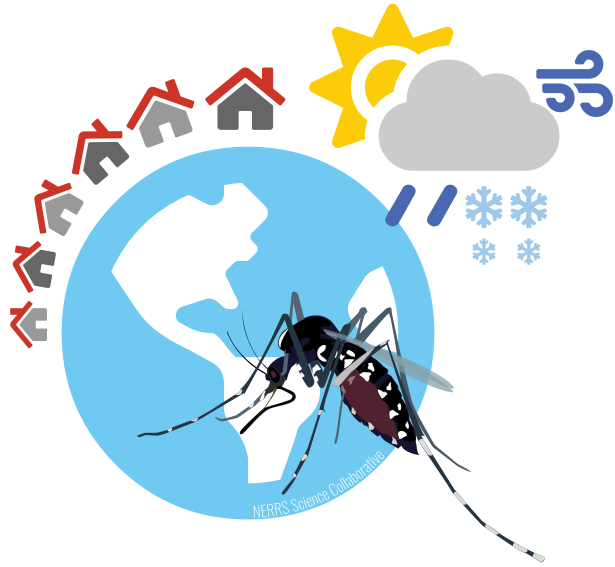
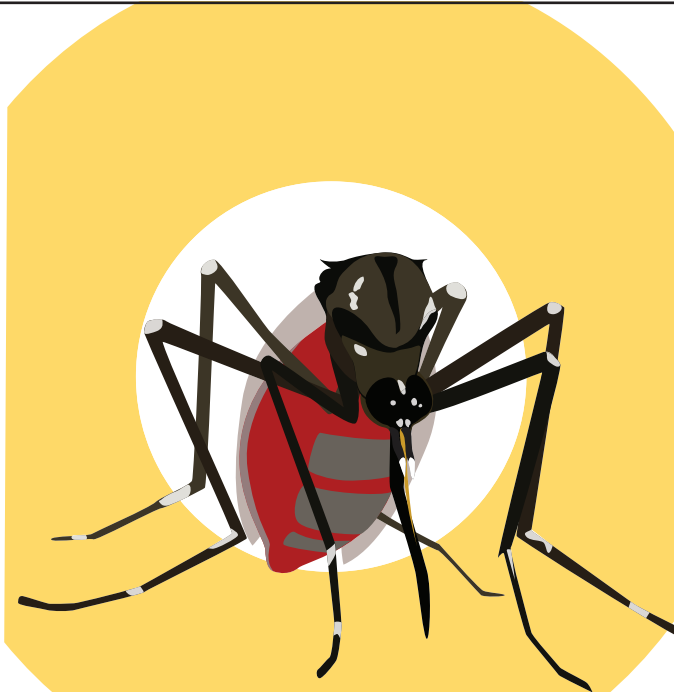


**What can you do to protect yourself & your family while enjoying the outdoors?**



- Apply and reapply insect repellent
- Tip, toss, and cover! Water pooled in containers, even small ones, can produce mosquitoes
- Wear light-colored, long-sleeve shirts and pants while outdoors
- Protect your pets! Make sure pets receive their appropriate preventative heartworm medication



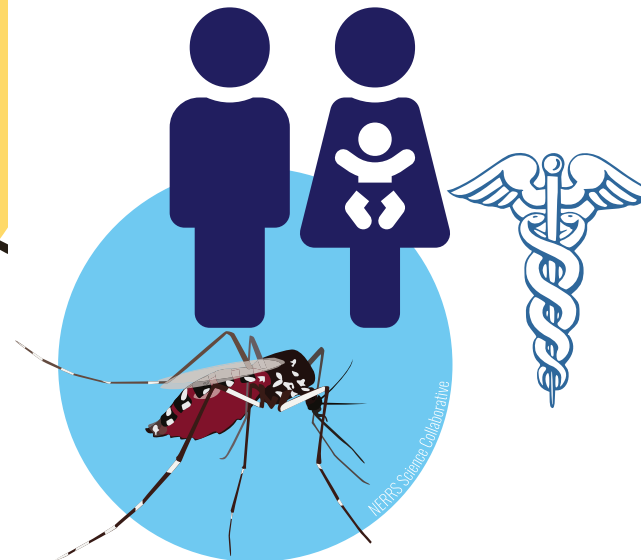
# FIGHT THE BITE

**Learn about mosquitoes.  
Protect you and your family.**

For more information about this project, visit [nerrsciencecollaborative.org/project/Lathrop16](http://nerrsciencecollaborative.org/project/Lathrop16)



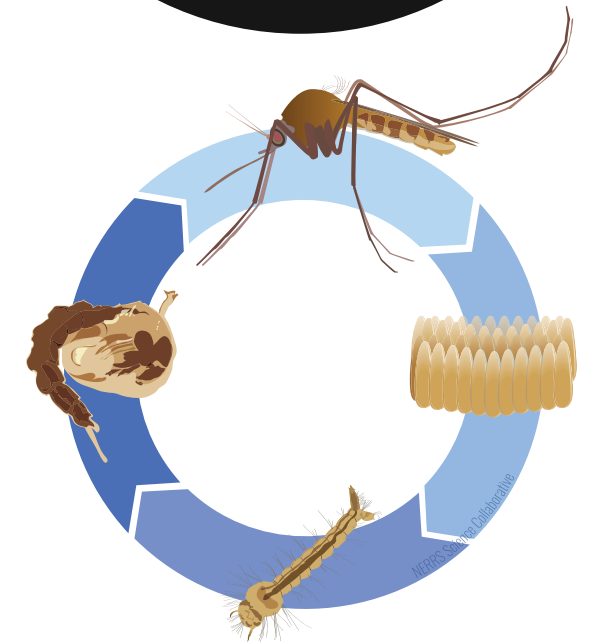
**How are they dangerous to your health?**



