



NORTHERN KENTUCKY
INDEPENDENT DISTRICT
HEALTH DEPARTMENT



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Mission

The Northern Kentucky Health Department is the public agency charged with performing mandated public health services and addressing priority community health needs.

We prevent disease, promote wellness and protect against health threats.



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Mosquito Prevention



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Mosquito Facts



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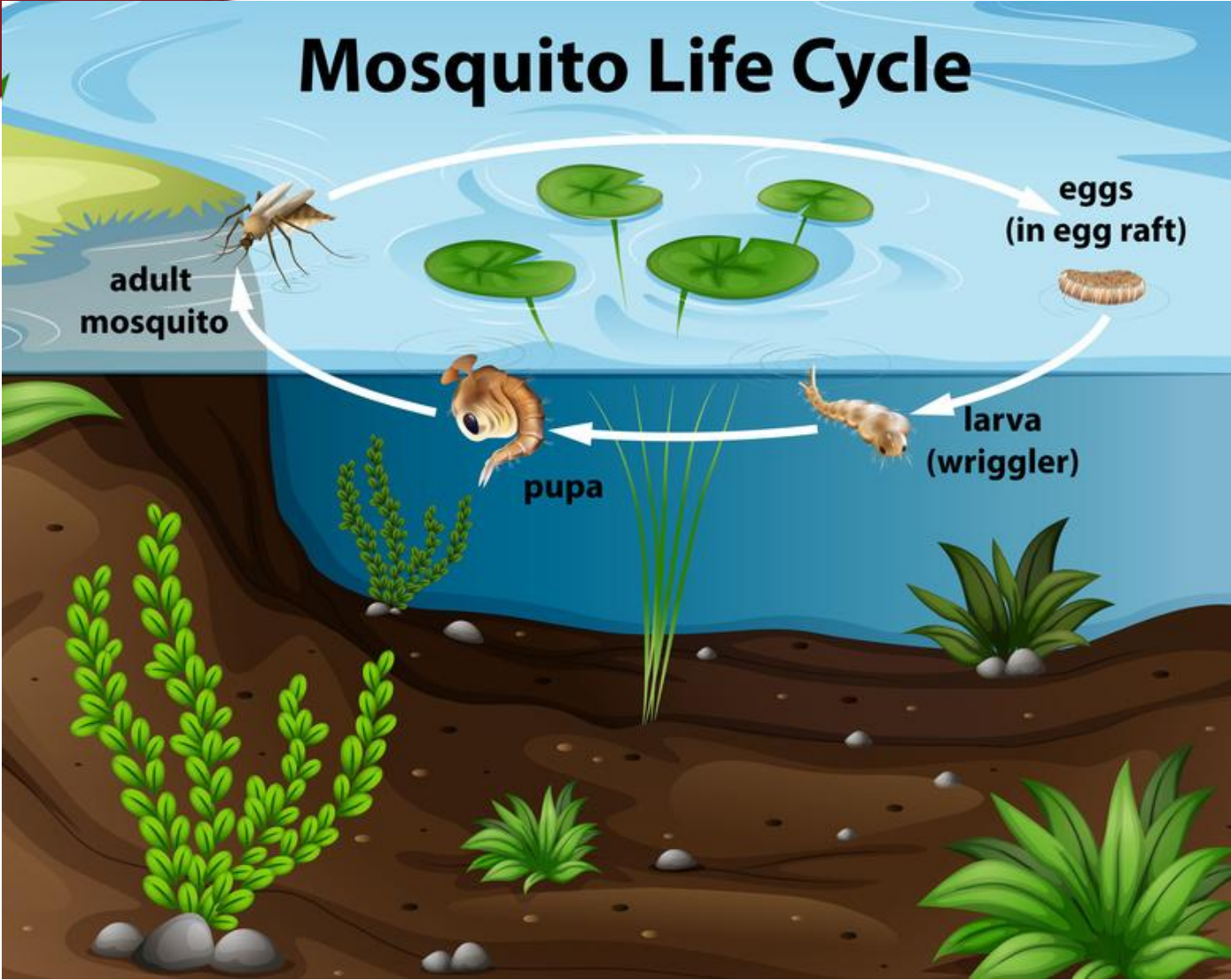
- In the United States, mosquitoes transmit a variety of viruses
- More than 50 mosquito species can be found in Kentucky but only a few are a significant nuisance and/or public health threat



