

FAQS: MOSQUITOES AND FLOODING

Will the mosquito problem caused by flooding lead to a greater risk for West Nile virus (WNV) and other diseases?

Rain and flooding may lead to an increase in numbers of mosquitoes, which can carry diseases, such as West Nile virus (WNV). In most cases; however, the types of mosquitoes produced by spring flooding will be pests, but do not carry diseases.

Local and state public health authorities actively work to monitor mosquito populations and to control the spread of mosquito-borne diseases. For more information about WNV, see the Ohio Department of Health's (ODH) Web site: <http://www.odh.ohio.gov/odhPrograms/idc/zoodis/wnv/wnv1.aspx>

What is the difference between mosquitoes produced by flooding and those that spread WNV?

The most common mosquitoes in Ohio produced by floodwater are nuisance species, such as *Aedes vexans* and *Psorophora* species. While these mosquitoes may be pesky, they typically are not carriers of WNV, thus the risk of becoming infected is low.

Culex pipiens is the mosquito that most often spreads WNV in Ohio. This species prefers to breed in smaller bodies of stagnant water, especially water standing in containers. This species does not become more numerous until mid-summer, even with all the rain we have experienced. The greatest risk for contracting WNV in Ohio is from mid-July through early September.

What can I do to protect myself and my family from mosquitoes?

Avoid being outdoors when mosquitoes are most active, in early morning and early evening. Mosquitoes may be active in shady, forested areas at all times following flooding.

If you must be outside when mosquitoes are active, cover as much skin as possible by wearing long sleeves and pants.

Use personal mosquito repellents such as DEET or Picaridin. Follow directions on the product label especially when using DEET on children.

To help control mosquito populations, drain all standing water left outdoors in open containers, such as flower pots, tires, pet dishes and buckets.

Make sure window and door screens are bug-proof and repair any that are damaged.

Remember: No control program will kill all mosquitoes. Please take precautions to protect yourself and your family. Avoid being bitten and drain standing water from containers to reduce mosquito numbers.

What are authorities doing to protect the public against mosquitoes and the diseases they carry?

Local and state public health authorities actively work to monitor mosquito populations and to control the spread of mosquito-borne diseases as they do every year. Surveillance data and updates are available on the ODH Web site at: <http://www.odh.ohio.gov/odhPrograms/idc/zoodis/wnv/wnv1.aspx>

To reduce populations of flood-water mosquitoes, local authorities may use products called larvicides that are applied directly to flood waters that hold mosquito eggs or larvae. They are used to kill immature mosquitoes.

The active ingredient of larvicide used in large flooded areas is either *Bacillus thuringiensis israeliensis* (BTI) or Methoprene. BTI is a naturally occurring bacterium that destroys the digestive system of the mosquito larva and the larva dies within 24 hours. This product is completely environmentally safe. It has no effect on humans, animals, birds, fish or other insects. Methoprene is an insect hormone that prevents larvae from becoming adults. Like BTI, methoprene is safe for humans and is environmentally safe. Both products are regulated by the U.S. Environmental Protection Agency and break down quickly in water and soil.

Local and state public health authorities work every year to reduce the risk of mosquito transmitted diseases with available resources. You can do your part to support your community program by ensuring water is not allowed to remain in containers around your property and by taking measures to protect yourself and your family from mosquito bites.