



MOSQUITO and VECTOR MANAGEMENT DISTRICT of Santa Barbara County

DISEASE SURVEILLANCE REPORT

February 2019

Live Mosquito-Borne Virus Surveillance

No mosquito trapping surveys were conducted in February as the 2019 mosquito trapping season has not started. Favorable conditions for mosquito breeding developed in some areas because of flooding and accumulation of standing water due to increased rain activity. Staff performed inspections within our enhanced services areas in the southern coastal communities and treated for mosquito larvae when necessary.

West Nile Virus Dead Bird Submissions

There were no Dead Bird Hotline notifications and no West Nile virus (WNV) activity was detected in Santa Barbara County. Twelve human cases of WNV infection in California were reported between December 27, 2018 and January 31, 2019.

St. Louis Encephalitis Virus Activity

As of March 6, 2019, the California Department of Public Health has not reported any cases of SLEV disease in California this year. SLEV activity has never been confirmed in Santa Barbara County.

Zika Virus and Invasive *Aedes* Mosquito Update

As of March 1, 2019, there have been 708 travel-associated Zika virus infections in California since 2015. Six new infections were reported in the last month but none were from Santa Barbara County. Neither yellow fever mosquitoes *Aedes aegypti*, nor Asian tiger mosquitoes, *Ae. albopictus*, have ever been detected in Santa Barbara County, to date.

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. There is no flock at the U.S. Forest Service ranger station during the winter. Blood samples were collected on February 6 and 7 and all samples tested negative for the presence of WNV, SLEV and WEE.



Oriental rat flea, *Xenopsylla cheopis*

For centuries, this pest has been a major, worldwide problem for humankind. The oriental rat flea has played a significant role in history as the vector of the Black Death (bubonic plague). Oriental rat fleas can vector several harmful bacteria including *Yersinia pestis*, which is responsible for bubonic plague, and the two different species of *Rickettsia*, *R. typhi* and *R. felis*, that cause murine typhus. Oriental rat fleas and their close relative, the cat flea, have been implicated in recent years for outbreaks of typhus among homeless populations in Los Angeles. Although this flea is most commonly associated with domestic rats, they will also feed on dogs, cats, house mice, squirrels, cottontail rabbits, other urban animals, and humans. Rat control is critical in reducing oriental rat flea populations and outbreaks of diseases vectored by fleas.