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Mosquito Life Cycle



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Mosquito Life Cycle

- A mosquito can complete its life cycle within less than one week under ideal conditions
- A female mosquitoes life expectancy is one month
- Only female mosquitoes bite



Mosquito Life Cycle

Mosquitoes find their unwitting hosts by detecting carbon dioxide, heat and moisture.

Breathing, warm skin, and sweat are magnets for mosquitoes in search of a meal.



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Types of Mosquitoes



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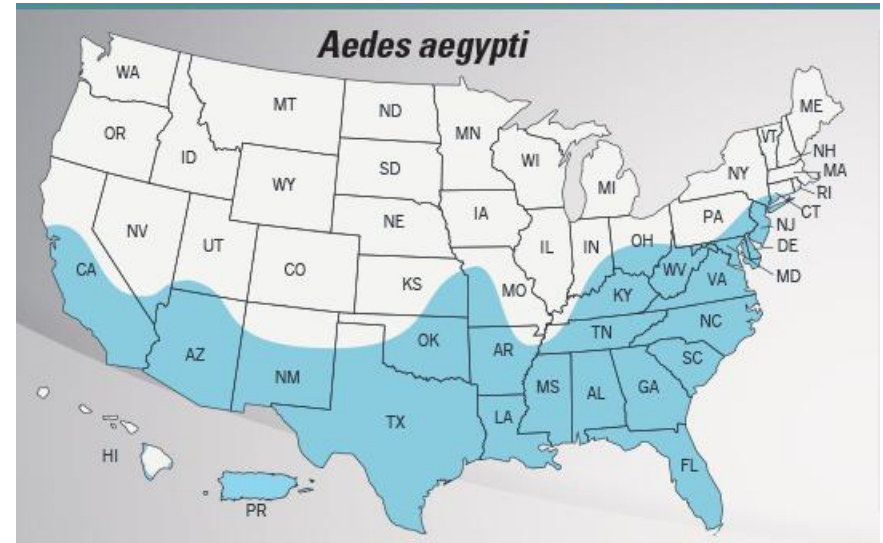
Aedes Mosquitoes

- Place their eggs at the base of vegetation in low lying areas that flood periodically
- Can deposit eggs above the water line in artificial containers (tin cans, old tires, etc.) or in tree holes that hold water



Aedes aegypti Mosquitoes

- Most likely originated in Africa
- Have migrated globally throughout the tropical, subtropical and parts of the temperate world through global trade and shipping activities
- Aggressive daytime biters



