



# COUNTY OF SANTA CLARA VECTOR CONTROL DISTRICT

## Operations and Surveillance Report

# AUGUST 2019

### REPORT DAY BITING MOSQUITOES

Yellow fever mosquito (*Aedes aegypti*) spreads throughout California.

Help us prevent this invasive mosquito from establishing itself in our community.

- Report day biting mosquitoes
- Report any sightings of black and white striped mosquitoes

Visit [SCCVector.org](http://SCCVector.org) or call 408-918-4770 to submit reports.



#### IN THIS ISSUE

MANAGER'S MESSAGE	2
SERVICES AVAILABLE	3
OPERATIONS REPORT	4 - 6
WEST NILE SURVEILLANCE	7 - 8
PUBLIC SERVICE REQUESTS	9
STAFF DEVELOPMENT	10
OUTREACH PROGRAM	11

# MESSAGE FROM THE MANAGER



**Nayer Zahiri**  
County of Santa Clara  
Vector Control District Manager

The State of California is facing a spread of the Yellow Fever mosquito (*Aedes aegypti*), an invasive mosquito not native to California or North America. The yellow fever mosquito, most famous for spreading Zika, has spread throughout most of the central valley with findings in Placer, Stanislaus, Modesto, Riverside, San Bernardino, San Diego, Tulare, Kern, Merced, and Los Angeles County. Orange County has also reported findings in 29 of its cities. On August 8, San Joaquin County Mosquito and Vector Control District found this mosquito in West Stockton.

The yellow fever mosquito likes to lay its eggs in man-made containers such as tires, buckets, and plant saucers. They are very aggressive day biters that will follow humans into cars or indoors for a blood meal. This mosquito is of great concern due to it being a vector of several illnesses such as dengue fever, chikungunya, Zika fever, Mayaro, yellow fever viruses, and other diseases.

The County of Santa Clara Vector Control District and other Bay Area districts are intensifying surveillance programs in an effort to prevent this mosquito from establishing in our community.

We encourage the public to report any sightings or day bites from a black and white striped mosquito to their local mosquito district.

Sincerely,

*Nayer Zahiri*



# SERVICES AVAILABLE

The County of Santa Clara Vector Control District is committed to protecting the public from vectors that are capable of transmitting diseases or creating a nuisance.

The services listed below are available for free to the public in Santa Clara County:

- Customer service requests for identification, advice, and/or control measures for mosquitoes, rodents, wildlife, and miscellaneous invertebrates (ticks, cockroaches, bees, fleas, flies, and others).
- Yellowjacket and wasp control/nest removal in public areas.
- Dead bird pickup and testing for West Nile virus.
- Delivery of mosquitofish to control mosquito populations. Mosquitofish are a topminnow (*Gambusia affinis*) and a natural predator of larval and pupal stage mosquitoes.
- K-12 educational presentations and hands-on activities tailored for individual classroom settings or school assemblies.
- Educational presentations for homeowner associations, organizations, businesses, civic groups, and other interested parties.
- Educational booths for community, corporate, or school events.



