

Notes on the Biology of Zika Virus Vectors

Aedes aegypti and *Aedes albopictus*, the major vectors of dengue, chikungunya & Zika viruses, are originally of African and Asian origin, respectively. The spread of these two species around the world in the past 50 years is well documented and facilitated by a unique life trait: their eggs can survive desiccation. This trait allows eggs laid by these species to travel undetected in receptacles like used tires, or lucky bamboo plants, which are distributed throughout the world. When these receptacles are wetted (e.g. by rain), the larva emerge and grow to adults in their new environment. In temperate or tropical environments conditions are highly suitable for populations to quickly become established, as these mosquitoes have done in Brazil and nearly every other country in North, Central and South America.

Compounding this problem is that these mosquito species are capable of ovarian viral transmission – meaning that if the mother is infected with a virus, she can pass it on to her offspring through her eggs. Each female mosquito lays 100-120 eggs, every 4-5 days (c.4-8 times in her life time of 1-3 months), and if she is infected, all her offspring emerge ready to infect the first person they bite.

Reducing the exposure of infected people to mosquitoes requires the widespread availability of rapid diagnostic tests, effective treatment and most importantly, containment of the patients. Given that there is currently no vaccine or effective treatment for Zika virus, reducing the opportunity for mosquitoes to bite infected people is critical in slowing the continued spread of the disease.

Further guidance on protecting yourself from the Zika Virus:

[CDC Guidance on Zika Virus](#)

[CDC Dengue and Chikungunya in Our Backyard: Preventing Aedes Mosquito-Borne Diseases](#)

[CDC Preventing Aedes Mosquito-Borne Disease](#)

[CDC DEET Factsheet](#)

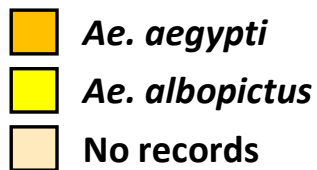
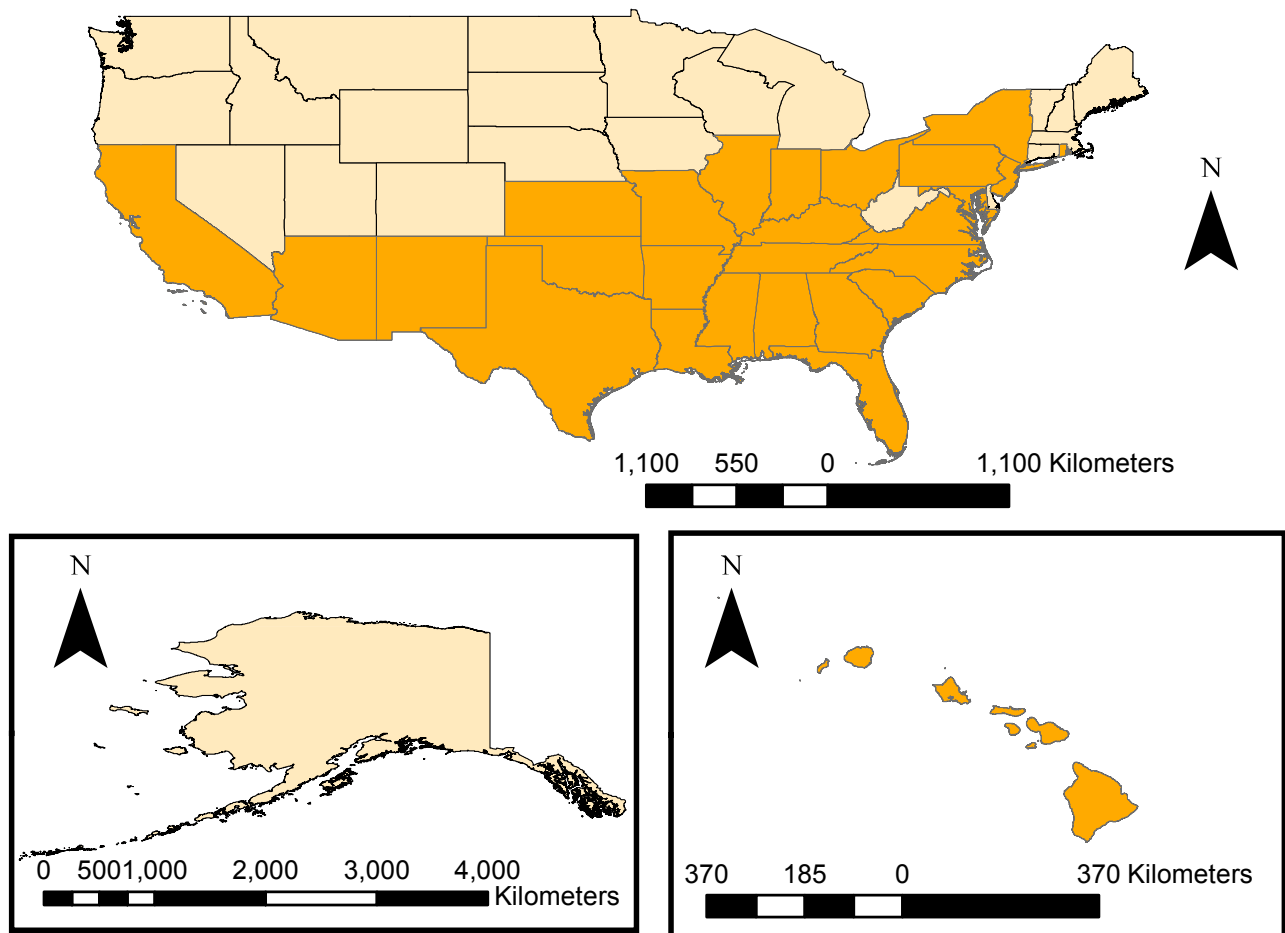
[WHO Zika Virus Background](#)

[WHO Microcephaly/Zika virus](#)

[U.S. EPA Controlling Mosquitoes at the Larval Stage](#)



Zika Virus Vectors: United States Distributions



Aedes (Stg.) aegypti

Aedes (Stg.) albopictus

Click on the mosquito species name to see the
distribution by state

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