

# Mosquito Control Matters

## FIGHT THE BITE

Current Issues and Challenges Related  
to Mosquito Control

Gary Goodman  
District Manager

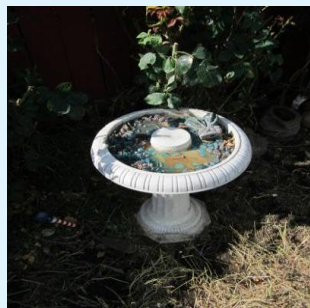
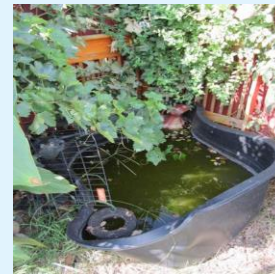
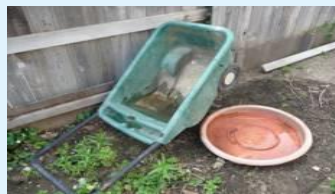


# Mission: Protect Public Health

- To provide safe, effective and economical mosquito and vector control. To accomplish this, we provide ongoing surveillance of mosquitoes and other vectors to determine the threat of disease transmission and lower annoyance levels.
- District operates under the California Health and Safety Code



# Different Mosquito Breeding Sources



# Integrated Mosquito Management Approach

- Public Information
- Surveillance
- Biological Control
- Ecological Management
- Chemical Control



# WNV Activity in California

<u>Year</u>	<u>Mosquito Samples</u>	<u>Human Cases</u>	<u>Potential Cases</u>
2021	2,263	128	3,000-8,000
2020	2,628	231	6,000-15,000
2019	3,288	225	6,000-15,000
2018	1,963	218	6,000-15,000
2017	3,371	536	16,000-37,000

**\*\*WNV is extremely under reported. The Centers for Disease Control estimates that for every neuroinvasive case confirmed, there are approximately 30-70 cases that are not reported\*\***

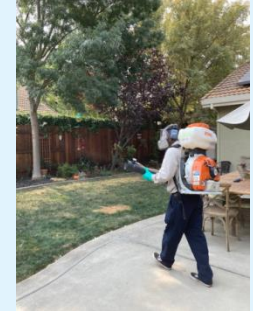




# New Concern: Invasive Mosquitoes

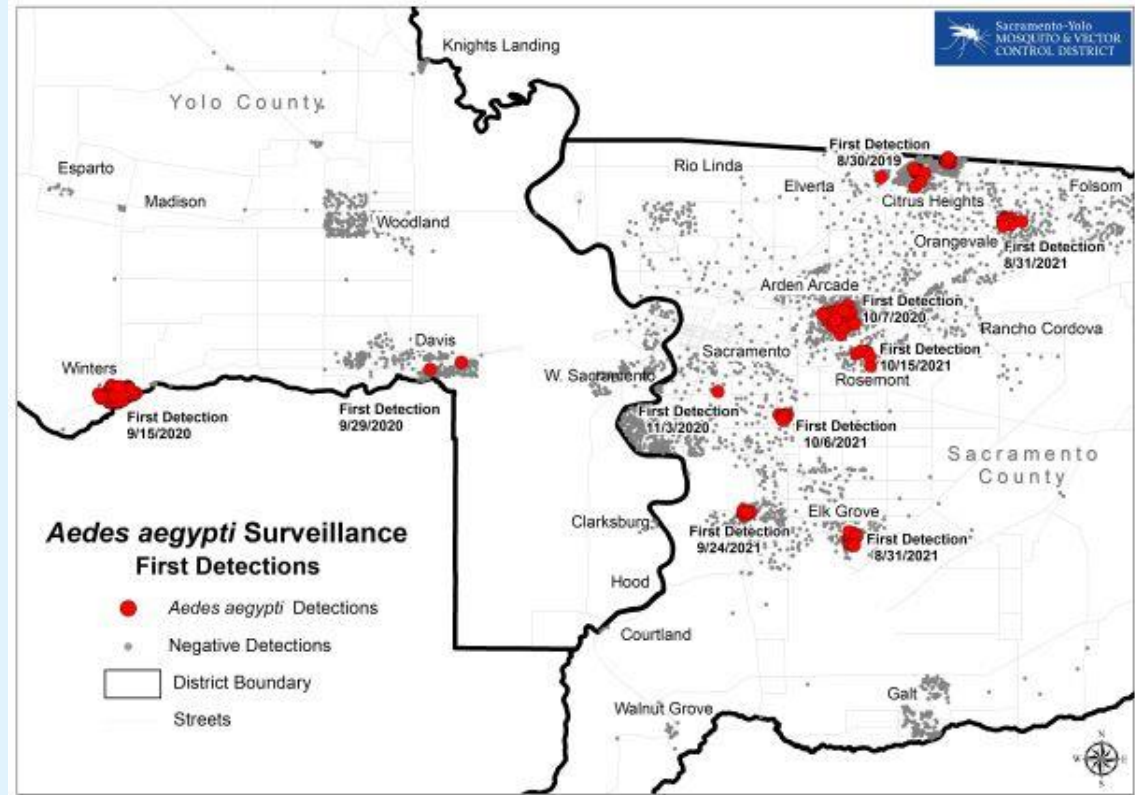
## *Aedes aegypti* (Yellow Fever Mosquito)

