) activity has been detected in Santa Barbara County in 2016 to date. However, 14 WNV positive dead birds have been reported from 4 California counties, 9 of them from San Diego County. One WNV positive mosquito pool has been reported from Los Angeles County.

Statistics for California WNV activity can be found online at www.westnile.ca.gov. National statistics for WNV can be found at the National Centers for Disease Control and Prevention website at www.cdc.gov.

Zika Virus and Invasive *Aedes* Mosquito Update

There has been no change in the status of invasive *Aedes* mosquitoes in California in the past month. There have been imported cases of Zika virus into California, but no locally transmitted cases. Zika virus information can be found at <http://www.cdph.ca.gov/HealthInfo/discond/Pages/Zika.aspx> and at <http://www.cdc.gov/zika/>.

Live Mosquito-Borne Virus Surveillance

The District conducted 11 mosquito trapping surveys in April 2016. The surveys include the use of both carbon dioxide baited Encephalitis Virus Surveillance (EVS) traps and the human scented BG-Sentinel traps. The results of the surveys are shown in the table below. High winds have continued to curtail the number of trapping surveys.

LOCATION	DATE	NUMBER of MOSQUITOES	NUMBER of TRAPS [^]	MOSQUITOES PER TRAP NIGHT*	POOLS SUBMITTED	RESULT
1500 block of Santa Monica Rd., Carpinteria	3/28-4/1/16	0	1 BG	0.0	0	N.A.
Shoreline Dr./More Mesa, Goleta Valley	4/4-5/16	141	12 EVS	11.8	4	Negative
Andree Clark Bird Refuge, Santa Barbara	4/5-6/16	29	10 EVS	2.9	1	Negative
Club House Rd., Vandenberg Village	4/12-13/16	54	4 EVS	13.5	2	Negative
Santa Ynez River @ Floradale Ave., Lompoc	4/12-13/16	43	5 EVS	8.6	1	Negative
La Salle Canyon, Lompoc Valley	4/12-13/16	8	2 EVS/2 BG	2.0	0	N.A.
Puesta Del Sol Rd., Mission Canyon	4/12-18/16	5	2 BG	0.4	0	N.A.
El Estero Wastewater Plant, Santa Barbara	4/18-19/16	350	12 EVS/3 BG	23.3	7	Negative
Orcutt Creek @ Broadway, Orcutt	4/20-21/16	40	5 EVS/2 BG	5.7	1	Negative
Orcutt Creek @ Highway 135, Orcutt	4/20-21/16	20	3 EVS	6.7	0	N.A.
Orcutt Creek @ Bradley Rd., Orcutt	4/20-21/16	8	4 EVS/1 BG	1.6	0	N.A.

* Mosquitoes Per Trap Night = Number of Mosquitoes ÷ (Number of Traps x Number of Nights)

[^] EVS = CO₂ trap BG = BG-Sentinel invasive *Aedes* mosquito trap

This surveillance technique utilizes battery-powered Encephalitis Virus Surveillance (EVS) traps that use dry ice as a source of carbon dioxide along with human scented BG-Sentinel traps to attract adult female mosquitoes that are actively seeking a blood meal. The live female mosquitoes are taken into the District's laboratory where they are anesthetized with triethylamine under the fume hood. They are then separated by species using a stereo zoom microscope and placed into "pools." The pools (1 pool = up to 50 adult female mosquitoes of a single species collected at one place at one time) are stored in the District's ultra-low temperature freezer at -70°C until they can be submitted to the Davis Arbovirus Research and Training laboratory on the U.C. Davis campus where they are analyzed for the presence of live mosquito-borne viruses including WNV.

Sentinel Chicken Flocks

The 2016 sentinel chicken sampling season is now underway. Samples are being taken from all five flocks every two weeks. All samples submitted in 2016 to date have been negative.


The District purchased 30 chickens from Demler Egg Ranch in San Jacinto. These chickens replaced the two year old chickens at Goleta and Mission Hills and restarted the flock at the U.S. Forest Service's Paradise Road Ranger Station. The two year old chickens were given away for adoption. The one year old chickens at Carpinteria and Solvang will serve for another season.

Samples of blood are collected from each chicken on strips of filter paper and dried overnight. They are then submitted to the California Department of Public Health Vector-Borne Disease Laboratory at Richmond, California where they are analyzed for antibodies to WNV and other mosquito-borne viruses.

West Nile Virus Dead Bird Submissions

The District did not submit any dead bird samples in April 2016. All dead bird samples submitted by the District in 2016 have been negative for WNV. The California Department of Public Health's West Nile Virus Dead Bird Hotline has resumed full operation as of April 18, 2016.

Citizens can report dead birds to the California Department of Public Health's toll free West Nile Virus Dead Bird Hotline (1-877-968-2473 or 1-877-WNV-BIRD) or online at www.westnile.ca.gov. Local agencies will pick up the dead birds and collect samples via oral swabs that are transferred to RNase cards. The RNase cards are dried outdoors for at least two hours then mailed to the Davis Arbovirus Research and Training laboratory on the U.C. Davis campus where the samples will be analyzed for West Nile Virus.

 <p data-bbox="316 1302 487 1333">Shown Life Size</p>	<p data-bbox="755 987 1356 1029">Common Crane Fly (<i>Tipula planicornis</i>)</p> <p data-bbox="933 1039 1177 1071">Diptera: Tipulidae</p> <p data-bbox="641 1071 1469 1333">Crane Flies are true flies that resemble mosquitoes and are often very abundant in spring. The District occasionally gets calls from terrified citizens complaining of “giant mosquitoes.” Another popular urban legend is that they are “mosquito eaters.” The truth is that Crane Flies cannot bite nor do they eat mosquitoes. They are completely harmless, but can be a nuisance because they are attracted to lights at night. The larvae live in loose soil or leaf litter and feed on the roots of small annual plants or decaying plant matter. Larvae of some species are aquatic.</p>
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