The mosquito life cycle

Many species of mosquitoes are found in the Oberlin area. Most species lay their eggs in standing water. The eggs hatch into larvae, "wrigglers," which may be found in large numbers in pools, ditches, clogged house gutters, or artificial containers that have filled with water.



After several weeks, the **larvae** develop into **pupae**, "tumblers," which then develop into adults in less than a week. Although both male and female adult mosquitoes feed on plant juices, females require a blood meal to produce **eggs**. Mosquitoes bite humans to acquire this blood meal. The female then lays her eggs in a wet area. A small pool of water only several inches deep may produce thousands of mosquito larvae.

Will mosquitoes be abundant in Oberlin this summer?

Mosquito numbers vary from year to year and month to month depending on weather conditions. During years of heavy rainfall, mosquito breeding areas are plentiful and many mosquitoes are produced. During a dry summer, large numbers of mosquitoes can suddenly occur about two weeks after a heavy rainfall because of newly formed pools of water in which eggs may be laid.

Mosquito control

Spraying insecticide is one way to reduce the number of adult mosquitoes. However, the most effective mosquito control strategies target the aquatic larvae by either eliminating standing water, or the killing of larvae with larvicides. The City of Oberlin is currently providing residents with an environmentally friendly larvicide that selectively kills only mosquito larvae. The larvicide, a small briquet with bacteria that kill only mosquito larvae, may be placed in pools of water. The disc is active for 30 days.

How you can help

You can help control mosquitoes by following these suggestions:

1. Remove or empty any containers on your property that may fill with water:

| OLD TIRES | BUCKETS |
|------------------|---------|
| BARRELS | CANS |
| POTS | BOTTLES |

- 2. Replace water in bird baths weekly
- 3. Keep house gutters empty to prevent water from collecting.
- 4. Report to the City any standing water in which mosquitoes may be breeding
- 5. Request larvicide from the city to treat mosquito breeding areas on your property

Larvicide briquets are available to City residents for treatment of private property. Briquets may be acquired at the Oberlin City Hall, 85 S. Main St. or call 775-7218 for more information.

For further information contact the Lorain County General Health District at 322-6367

The goals of mosquito control

- 1. Reduce the number of mosquitoes which are not a health threat, but bother residence by reducing outdoor activity.
- 2. Reduce the number of mosquitoes that transmit disease

Mosquitoes and disease

Although most species of mosquitoes found in Oberlin do not pose a threat to human health, some species are capable of transmitting disease. The mosquito-borne diseases of greatest concern in Oberlin are West Nile virus (see enclosed brochure) and **LaCrosse encephalitis virus**.

LaCrosse encephalitis virus

- typically affects children
- requires hospitalization
- is rarely fatal
- includes the following symptoms: headache, fever, stiff neck, lethargy, nausea, and disorientation
- most cases occur July September
- results in 25 30 illnesses in Ohio each year
- resulted in one nonfatal case in Oberlin in 1984
- is transmitted by one species of mosquito, the tree-hole mosquito

The **tree-hole mosquito** acquires the virus by biting an infected chipmunk or squirrel. Infected mosquitoes also may pass the virus on to the next generation through their eggs.

Controlling the tree-hole mosquito

The tree-hole mosquito is unique in two ways. First, it lays eggs only in treeholes and artificial containers, especially used tires, rather than in pools of water on the ground. Secondly, unlike most other species, it flies and bites humans during the day and hides at night. Therefore, night-time spraying is not the most effective method for controlling the treehole mosquito.

How you can help

- 1) Check the trees in your yard for holes and cavities that hold water. Drain the water and fill cavities with sand.
- 2) Empty all artificial containers in your yard at least once a week
- 3) Remove or drain used tires

This pamphlet was produced with the cooperation of Oberlin College, the City of Oberlin, and the Lorain County General Health District.

Mosquito Control in Oberlin