- An aggressive day biting mosquito that prefers to bite humans.
- Small dark mosquito with a violin shaped marking on its back and banded legs
- Prefers to live in urban areas both indoors and outdoors
- Can breed in as little as 1 teaspoon of water and can complete life cycle in 7-10 days
- Eggs are laid on the side of containers and are resistant to drying out. They can survive without water for many months
- Capable of transmitting several debilitating diseases including Zika, dengue and chikungunya
- Once established in a location it can be very difficult to control



# Detections of Invasive Mosquitoes

- No invasive mosquitoes have been detected in Folsom.
- Initially discovered in Citrus Heights in 2019 and have been rapidly spreading throughout the District.
- In 2021 invasive mosquitoes were detected in various new areas and known infestations became larger.
- Invasive mosquitoes have not been detected to date in 2022.





# Common Invasive Mosquito Breeding Sources



Sacramento-Yolo  
MOSQUITO & VECTOR  
CONTROL DISTRICT

# Outreach by District

- Ongoing email to elected officials to inform of detections and District activities
- Door to door inspections in new detection areas
- Targeted social media to affected communities
- Post cards sent to residents in detection areas
- Work with city staff to disseminate information to residents

It's important to prevent Aedes mosquitoes from spreading because they can be an extreme nuisance and can spread diseases such as Zika, dengue and chikungunya. Learn more about how you can help reduce mosquitoes in your neighborhood by visiting- <https://www.fightthebite.net/education/reducing-mosquitoes/>



**FIIGHT THE BITE**  
 FIGHTtheBITE.net  
 1-800-429-1022  
 Monday - Friday  
 7:00am to 3:30pm

Sacramento-Yolo  
**MOSQUITO & VECTOR  
 CONTROL DISTRICT**

**PUBLIC HEALTH WARNING**  
**REPORT DAY-BITING MOSQUITOES!**  
 Please call the District at (800) 429-1022  
**Aedes Aegypti** (Yellow Fever mosquito)

Actual Size: About 1/8 inch long

**WHY THE CONCERN?**  
 Aedes aegypti is an invasive mosquito in California. It can be a major annoyance and a public health threat, potentially capable of transmitting several diseases including Zika, dengue, and chikungunya.

**FACTS: Invasive Aedes Mosquitoes**

- Small dark mosquito that bites during the day.
- Prefers to dwell in urban areas indoors and outdoors.
- They especially like to bite babies, infants and adults.
- They lay eggs in small sources of water around homes.
- They are very difficult to control.
- They complete their life cycle in 7-10 days. The adults live for about 2 weeks.
- Invasive Aedes are "container breeders". Individual eggs are glued to the sides of containers. The eggs are resistant to drying out and can survive for many months until water covers them.

**REPORT DAY-BITING MOSQUITOES**  
 call the District at (800) 429-1022  
 There is no charge for District services.

**www.FIGHTtheBITE.net**



**INVASIVE MOSQUITOES DETECTED IN YOUR AREA**

**REPORT DAY-BITING MOSQUITOES!**  
 Please text the SACRAMENTO-YOLO MOSQUITO & VECTOR CONTROL DISTRICT at 916-756-9334 to schedule an inspection or visit [fightthebite.net/notice](https://www.fightthebite.net/notice).

**Aedes aegypti**  
 (Yellow Fever mosquito)

Actual Size: About 1/8 inch long

**WHY THE CONCERN?**  
 Invasive mosquitoes continue to be found at many homes throughout your neighborhood. These mosquitoes are currently very active and we need your help to control them. Aedes aegypti pose a serious health threat because they can transmit several diseases.

**About Aedes aegypti mosquitoes**

- Small dark mosquito that bites during the day and can live indoors and outdoors.
- They lay eggs in small sources of water around homes and are very difficult to detect.
- Invasive Aedes are "container breeders". Individual eggs are glued to the sides of containers. Eggs are resistant to drying out and can survive for many months until water covers them.

Sacramento-Yolo  
**MOSQUITO & VECTOR  
 CONTROL DISTRICT**

Sacramento-Yolo Mosquito & Vector Control District  
 8031 Road Rd., Elk Grove, CA 95624

**INVASIVE MOSQUITO BREEDING SOURCES THAT NEED YOUR ATTENTION**

RESORTED STANDARD U.S. POSTAGE PAID 95670-0008 ECRWSS

LOCAL POSTAL CUSTOMER

- Drain and scrub or remove saucers under plants.
- Cover bins, buckets, and tubs with fitted lids.
- Remove miscellaneous containers.
- Re-direct sprinklers so containers are not filled.
- Empty birdbaths/fountains (every 3 days).
- Empty/refill pet drinking water (every 3 days).
- Clean out/drain rain gutters and drains in yard.
- Remove plants that hold water in yard.
- To avoid the spread of these mosquitoes, DO NOT transport plants and other containers from one place to another.