**A VECTOR is any animal or insect that can transmit diseases to animals or people.**

# OPERATIONS REPORT DATA



## AUGUST UPDATES

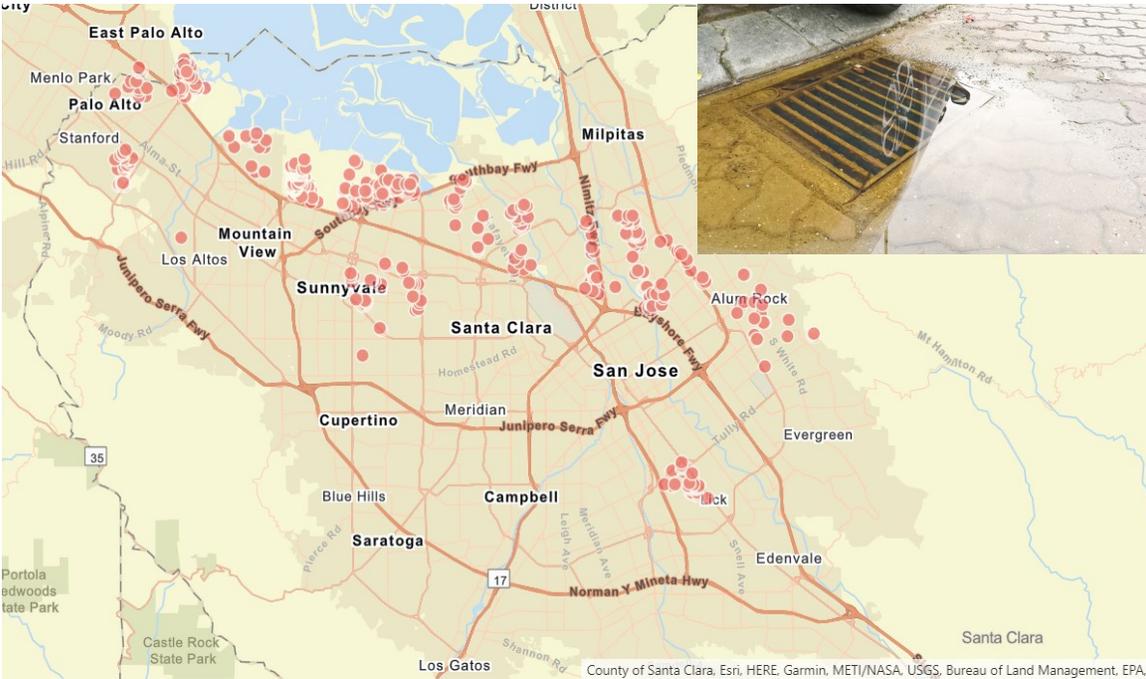


The District employs seasonal staff to check and treat mosquito larvae in flooded street stormwater catch basins, curbs, naturally breeding sources, and ponds.

These sites hold standing water due to rainfall or urban runoff from domestic water usage.

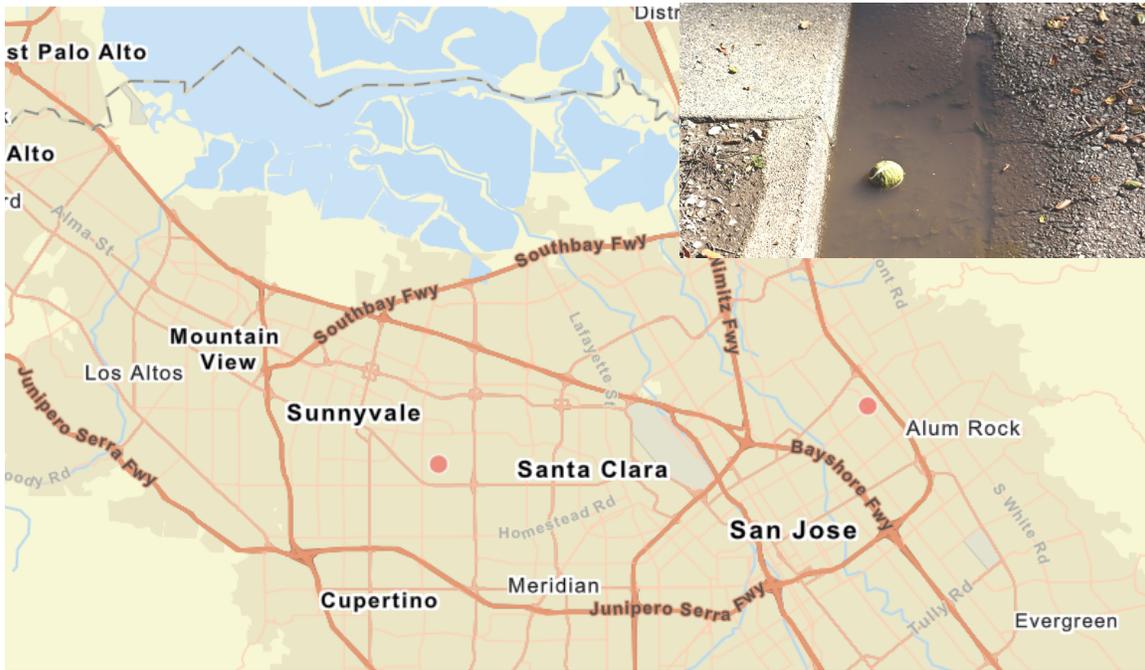
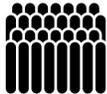
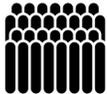
Stagnant water in these areas, and in neglected swimming pools, can breed mosquitoes that can carry dangerous human diseases like West Nile virus.