- From 2004 to 2016, the number of illnesses from mosquito, tick, and flea bites has tripled\*
- Diseases transmitted by mosquitoes in NJ include West Nile virus, eastern equine encephalitis, dog heartworm, and malaria

\*Source "Vital Signs: Trends in Reported Vectorborne Disease Cases — United States and Territories, 2004–2016" [cdc.gov](http://cdc.gov)

**Did you know?**  
Only the females bite.  
The blood is needed for egg production.



- Mosquito larvae can develop even in small amounts of water
- Adult males and females feed mainly on fruit and plant nectar
- Adult female mosquitoes can drink up to three times their weight in blood

# FIGHT THE BITE

## What you can do if you are bitten:

### Live in a residential area?

Common mosquito species in urban areas are the **Asian tiger mosquito** (*Aedes albopictus*) and the **house mosquito** (*Culex pipiens*).



You and your neighbors can do a few simple things to reduce the number of mosquitoes in your area: Get rid of standing water! Store watering cans, buckets, pots, tarps, etc. inside, or make sure you dump the water once a week. (This is a good idea for birdbaths.) See that your trash and recycling containers are draining properly, and check your yard routinely for any items or containers that could hold standing water!

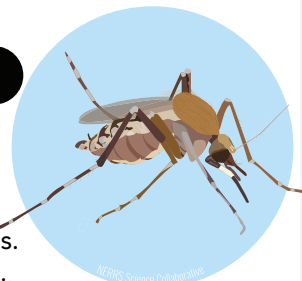
### Live near the coast?

#### The Salt Marsh Mosquito (*Aedes sollicitans*)

This mosquito species thrives in coastal salt marshes.

If you are frequently being bit near where you live, call your county mosquito control professionals.

Eggs laid in the high marsh hatch when flooded with the spring tides of the full and new moons. Left untreated, large broods of aggressive biters fly off and affect surrounding neighborhoods.

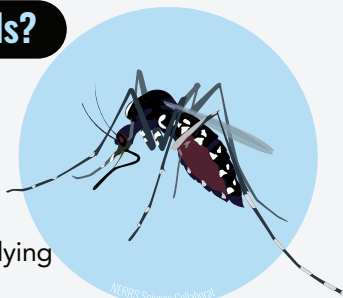


### Live near the woods?

#### The Inland Floodwater Mosquito (*Aedes vexans*)

The inland flood water mosquito thrives in low-lying flooded areas after rain. *Ae. sticticus*, *Ae. canadensis* can also be found in flooded forested areas.

If you are frequently being bit near where you live, call your county mosquito control professionals.

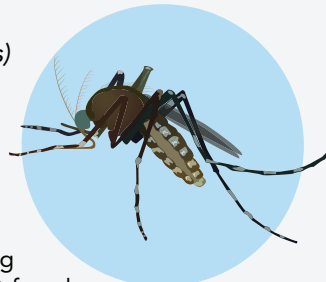


### Live near freshwater swamps?

#### The Cattail Mosquito (*Coquillettidia perturbans*)

This mosquito lays its eggs in permanent or semi-permanent bodies of water, like shallow ponds or storm water drainage areas. Feeding mostly during the evening hours, the adult females are aggressive and opportunistic biters.

If you are frequently being bit near where you live, call your county mosquito control professionals and follow the precautions for yourself, your family, and your pets.



# Mosquitoes and Climate Change

These factors will impact mosquito population size, adult survival rate and disease transmission.

### Intense Weather



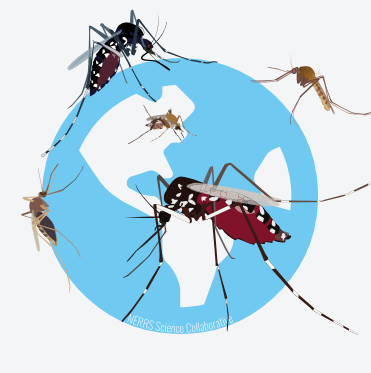
More intense storms linked to climate change can result in more extensive floodwaters and widespread, water-holding debris-prime mosquito habitats. Adult mosquitoes thrive in wetter/high moisture conditions, potentially increasing pathogen transmission.

### Sea-Level Rise



Sea-level rise may impact the habitats of mosquitoes that lay eggs in coastal salt marshes, like the salt marsh mosquito *Aedes sollicitans*. This will make things difficult for local mosquito control to control or predict where to treat.

### Habitat Range Changes



Because of increased air temperatures, species' habitat ranges are shifting. More southern mosquito species are appearing in the Mid-Atlantic region: the southern species *Culex erraticus* arrived in New Jersey thirty years ago, and is now present in most counties. In addition, southern NJ species are now being found more frequently in northern NJ.

### Invasive Species



Invasive mosquitoes are non-native species that can thrive in human environments. They lay eggs in water-holding containers that can get accidentally moved to new areas starting a new infestation. Water in small containers in backyards is devoid of natural predators but is often full of nutrients, the byproduct of human activities. This allows invasive mosquitoes to build very large populations making them a nuisance and potential disease vectors.