Planters with Water, Buckets, Bird Baths, Outside Toys, Water Fountains, Green Water, Plant pots or where leaf meets stem

The Sacramento-Yolo Mosquito & Vector Control District is currently conducting door-to-door inspections, setting traps and making treatments in your neighborhood to control these mosquitoes. THERE IS NO CHARGE FOR DISTRICT SERVICES.

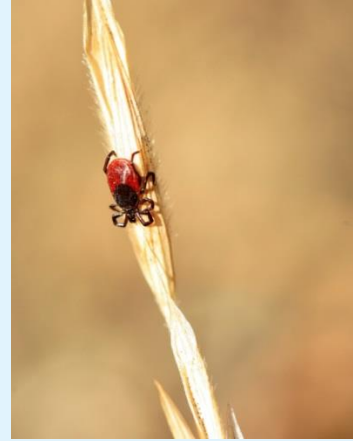
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# Tick Surveillance

- *Ixodes pacificus*, known as the blacklegged tick is found in areas of high humidity mainly between November and April.
- Staff conducts tick flagging: flannel sheets are dragged along sides of trails to collect tick specimens and brought back to the lab for testing.





# Lyme disease

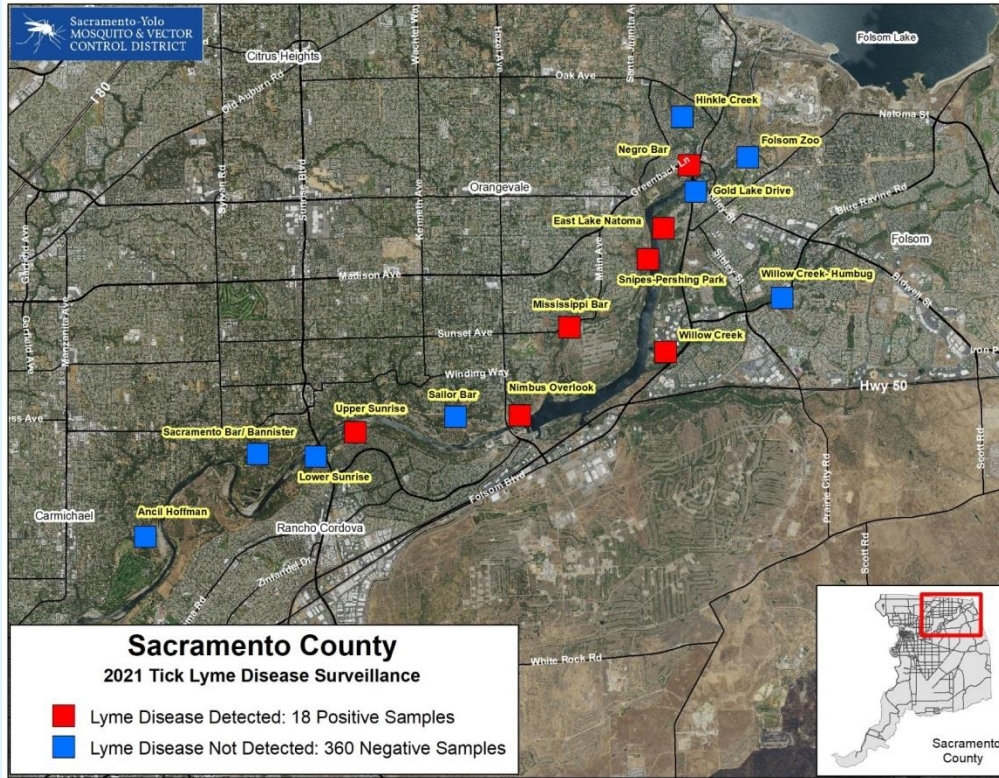
- Lyme disease is caused by a bacteria called *Borrelia burgdorferi* that can spread from the bite of an infected western blacklegged tick.
- An infected western blacklegged tick must be attached to a person and feed for at least 24 hours before it can transmit the bacteria.
- Lyme disease may start as a mild illness that begins 3 to 30 days after a tick bite and might easily be mistaken for other common illnesses like a cold or flu. Symptoms include: fever, chills, headache, fatigue, muscle and joint aches, and swollen lymph nodes may occur in the absence of rash
- Erythema migrans (EM) rash occurs in approximately 70 to 80 percent of infected persons. Begins at the site of a tick bite expands gradually over several days reaching up to 12 inches or more across. May feel warm to the touch but is rarely itchy or painful. Sometimes clears as it enlarges, resulting in a target or “bull’s-eye” appearance



Centers for Disease Control and Prevention, <http://phil.cdc.gov/phil/>



# 2021 Tick Surveillance Results



# Thank you!



**1-800-429-1022**

**[info@fightthebite.net](mailto:info@fightthebite.net)**



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CONTROL DISTRICT

[www.FIGHTtheBITE.net](http://www.FIGHTtheBITE.net)  