

Become a Responsible Licking Township Resident

Licking Township is looking for Responsible Residents. Residents who will personally commit to do something about mosquito control in their rural community to protect themselves, their family, and their neighbors from the infectious diseases carried by mosquitoes. Residents who will educate themselves and maintain their property so they are not contributing to the potentially serious health problems from mosquitoes by allowing mosquitoes to be bred on their property. All residents participating in the **I'll Be A Responsible Resident Program** will be recognized on the Licking Township website and printed lists in The Buckeye Lake Beacon and The Newark Advocate. Also, as a program participant you will be able to receive free preventative larvicide briquettes to use on your property in appropriate wet locations. Other residents not involved in the Program can purchase larvicide at the Township's cost.

By committing to the **I'll Be A Responsible Resident Program**, the resident will both educate themselves and act responsibly by studying and acting upon the Responsible Resident curriculum:

I have read the expectations of the I'll Be A Responsible Resident Program and I commit to accomplish the requirements of this responsibility.

Name

Date

Address

Telephone Number

Email Address

Send this form by mail to **I'll Be A Responsible Resident Program**, P.O. Box 222, Jacksontown, OH 43031 or email page 1 of this document to **licking_twp_0653@uan.auditor.state.oh.us** with your name, address, telephone number, date and email address listed, or fax page 1 of this document with the same information to 323-2209. If you have questions or suggestions, feel free to make contact using the same methods to reach Licking Township personnel.

Personal Education:

Understand the breeding cycles and habitats of mosquitoes by personally reading the attached article.

Become knowledgeable of the symptoms and treatment of West Nile Virus Disease in the attached article.

Review information on the Licking Township website at www.lickingtwpohio.us regarding Licking Township's efforts to make our rural community as safe as possible.

Preventative Action By Any of the Following:

1. Stay indoors at dawn, dusk, and in the early evening when practical.
2. Wear long-sleeved shirts and long pants whenever you are outdoors.
3. Spray clothing with repellents containing permethrin or DEET since mosquitoes may bite through thin clothing.
4. Apply insect repellent sparingly to exposed skin. An effective repellent will contain 35% DEET (N,N-diethyl-meta-toluamide). DEET in high concentrations (greater than 35%) provides no additional protection.
5. Avoid applying repellents to the eyes and mouth, as they may be irritated. Also avoid applying repellent to the hands of children.
6. Read and follow the manufacturer's DIRECTIONS FOR USE of insecticide or insect repellents, as printed on the product.

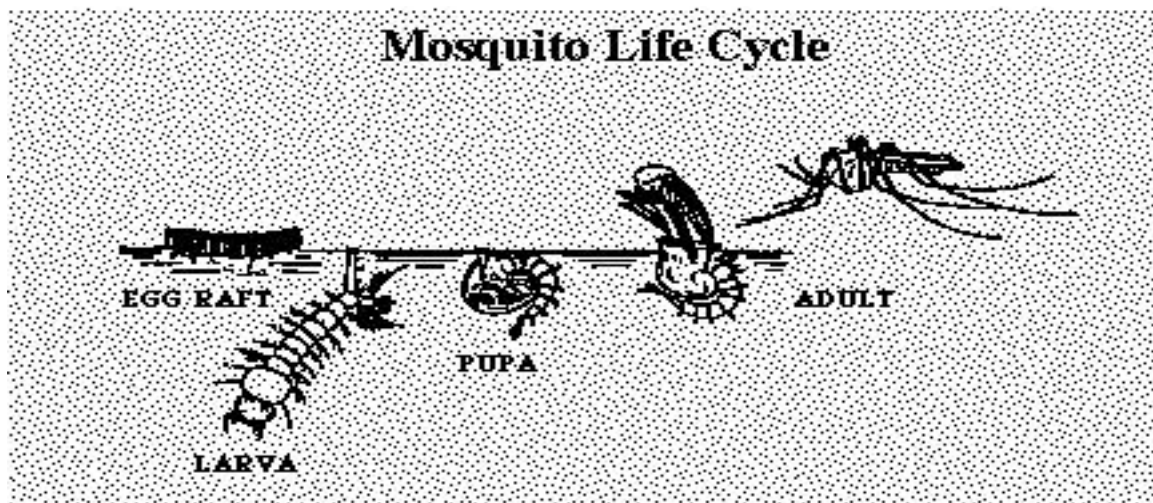
Personal Action:

1. Discuss the issue of mosquito control and the abatement of infectious disease with your family and neighbors.
2. Complete an inventory of your property and eliminate any potential breeding sites for mosquitoes by removing tin cans, old tires, buckets, glass jars, broken toys and other water-holding containers. Check the water in flowerpots and other containers for mosquito larvae.
3. Maintain the natural or architectural features of your property that may be breeding mosquitoes.
4. Change the water in any birdbaths and wading pools once a week.
5. Clean out roof gutters so water does not accumulate.
6. Examine flat roofs after rains, making certain no water remains more than one week.

