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West Nile Virus Fact Sheet, April 2004

West Nile Virus and Mosquitoes

Do all mosquitoes bite humans?

No, only adult female mosquitoes bite humans. Male mosquitoes feed on nectar and plant juices only. Most female mosquitoes feed on humans, birds and other animals to get sufficient blood to develop eggs.

Do all mosquitoes transmit West Nile virus?

While there are many species of mosquitoes, the adult *Culex pipiens* mosquito (the common house mosquito) is the one most commonly associated with West Nile virus.

Why are some people bitten more than others?

There are many factors. Cologne, perfumes and scented body lotions can attract mosquitoes. Dark-colored clothing is also more attractive to mosquitoes. During evenings, nighttime and dawn, mosquitoes are most active in searching for blood, so people outdoors during that time are more likely to be bitten. Finally, everyone's body is different, and some people produce odors more enticing for mosquitoes.

Where do mosquitoes live?

The *Culex pipiens* mosquito (the common house mosquito) lays its eggs in standing or slow-moving water. Weeds, tall grass, and bushes provide an outdoor home for the adult *Culex pipiens* mosquito.

How far can a mosquito travel?

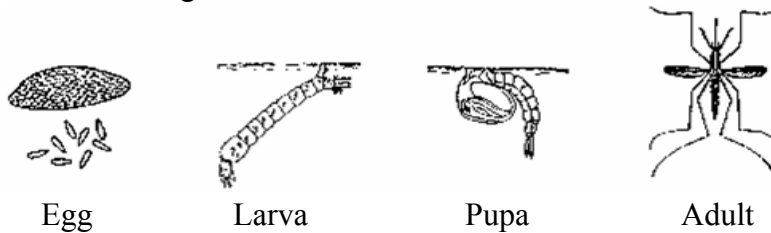
Depending on the species, adult mosquitoes may fly several miles with help from the wind. *Culex pipiens*, the species most commonly associated with the West Nile virus, has a travel range of two to three miles.

How long do adult mosquitoes live?

Generally, adult female mosquitoes have a life span of 2 weeks to a month while adult male mosquitoes only live a week.

What is the life cycle of a mosquito?

A mosquito goes through four distinct stages: egg, larva, pupa and adult (see below). This life cycle, from birth to death, is about a month long.



What is the egg phase of a mosquito?

Eggs are laid in clusters and float on the surface of water. They can be stuck together in rafts of hundreds, or laid separately on water or flooded soil. Most eggs hatch into larvae within 48 hours. Adult female mosquitoes can lay eggs every 10-14 days.

What is the larval stage?

Mosquito larvae live in water from 4 to 14, days depending on the water temperature. They come to the surface frequently to obtain oxygen. They feed on algae and small organisms living in the water. The larva sheds its skin four times while it grows. After the fourth time, the larva becomes a pupa, the stage before the mosquito becomes an adult.

What is the pupa stage?

The pupa stage is a resting, non-feeding stage. Mosquito pupae must live in water from 1 to 4 days, depending on the species and water temperature. When development is complete, the pupa skin splits and the mosquito emerges as an adult.

What is the adult stage?

The newly emerged adult mosquito rests on the surface of the water for a short time to dry and allow all its parts to harden. If nothing eats or kills it, the female adult can live up to a month, the male only a week.

Why do mosquitoes make a buzzing noise?

Mosquitoes flutter their wings very fast, some as much as 250 times per second, producing a high-pitched buzz.

How is West Nile Virus spread?

West Nile Virus is spread to humans by the bite of an infected mosquito. A mosquito becomes infected by biting a bird that carries the virus. After 10-14 days, the mosquitoes can transmit the virus to humans and animals while biting to take blood. Once the virus is in someone's bloodstream, it multiplies and may cause illness. You or your child cannot get West Nile Virus from a person who has the disease. West Nile Virus is not spread by person-to-person contact such as touching, kissing, or caring for someone who is infected.

For more information about West Nile Virus, call the Livingston County Department of Public Health at 517.546.9858, Monday-Friday during business hours, or check our website at www.lchd.org.

This fact sheet includes materials provided through the courtesy of the New York City Department of Health & Mental Hygiene and the Washtenaw County Environmental Health Department.