The County of Santa Clara Vector Control District actively monitors such locations to prevent these local nuisances from emerging and potentially spreading diseases.



Map 1. Staff inspected 9,000 catch basins and treated 1,232 that were found to contain mosquito larvae.

# OPERATIONS REPORT DATA

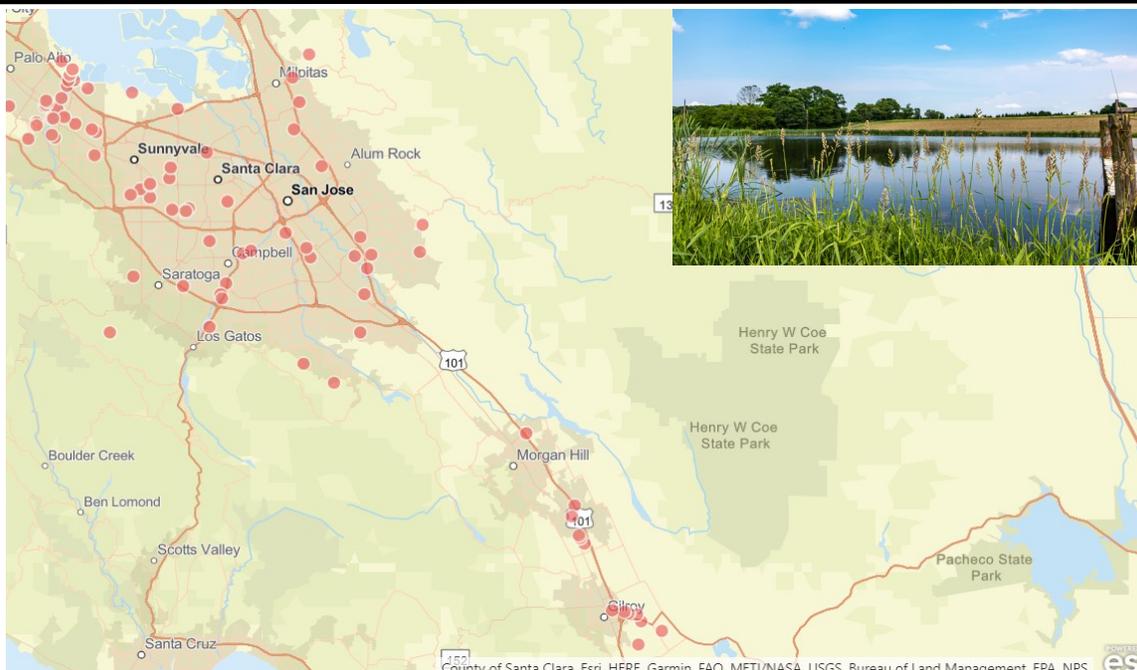


Map 2. 2 of 12 inspected curbs were treated to control mosquito breeding.



Map 3. Inspected 44 reported neglected pools and treated 7 that were found to be breeding mosquitoes.

# OPERATIONS REPORT DATA



Map 4. Inspected 448 different locations, including man-made habitats such as ponds, creeks, and marshes, treating 120 that were breeding mosquitoes.



Map 5. Delivered a total of 140 mosquitofish during 44 service requests.

# WEST NILE VIRUS SURVEILLANCE

## STATE WIDE

As of August 30, 57 human cases of West Nile virus (WNV) were reported in 12 counties throughout California. So far in 2019, two counties also reported three cases of Saint Louis encephalitis. While positive detections in birds and mosquitoes ranges from San Diego to Shasta County, positive detections were not found in Santa Clara County or in any of the other Bay Area/Coastal Region districts. In 2018, at this same time, there were a total of 42 human cases detected throughout 18 counties. There was also a drastic drop in the number of WNV positive birds compared to last year. So far in 2019, there have been a total of 91 WNV positive birds detections, whereas in 2018, there were 397 positive tests. Immunity and the preceding heavy winter rains are believed to influence those findings.



