

Invasive mosquitoes are spreading across Los Angeles County. Have you been bitten?

Have you experienced an unusual number of mosquito bites this summer?

Have they landed mostly below the knee and especially around your ankles?

And did the six-legged perpetrator fly off unnoticed, like a mosquito ninja, after feasting on your blood?

If the answer to all these questions is yes, then your neighborhood is probably infested with an invasive mosquito that is moving rapidly across Southern California, driving residents and vector control specialists crazy.

It's called *Aedes*, and it's a real problem.

"They are spreading like wildfire," said Susanne Klueh, director of scientific and technical services for the Greater Los Angeles County Vector Control District. "Our phones are exploding."

Los Angeles County is home to two particularly troubling types of invasive *Aedes* mosquitoes.

Aedes albopictus, also known as the Asian Tiger mosquito, arrived first, having hitched a ride with shipments of lucky bamboo from China in 2001.

Vector control specialists monitored plant nurseries across the county and soon stopped finding the mosquitoes in their traps. They thought the insects had been eradicated. However, in 2011, residents in El Monte began to complain about unusually aggressive, daytime-biting mosquitoes plaguing

the neighborhood.

The Asian Tiger had resurfaced.

Three years later, vector control discovered another, more sinister species of *Aedes* mosquito in L.A. County — *Aedes aegyptai*. Genetic testing suggested it came from South America, and it has proved to be even more difficult to control than *Aedes albopictus*.

“This one has really been a game changer for us,” Klueh said. “We really haven’t been able to get a handle on it.”

Before these two *Aedes* species arrived, most of our mosquito bites came from a species of mosquito known as *Culex*.

These mosquitoes still make up the majority of L.A. County’s mosquito population, but because they’d rather bite birds than humans, they don’t bother us as much.

Aedes mosquitoes, on the other hand, prefer humans and will even follow you into your car or home to get a blood meal.

Their coloring — black with white stripes on their legs and thorax — makes them harder to see than the amber-colored *Culex*. What’s more, *Aedes* prefer to bite people below the knee where they are less likely to be observed.

The two types of mosquitoes also have different biting styles. *Aedes* females are skittish, and they will attack several times in a row to get enough blood to lay their eggs.

A *Culex* mosquito prefers to take one long, lazy drink. That makes it easier to slap and kill her before she can fly away.

The Culex's egg-laying strategies differ as well. Culex females generally lay a raft of 100 eggs on a fairly sizable body of water — an ornamental pond, a neglected swimming pool, a bucket of water, a bird bath. Dump out the water and the eggs die.

Aedes females use those sources of waters too. However, because their larvae can survive in just one-eighth of an inch of water, they can also lay their eggs along the edge of a plant saucer, in a bottle cap or even in the depression of a wrinkled old bag of chips that gets hit by a sprinkler.

“Aedes lay a few eggs here, a few eggs there because they don't know which one of these little sources is going to dry up,” Klueh said. “They don't want to put all their eggs in one basket.”

Aedes will also attach their eggs to the dry surface of a container, which means they can survive even if the water gets dumped out. The next time the container fills with water, the eggs will hatch — even if that's five years later.

All this has made controlling Aedes extremely difficult.

“Our field agents used to just trudge through people's backyards and walk right to that swimming pool or right up to that hot tub and find what they were looking for,” Klueh said.

Now her team has to check for signs of mosquito larvae in upturned bottle caps embedded in ivy, in starter plants adorning the porch and in the saucers beneath potted plants.

“We really had to retrain our entire workforce to look at a yard very differently,” she said.

If the Aedes mosquito population continues to grow unchecked, it may soon be very uncomfortable to spend time outside in Southern California.

“The experience you might have in New York or Florida or Indiana — that’s what we have to look forward to here in California,” said Kelly Middleton, outreach coordinator for the Greater Los Angeles County Vector Control District. “It will make spending time outdoors pretty miserable.”

For the 1,200 people who called her offices in August, that reality is already here.

But what has vector control specialists really worried is the growing likelihood of an outbreak of mosquito-borne disease. Culex mosquitoes have traditionally been responsible for about 100 to 150 known cases of [West Nile virus](#) a year, but they can’t transmit [Dengue fever](#), [yellow fever](#), [Zika](#) or [Chikungunya](#). Aedes most definitely can.

“It is really a scary scenario,” Klueh said.

So far, no Aedes mosquito in Southern California is known to have transmitted a disease to people. But vector control has a game plan in case it does happen.

The good news is that local communities have the power to stop Aedes mosquitoes from breeding, at least in their immediate area.

These mosquitoes rarely fly more than 200 yards in their lifetime. That means if you and your neighbors remain vigilant about emptying even tiny sources of standing water on your properties, you can keep them under control.

“Make it a campaign,” Klueh said. “Talk to everybody you share fences with and make sure nobody has saucers or starter plants or lawn drains that are not screened.”

She did this with her neighbors in Azusa and has seen a remarkable

improvement.

“No matter what else happens in the rest of L.A. County, you can keep this out of your neighborhood and continue to enjoy your time outdoors,” she said.

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