Aedes albopictus

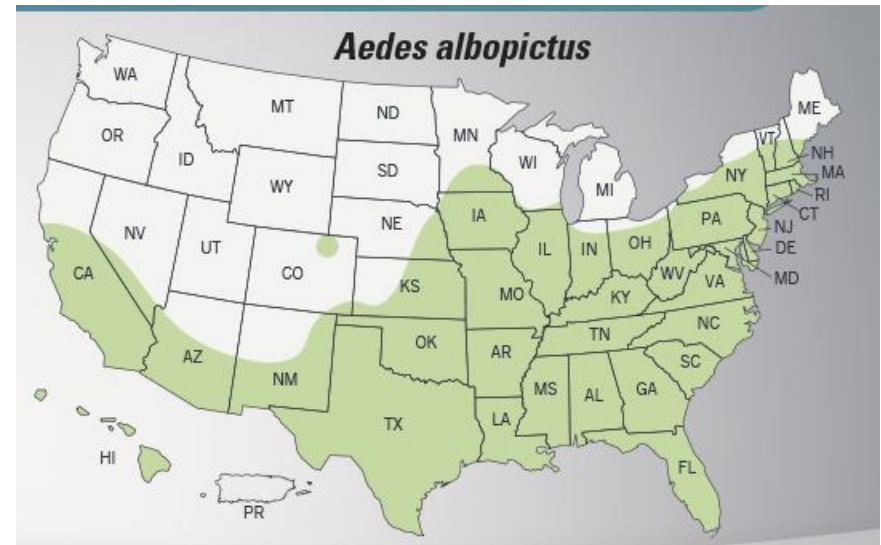
Mosquitoes

- Originated in Asia
- Have also migrated globally throughout the tropical, subtropical, and temperate world, primarily through international trade in used tires
- Live in close proximity to people, but less so than *Aedes aegypti*.
- Aggressive daytime biters



Aedes albopictus Mosquitoes

- Have adapted to survive in a broader temperature range at cooler temperatures, so they persist in more temperate climates like Kentucky.



Disease Transmission

- Aedes aegypti and Aedes albopictus are the principal vectors of
 - Dengue fever
 - Chikungunya
 - Yellow fever
 - Zika virus





Culex pipiens



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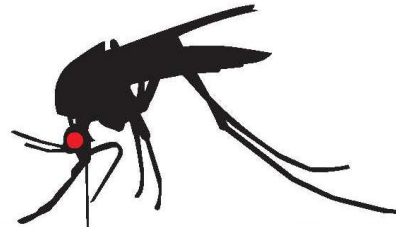


Culex Mosquitoes

- Lay groups of eggs on the surface of water in rain barrels, bird baths, tin cans, old tires, car bodies, cisterns, roof gutters and other containers which hold water
- Typically bite during evening hours



Mosquito Exclusion and Control



FIGHT
THE BITE
DAY AND NIGHT



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Mosquito-Proof Your Home

- Keep mosquitoes out of the home by keeping windows, doors and porches tightly sealed
- Keep screens in good repair
- Use air conditioning when available



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Standing Water

- Mosquitoes only need a spoonful of water to breed and just a couple days to hatch
- A neglected bird bath, pool or gutter can produce hundreds of new mosquitoes in just days



Sources of Standing Water



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Remove Sources of Standing Water

- Dispose of old tires, buckets or other refuse that can hold water
- Clean debris from gutters and downspouts
- Change water in bird baths and baby pools at least weekly
- Keep swimming pools clean, chlorinated, and filtered



Remove Sources of Standing Water

- Fill or drain ditches and/or swampy areas
- Ensure ornamental ponds are aerated and/or stocked with mosquito-eating fish



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Bite Prevention



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Bite Prevention

- Use an EPA-registered insect repellent. Look for these ingredients: DEET, picardin, IR3535
- Always read and follow directions on the repellent container
- Do not use insect repellent on babies younger than 2 months of age



Bite Prevention

- If you use sunscreen, apply sunscreen first and insect repellent second



Bite Prevention

- Dress for occasion----wear light colored long sleeves, long pants and a hat when you plan to be outdoors
- Treat clothing and camping gear with permethrin or purchase permethrin-treated clothing and gear
- Do not use permethrin products, intended to treat clothing, directly on skin



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Bite Prevention

- EPA has not evaluated natural insect repellants for effectiveness. Examples include citronella oil, geranium oil, peppermint oil, or soybean oil.



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Treating Standing Water with Larvicide



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Treating Standing Water with Larvicide

- Larvicide is a chemical or biological agent that kills or prevents development of mosquitoes in immature stages.
- Use EPA approved larvicide products when areas of standing water cannot be completely eliminated.
- When applying larvicide, be sure to follow manufacturer application instructions



Questions?

Northern Kentucky Health Department

859.341.4151

www.nkyhealth.org/zika.aspx



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