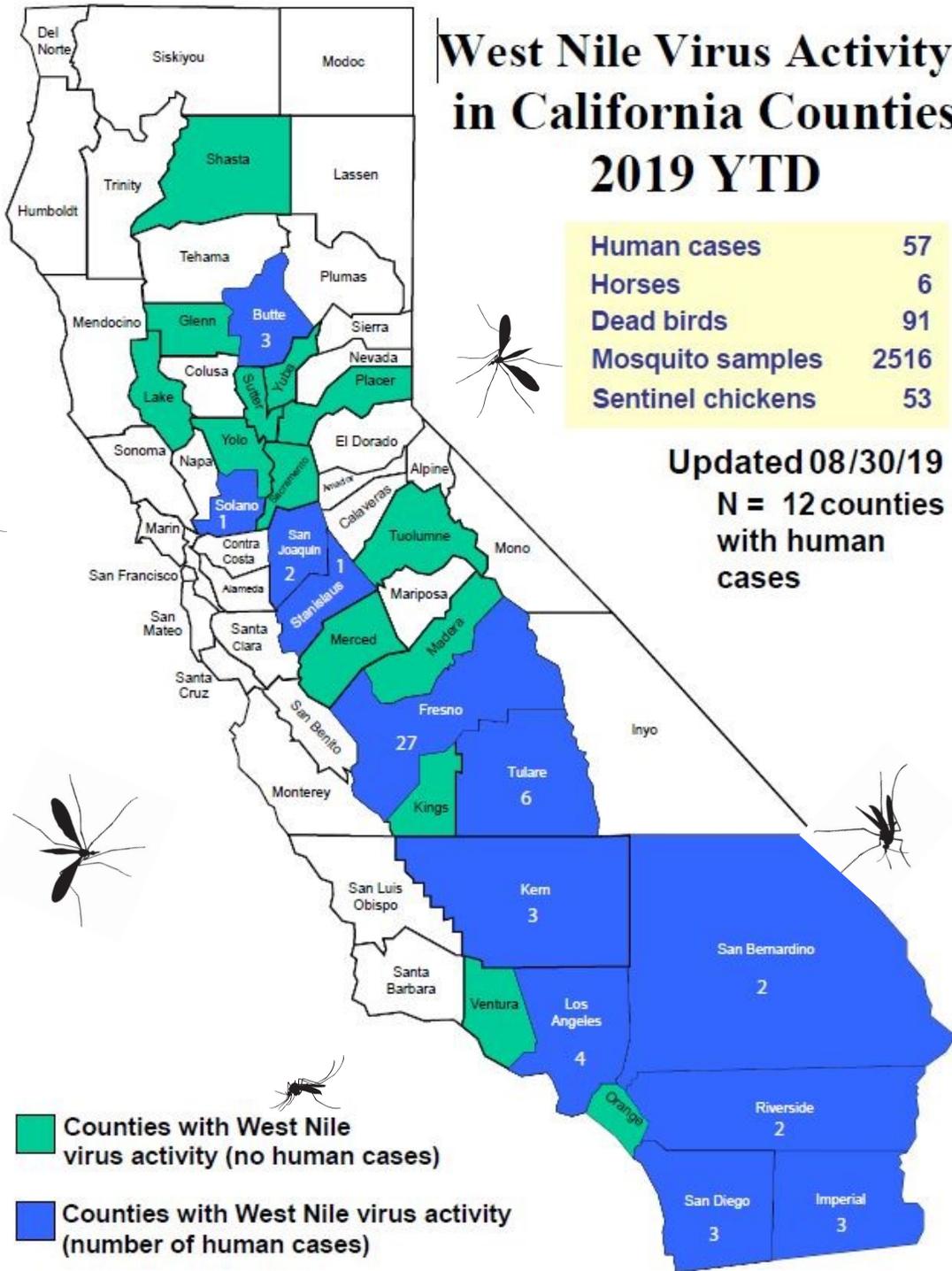
## Report dead birds

Call the California West Nile virus  
and Dead Bird Hotline

**1-877-968-2473**



# WEST NILE VIRUS SURVEILLANCE IN CALIFORNIA COUNTIES



# PUBLIC SERVICE REQUESTS

## AUGUST SERVICE REQUESTS

The District received 576 public service requests regarding a variety of vector issues during August. Mosquito requests were the highest, followed by rodent issues. Compared to historic averages, numbers in August were statistically above normal for bats, coyotes, mosquitoes, other invertebrates (biting mites, fleas, flies, etc.), and other vertebrates (snakes, foxes, bobcats, etc.). The remaining requests remained within the normal range for August trends.

REQUEST IN JUNE/JULY	TOTAL
Mosquitoes	123
Rodents	119
Wasps/Yellowjackets	58
Coyote	55
Gambusia (mosquitofish)	43
Other invertebrate	32
Other vertebrate	26
Skunk	25
Raccoons	22
Opossum	17
Bats	14
Bed Bug	11
Neglected Pools	9
Bees	8
Cockroaches	6
Squirrels	4
Snakes	2
Midges/Gnats	1
Other (see description)	1
<b>TOTAL</b>	<b>576</b>

## INSECT IDENTIFICATION

In August, a resident reported being bitten by something while being outside in her yard. Menou Thaoprasureuth, a Vector Control Technician, conducted a home inspection for the resident and discovered larval and adult stages of chiggers. Larval chiggers, of the species *Eutrombicula belkini*, are a parasite of lizards, but will bite other vertebrates including humans. The resident’s front yard was landscaped with river rocks and tan bark, and western fence lizards were observed active in the morning sun, explaining the source of chigger mites. Their bites are much more persistent and itchy than mosquito or flea bites, and they



Chigger mite

also form welts. Chiggers are also known to transmit Scrub typhus or tsutsugamushi disease in other parts of the world. Vector Control continues to work with the resident to resolve the problem.

