

# SPECIAL REPORT

## Invasive Mosquitoes in LA County

LA COUNTY

### Have you seen this Mosquito?



*Aedes albopictus*, commonly known as the Asian tiger mosquito, pictured above, is one of three invasive mosquito species found in LA County. All three species are black with white stripes and bite aggressively during the day. Health officials are asking residents to report sightings of these mosquitoes as well as remove breeding sources from their home.

#### A small insect is having a big impact

An invasive and especially resilient group of mosquitoes belonging to the genus *Aedes* are making their way around the globe, finding suitable micro-climates in urban areas. Wherever these mosquitoes establish themselves, they change the way people use outdoor spaces. These mosquitoes bite aggressively during the day and are capable of transmitting several viruses.

They are a big reason why Florida swimming pools and patios are enclosed with screens. They are the reason hundreds of volunteers felt it necessary to

go door-to-door in New Jersey to educate the public. They are the reason why the debilitating Chikungunya virus has swept through the Caribbean infecting over 780,000 people since late last year, and the reason why Brazil is currently releasing thousands of genetically modified mosquitoes in a program to help fight dengue fever. And because three different *Aedes* mosquitoes have now been identified in Los Angeles County, it may not be long before Californians will need to put on insect repellent before they go outside or play with their kids at the park, why BBQs and picnics will need to be held under the cover of screens and why the fear of

chikungunya, dengue, and yellow fever could become a reality. How quickly this scenario becomes reality depends mostly on the residents of Los Angeles County. Vector control agencies are working hard to slow down the expansion of these invasive species, but in order to really make an impact home owners will have to eliminate water sources used by the mosquitoes.

“This is a shared responsibility,” said Truc Dever, general manager at Greater Los Angeles County Vector Control District. “We cannot accomplish our mission to effectively protect public health without the help of residents.”

#### What Should You Do

1. Immediately report **black-and-white, day-biting** mosquitoes. Even one bite is too many.
2. Got junk in your yard? Clean it up! These mosquitoes are ‘container breeders’ and will lay their eggs in toys, soda cans, and even trash around the yard. Check your yard carefully for anything that will collect rain or sprinkler water.
3. Do not grow plants in water-filled buckets or vases - even indoors. Remove saucers from under potted plants. These can breed hundreds of mosquitoes every week.
4. If you store water, make sure all containers are tightly covered to keep mosquitoes out.
5. Take the extra step: Scrub outdoor containers that have held water with hot, soapy water to kill mosquito eggs.
6. Talk to your neighbors – share what you know.

#### Report activity and request service from your local vector control agency:



**San Gabriel Valley Mosquito & Vector Control District**  
1145 N Azusa Canyon Road  
West Covina, CA 91790  
(626) 814-9466  
[www.SGVMosquito.org](http://www.SGVMosquito.org)



**Greater Los Angeles County Vector Control District**  
12545 Florence Ave.  
Santa Fe Springs, CA 90670  
(562) 944-9656  
[www.glacvcd.org](http://www.glacvcd.org)

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

## Mosquitoes INVASIVE Aedes

*Aedes albopictus* - Asian tiger mosquito  
*Aedes aegypti* - Yellow fever mosquito  
*Aedes notoscriptus* - Australian backyard mosquito

#### Bite Multiple Hosts

more efficient virus transmission

#### Aggressive Day Biters

#### Black with White Stripes

#### Container Breeders

#### 3 Species found in LA County

#### Short Flight Range

1/4 mile

#### Arrived in shipments of goods

#### Eggs are laid on the inside of containers, just above the water level

#### Eggs can lay dormant for several years while waiting for the right conditions

#### *Aedes* evolved to live in close contact with humans. Prefers urban environments

#### Best Defense: DUMP and DRAIN standing water

#### California’s Changing Landscape

Our urban lifestyle makes Southern California a haven for invasive mosquitoes. Global commerce, easy and frequent travel, and urbanization have created the conditions necessary for once tropical and sub-tropical species to arrive and then thrive in arid Southern California. We provide the irrigation and humid microclimates in our own neighborhoods to accommodate a hitchhiking mosquito or her tiny, tough eggs laid on stems of imported plants. We saw this happen in 2001 when ‘Lucky Bamboo’ became a popular household plant. Shipping containers from overseas were laden with Asian tiger mosquitoes. This year officials have announced our newest invaders: *Aedes aegypti*, the yellow fever mosquito and *Aedes notoscriptus*, the Australian backyard mosquito.

Once they become established in your yard or neighborhood, they are extremely tough to manage.



Specialists from San Gabriel Valley Mosquito and Vector Control District and Greater Los Angeles County Vector Control District working together to identify potential sources of mosquito breeding.

#### Why Your Help is so Important

The San Gabriel Valley Mosquito and Vector Control District, along with Greater Los Angeles County Vector Control District, have been conducting disease surveillance and controlling mosquitoes where they are found. Battling these invasive mosquitoes requires a careful and thorough integrated approach that includes laboratory testing, on-the-ground source reduction and control, and extensive educational outreach. With help from international partners, the two districts have learned much more about the invasive species since the first population of Asian tiger mosquitoes appeared in Los Angeles County in 2001. Through research, the districts have gained insight in the biology of these mosquitoes, including their breeding, feeding, and dispersal habits.

The invasive mosquitoes’ breeding habits in containers was one trait that stood out right away.

Instead of laying clusters of eggs that could be dumped out with stagnant water, these mosquitoes lay eggs individually along the water line that stick to containers and can live for years!

“These are not the mosquitoes people are used to in Los Angeles County,” said Jason Farned, public information officer for the San Gabriel Valley Mosquito and Vector Control District. “The new mosquitoes have adapted to our cluttered, urban lifestyle.”

A lot of clutter exists in people’s backyards – areas where vector control cannot easily access. Buckets, trash, plant saucers, old tires, and even toys left in backyards become a major problem when these containers fill up with rainwater. Plant cuttings living in a bucket of water provides perfect mosquito habitat and fuels this public health problem. So what can be done?

Vector control officials urge

residents to maintain a clean yard free from any containers that can hold stagnant water. Make it a game with children to clean the yard every week. Dump out water found in containers and throw them away or store them in a covered area.

**“These are not the mosquitoes people are used to in Los Angeles County,”**

-Jason Farned, Public Information Officer for SGVMVCD

And, of course, if you are bitten during the day or see black-and-white mosquitoes, simply contact vector control at [www.ReportMosquitoes.org](http://www.ReportMosquitoes.org). The inspection and treatments are free of charge for residents covered by vector control services.