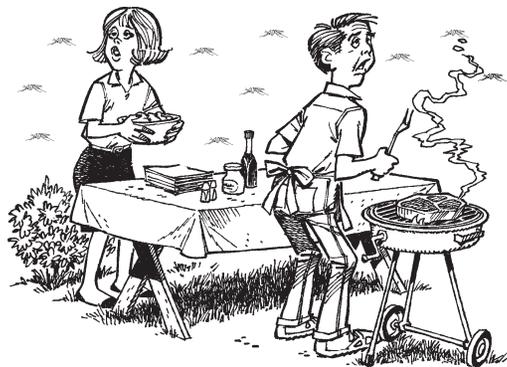


There are many different types of mosquitoes that dwell in our county. Most adult female mosquitoes are considered to be obnoxious biters and a nuisance (especially when these pests invade our outdoor recreational activities), but are not a public health concern because they do not spread disease. These nuisance mosquitoes are called floodwater mosquitoes. Floodwater mosquitoes lay their eggs in existing bodies of water or areas that will flood later and migrate into populated areas.



**Q: Do all mosquitoes carry diseases?**

No, most mosquitoes in this area do not carry diseases. There are two types of mosquitoes which are cause for concern in our region because they may carry the encephalitis virus: *Culex* (northern house mosquitoes) and tree-hole mosquitoes.

**Q: What is encephalitis and which mosquitoes carry encephalitis?**

In general, encephalitis is a viral disease which causes inflammation of the brain. Severe symptoms may include rapid onset of headaches, high fever and mental disturbances (i.e. confusion, irritability, tremors, stupor and coma). The *Culex* (house) mosquito carries St. Louis encephalitis and West Nile virus which is contracted from feeding on infected birds. St. Louis encephalitis mainly affects older adults. The *Culex* mosquito is capable of laying its eggs in water contaminated with sewage or natural organic material. The tree-hole

mosquito carries LaCrosse encephalitis, which is contracted from feeding on infected chipmunks or squirrels. LaCrosse encephalitis mainly affects children. Yellow fever, dengue and malaria are other diseases associated with mosquitoes, but are typically a concern in tropical regions.

**Q: How can I help reduce the mosquito populations in McHenry County?**

Mosquitoes, with a disease transmission potential, lay their eggs in artificial containers or treeholes that can be found around your home. There are many ways to help minimize the mosquito populations in our region. The first and best defense against these pests and vectors is to eliminate their breeding sites:

- Properly discard old tires and empty water found in any water-holding container outdoors (i.e. rain catchers, barrels, etc.)
- Empty wading pools at least once a week and store indoors or up-side-down when not in use.
- Keep weeds and tall grass cut short around your house.
- Make sure door and window screens are tight-fitting and in good repair.
- Cover trash containers to keep rain water out.
- Change water in bird baths twice a week.
- Pet dishes stored outside need to be emptied daily.
- Keep roof gutters free of leaves and other debris.
- Fill in tree rot holes and hollow stumps with sand or tree tar (contact your local nursery for more information).



**Q: I enjoy outdoor recreational activities, what are some precautionary measures I can take against mosquitoes?**

There are many ways to help protect yourself from the irritating itching associated with mosquito bites:

- Try to avoid the outside during peak feeding times (just before and after dusk and just before dawn.)
- Wear light colored, tightly woven clothing and keep trouser legs tucked into boots or socks.
- Use mosquito netting to protect young infants or when sleeping outdoors in an unscreened structure.
- Apply mosquito repellent to clothes and **always follow label directions**. Wash your hands before eating after applying repellent.

**Q: Are mosquito repellents safe?**

There are a variety of mosquito repellents available. Use repellents with the lowest effective DEET. Try to spray repellent on clothing rather than on skin and avoid spraying near eyes, lips and nasal membranes. Apply repellents sparingly on children and **always follow label directions**. Remember to wash your hands before preparing or eating food.

**Q: What is DEET?**

Many mosquito repellents contain DEET (diethyl toluamide). Mosquito repellents containing about 30% DEET works best for adults (Note: Some experts recommend using lower concentrations of DEET for children.) Some children may experience allergic reactions to mosquito repellents containing DEET. There currently are several products on the market that contain alternatives to DEET. Their effectiveness as a repellent will vary and should be considered on an individual basis.

**Q: Do "bug zappers" work?**

No, bug electrocutors are ineffective in controlling adult female biting mosquitoes. "Bug zappers" have an ultraviolet or "black light" that is supposed to attract mosquitoes; however, carbon dioxide attracts mosquitoes so human and mammal hosts are much more attractive to the mosquito because we exhale carbon dioxide. Many nontarget beneficial insects are electrocuted by "bug zappers".

**Q: Are natural mosquito control procedures/products available?**

The first and best way to reduce mosquito populations is by eliminating their breeding sites around your yard by emptying or removing artificial containers of standing water. Stock ponds with mosquito fish (i.e. gambusia, pan fish, minnows, etc.) which eat mosquito larvae or treat bodies of water with *Bti*. *Bti* (*Bacillus thuringiensis israelensis*) is a biological insecticide which specifically targets mosquito larvae digestive systems. *Bti* biological insecticides can be found at local lawn and garden centers. *Bti* does not affect other beneficial insects and is safe for the environment. When applying any larvicide, strict adherence to label recommendations is necessary so wildlife will not become injured. Naturally controlling mosquito larvae populations before they mature into adult female biting mosquitoes is the best and most cost-effective means of mosquito abatement.

**Q: Does the county spray for mosquitoes?**

No, the county does not implement adulticiding mosquito abatement programs. Municipalities or townships may implement mosquito abatement programs. Nuisance mosquitoes are capable of traveling in wind distances of 10 -15 miles from

their breeding sites. Flourishing numbers may cause public discomfort and increase public health concerns. Adulticiding with insecticides is not cost-effective. Ground adulticiding or spraying is dependent upon weather conditions. Windy conditions cause poor control of sprays, hot temperatures may cause sprays to quickly evaporate into the atmosphere before hitting its target (adult female biting mosquitoes.) For more information regarding mosquito abatement programs, please contact your local municipality or township office. The State health department also captures birds (intermediate host) and checks them for the encephalitis virus in this region. Encephalitis is a reportable illness to the health department from doctors. All reported cases are thoroughly investigated.

By eliminating artificial containers around your yard, you help reduce the number of larvae before they mature into adult female biting mosquitoes.



**FOR MORE INFORMATION**

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**Sources:**

[Commonly Asked Questions About Mosquito Control](#), Clarke Environmental Mosquito Management, Inc. P.O. Box 72197 159 North Garden Avenue Roselle, IL 60172.

[Mosquitoes and Encephalitis](#), (1995). Illinois Department of Public Health, Division of Environmental Health 525 W. Jefferson St. Springfield, IL 62761.

[Stop Raising Mosquitoes in Your Yard & Home](#), U.S. Department of Health, Education, and Welfare, Public Health Service, Bureau of Disease Prevention and Environmental Control, National Communicable Disease Center Atlanta, GA 30333.

**QUESTIONS**

**MOSQUITOES**

**& ANSWERS**



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