# STAFF DEVELOPMENT

## WILDLIFE EXCLUSION PROJECT

The County of Santa Clara Vector Control District recently conducted a wildlife exclusion project at the District office. The outreach team documented every step with the goal to create helpful tools for the public to use if they need to exclude wildlife from under their patios, decks, or home. This served as a great learning opportunity for the Vector Control technicians to learn from the wildlife team and gain hands-on experience. Management, technicians, yard, and laboratory staff worked together to monitor the area to ensure no animals were inside before beginning the exclusion work, and then proceeded to sweep back the mulch, roll and secure the hardware cloth, and sweep the mulch back into place. We look forward to use similar projects like this to further educate our technicians and provide hands-on experience, as well as provide educational tools for the community to use.



Wildlife Exclusion Project Team

# OUTREACH PROGRAM

## PUBLIC EDUCATION

August community education efforts included hosting a presentation for a Vietnamese senior group at an East San Jose neighborhood center, providing a mosquito presentation at Central Park Library in Santa Clara, participating in Amazon's Health and Safety Fair, and providing a rodent presentation for a mobile home park. Each year, the County of Santa Clara Vector Control District educates thousands of individuals on the importance of mosquito control, how to manage problems with cockroaches, how to prevent a rodent infestation, and the importance of vector control. The District offers school presentations for K-12 students, community presentations, and educational booths year-round. Interested parties can submit a presentation request online at [SCCVector.org](http://SCCVector.org), submit an email to [VectorOureach@cep.sccgov.org](mailto:VectorOureach@cep.sccgov.org) or call 408-918-4794.



Amazon Health and Safety Fair



Mobile Home Park Rodent Presentation in Sunnyvale



Educational Table at Central Park Library



Yellow fever mosquito (*Aedes aegypti*)  
\*photo for educational purposes only

## MISSION

To detect and minimize  
vector-borne diseases,  
to abate mosquitoes,  
and to assist the public  
in resolving problems that  
can cause disease,  
discomfort, or injury to  
humans in Santa Clara  
County.

[www.sccvector.org](http://www.sccvector.org)



@sccvcd