

Dengue and the *Aedes albopictus* mosquito

Aedes albopictus—also called the Asian tiger mosquito-- is a mosquito that can transmit the viruses that cause dengue fever. The female mosquito lays eggs in water holding containers around or further away from homes, treeholes and bamboo internodes. It bites people, pets and wild animals. This species can survive year round in tropical and subtropical climates.



General information

- *Aedes albopictus* is a small, dark mosquito with a white dorsal stripe and banded legs.
- They are strongly attracted to bite humans, but will feed on cats, dogs, squirrels, deer and other mammals, as well as birds. They will bite any exposed skin surface. They bite outdoors and indoors, but are usually found outside.
- These mosquitoes can use natural locations or habitats (for example treeholes and plants) and artificial containers with water to lay their eggs.
- About four or five days after feeding on blood, the female mosquito lays her eggs just above the surface of the water. When rain covers the eggs with water, the larvae hatch.
- Generally larvae feed upon small aquatic organisms, algae and particles of plant and animal material in water-filled containers.
- The entire immature or aquatic cycle (i.e., from egg to adult) can occur in as little as 7-9 days. The life span for adult mosquitoes is around three weeks.
- They have a short flight range (less than 200 m), so egg production sites are likely to be close to where this mosquito is found.
- *Aedes albopictus* mosquitoes remain alive through the winter in the egg stage in temperate climates (areas with four seasons) but are active throughout the year in tropical and subtropical locations.

Medical importance

Aedes albopictus is most well known for transmitting dengue and chikungunya viruses but it has also been found infected in nature with the following viruses: West Nile, Eastern equine encephalitis, Japanese encephalitis. It can also transmit dog heartworm parasites.

Habitat

The Asian tiger mosquito lays its eggs on the inner sides of water-holding receptacles in urban, suburban, and rural areas as well as in nearby edges of forested areas. *Aedes albopictus* is closely associated with vegetated areas in and around homes. The immature forms (larvae and pupae) are found in artificial containers with water such as tires, flower pots, plates under potted plants, cemetery urns/vases, buckets, tin cans, clogged rain gutters, ornamental ponds, drums, water bowls for pets, birdbaths, etc. In some instances this species has been found in catch basins. Larvae can also be found in natural habitats such as tree holes, rock holes, hollow bamboo stumps, and leaf axils.

Biting Behavior

Aedes albopictus is a very aggressive daytime biter. Its peak feeding times are during the early morning and late afternoon. This mosquito has a rapid bite that allows it to escape most attempts by people to swat it. It feeds mainly on mammals, including humans, dogs, and cats in the domestic environment and on a variety of wild animals, including squirrels and birds. Because these mosquitoes are produced in nearly any sort of water-filled container, they often become very common and bothersome, even in neighborhoods where there are normally few mosquitoes.

Mosquito Control

- Check your yard weekly for water-filled containers.
- Throw away or recycle water-holding containers that are not needed.
- If empty containers must be stored, they should be covered, turned over or placed under a roof that does not allow them to fill with water.
- Clean and scrub bird baths and pet-watering dishes weekly and dump the water from overflow dishes under potted plants and flower pots. Check that gutters are not holding water and cover rain barrels with tight screening so that mosquitoes cannot enter.
- Fill tree holes and other cavities in plants with sand or soil.
- Call the health authorities when you detect unusual numbers of mosquitoes.

Avoid mosquito bites

Use personal protection to avoid mosquito bites.

- Wear long sleeve shirts, long pants, socks and shoes when mosquitoes are most active.
- Apply repellents such as DEET, picaridin, oil of lemon eucalyptus or IR3535 only to exposed skin and/or clothing (as directed on the product label). Do not use repellents under clothing.

In addition to wearing repellent, you can protect yourself and your family by taking these precautions:

- Use mosquito netting over infant carriers, cribs and strollers.
- Install or repair window and door screens to keep out mosquitoes.



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