7. Place tight covers over cisterns, cesspools, septic tanks, fire barrels, rain barrels and tubs where water is stored.
8. Regulate lawn and garden irrigation causing puddling in low areas.
9. Fill tree holes with Treekote and mortar after draining. Eliminate water-holding tree stumps and keep the grass mowed around ponds and other bodies of water, taking care to keep clippings out of water.
10. Drain or fill stagnant water pools, puddles and ditches of swampy areas around your property.
11. Maintain farm ponds according to good management practices. Eliminate excessive amounts of emergent aquatic vegetation that will shelter mosquitoes. (In some cases, fish, such as the White Amur or Grass Carp, can be used to clear vegetation and reduce the mosquito breeding capacity of the pond.)
12. Secure and use larvicide for the treatment of stagnant ponds and wet areas. (Larvicide can be obtained for free by participating in the **I'll Be A Responsible Resident Program**. Other residents not involved in the Program can purchase larvicide at the Township's cost.)
13. Notify the Township of potential mosquito breeding sites.

Licking Township will:

1. Work to eliminate or treat with larvicide standing water in ditches along the roads within the Township.
2. Utilize Section 505.87 of the Ohio Revised Code to ensure that maintenance of properties in the Township are not the cause of mosquito infestation.
3. Maintain a section of the Township webpage with information regarding developments pertaining to mosquito control and disease prevention from the infection of mosquitoes.
4. Offer environmentally sensitive larvicide to Township residents, depending on their personal commitment to the abatement of the mosquito population either free of charge or at cost.
5. If necessary, contract with the Licking County Health Department or a private contractor for applying adulticiding spray that is the least harmful to humans and the environment.



Egg: Eggs are laid one at a time or attached together to form “rafts.” They float on the surface of the water. In the case of *Culex* and *Culiseta* species, the eggs are stuck together in rafts of up to 200. *Anopheles*, *Ochlerotatus* and *Aedes*, as well as many other genera, do not make egg rafts, but lay their eggs singly. *Culex*, *Culiseta*, and *Anopheles* lay their eggs on the water surface while many *Aedes* and *Ochlerotatus* lay their eggs on damp soil that will be flooded by water. Most eggs hatch into larvae within 48 hours; others might withstand subzero winters before hatching. Water is a necessary part of their habitat.

Larva: The larva (plural - larvae) lives in the water and comes to the surface to breathe. Larvae shed (molt) their skins four times, growing larger after each molt. Most larvae have siphon tubes for breathing and hang upside down from the water surface. *Anopheles* larvae do not have a siphon and lie parallel to the water surface to get a supply of oxygen through a breathing opening. *Coquilleltidia* and *Mansonia* larvae attach to plants to obtain their air supply. The larvae feed on microorganisms and organic matter in the water. During the fourth molt the larva changes into a pupa.

Pupa: The pupal stage is a resting, non-feeding stage of development, but pupae are mobile, responding to light changes and move (tumble) with a flip of their tails towards the bottom or protective areas. This is the time the mosquito changes into an adult. This process is similar to the metamorphosis seen in butterflies when the butterfly develops - while in the cocoon stage - from a caterpillar into an adult butterfly. In *Culex* species in the southern United States this takes about two days in the summer. When development is complete, the pupal skin splits and the adult mosquito (imago) emerges.

Adult: The newly emerged adult rests on the surface of the water for a short time to allow itself to dry and all its body parts to harden. The wings have to spread out and dry properly before it can fly. Blood feeding and mating does not occur for a couple of days after the adults emerge.

The egg, larva and pupa stages depend on temperature and species characteristics to determine how long they take for development. For instance, *Culex tarsalis*, a common California (USA) mosquito, might go through its life cycle in 14 days at 70° F and take only 10 days at 80° F. On the other hand, some species have naturally adapted to go through their entire life cycle in as little as four days or as long as one month.

Become Knowledgeable of the Symptoms and Treatment of West Nile Virus

All residents of areas where virus activity has been identified are at risk of getting West Nile encephalitis; persons older than 50 years have the highest risk of severe disease. Most infections are mild, and symptoms include fever, headache, and body aches, occasionally with skin rash and swollen lymph glands. More severe infection may be marked by headache, high fever, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, paralysis, and, rarely, death. The incubation period in humans (i.e., time from infection to onset of disease symptoms) for West Nile encephalitis is usually 3 to 5 days. If you have concerns about your health Contact your health care provider. If you or your family members develop symptoms such as high fever, confusion, muscle weakness, and severe headaches, you should see your doctor immediately. Persons older than 50 years of age have the highest risk of severe disease.

There is no specific treatment for West Nile Virus. In more severe cases, intensive supportive therapy is indicated, often involving hospitalization, intravenous fluids, airway management, respiratory support (ventilator), prevention of secondary infections (pneumonia, urinary tract, etc.), and good nursing care.