



MOSQUITO and VECTOR MANAGEMENT DISTRICT of Santa Barbara County

DISEASE SURVEILLANCE REPORT

December 2018

Live Mosquito-Borne Virus Surveillance

One trapping survey was conducted overnight on December 12 at the U.C. Santa Barbara bluffs overlooking the Santa Barbara Airport. Twelve EVS-CO₂ traps were set up but only a single southern house mosquito was caught. Staff conducted inspections at various sites in the southern coastal communities, especially following rains, and treated for mosquito larvae as needed.

West Nile Virus Dead Bird Submissions

Four calls were made to the Dead Bird Hotline. A sample was collected and submitted from one bird and results are pending. No West Nile virus (WNV) activity was detected in Santa Barbara County in 2018. As of Dec. 27, there were 203 human cases of WNV infection reported from 31 counties in California in 2018 including 14 new cases reported during the week ending December 14.

St. Louis Encephalitis Virus Activity

Four new human cases of St. Louis encephalitis virus (SLEV) disease in California were reported in December - one each from Los Angeles, Kern, Stanislaus and Fresno counties. This brings the total number of SLEV disease cases in California to 5 in 2018. SLEV activity has never been confirmed in Santa Barbara County.

Zika Virus and Invasive *Aedes* Mosquito Update

As of December 7, there have been 56 travel-associated Zika virus infections in California this year; none have been reported from Santa Barbara County. No yellow fever mosquitoes *Aedes aegypti*, or Asian tiger mosquitoes, *Ae. albopictus*, have ever been detected in Santa Barbara County, to date. (Updates are released on the first Friday of each month.)

Sentinel Chicken Flocks

The District currently maintains four sentinel chicken flocks located at the Carpinteria Sanitary District, Goleta Sanitary District, Solvang City Wastewater Treatment Plant, and the Mission Hills Community Services District. The flock at the U.S. Forest Service ranger station was retired and adopted by a nearby resident in November.

The chicken flocks are on a 4 week sampling regime from November through March due to reduced mosquito activity. Blood samples were collected on December 10 and 11 and all samples tested negative for the presence of WNV, SLEV and WEE.



Bed bug, *Cimex lectularius*

For centuries the bed bug was a common indoor pest until DDT and other pesticides rendered them almost obsolete in the U.S and many other countries. However, in the late 1990s and early 2000s they made an unexplained resurgence. Bed bugs can now be found infesting houses, apartments, dorms, nursing facilities, cruise ships, hotels and motels, libraries, laundromats, movie theaters and other places where people live, congregate and rotate through. Adult bed bugs are about the size of an apple seed or lentil while newly hatched young are about the size of a poppy seed. Bed bugs spread through infested beds and furniture, luggage, laundry, books, backpacks, purses and other items transported from infested sites. Bed bugs crawl from their hiding places in the middle of the night and early morning hours and use their piercing-sucking mouthparts to draw blood from their sleeping hosts. The bed bug body swells like a water balloon as they become engorged with blood. Fortunately, bed bugs are not known to vector any diseases. However, their bites can produce welts, itching and physical discomfort. Persons living in infested premises may suffer mental and emotional trauma. Substantial time, labor, money and aggravation may be spent dealing with infestations. When traveling, inspecting your hotel room and keeping your luggage secure from bed bugs can be worth the time and effort if it can prevent you from picking up unwelcome hitchhikers.