

# HOT NEWS

## MOSQUITO FACTS

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With the recent flooding in many parts of Indiana one concern is going to be the potential for increased mosquito activity. Given the severity of the flooding there are extensive areas of standing water. Rainwater/floodwater nuisance biting *Aedes* sp. mosquitoes are likely to emerge in higher numbers in the next few days. Although these mosquitoes are aggressive biters they are not of a significant concern for human disease transmission. However, they can transmit dog heartworm in dogs. Pet owners should check with a veterinarian for proper preventive measures to be taken.

As floodwaters recede and pockets of water may linger, this could pose a concern for stagnant water-breeding mosquitoes. These include mosquitoes capable of transmitting such diseases as West Nile virus and mosquito-borne encephalitis. These mosquitoes will breed in many standing water situations, including containers, clogged gutters, open trash cans, uncovered boats, neglected swimming pools, pet dishes, bird baths, and other water holding situations. Homeowners should check for and eliminate any standing water lingering around on private property. The Indiana State Department of Health monitors mosquito-borne disease activity throughout the summer and will alert the public and local health departments of any disease concerns. The following are common mosquito questions we often receive:

### Common Mosquito Questions:

*How many kinds of mosquitoes are there?*

- There are more than 3,000 different kinds of mosquitoes worldwide. In Indiana, there are over 50 known species. However, only a few are important as nuisance biters or of concern in disease transmission.

*Why do mosquitoes bite?*

- Both male and female mosquitoes feed primarily on nectar and plant juices. Only the female bites; she draws blood to use as a protein source for her eggs.



Culex mosquito

*Where do mosquitoes come from?*

- All mosquitoes breed in standing water. Female mosquitoes lay their eggs on the surface of water or in low-lying places where water is likely to accumulate. Some species lay their eggs in marshes, ditches and flood plains. Others will make their homes in roof gutters, old tires, bird baths, and other water holding containers. Flower pots are also a perfect place for a mosquito to set up housekeeping.

*How far from their breeding sites do they fly?*

- Most mosquitoes remain within one mile of where they breed. Some species can fly up to 5 to 10 miles from their breeding source, however.

*They seem to suddenly appear? How quickly can they develop?*

- The entire life cycle of a mosquito, depending on temperature, may be completed in as few as 7 to 10 days.

*What can I do to prevent them from breeding near my home?*

- Drain excess water from these unsuspecting breeding sites before mosquitoes move in. Eliminate any unnecessary water-holding containers and standing water areas. Be sure to loosen soil in flower pots regularly to ensure that water penetrates through the soil instead of forming a stagnant pool for mosquitoes to breed in.

*How about those that fly in?*

- Eliminate tall grass and weeds. Adult mosquitoes tend to hide in heavy vegetation during the day.

*What about chemical control?*

- Leave insecticide treatments to trained mosquito control personnel. Contact your local health department regarding any concerns or interest for chemical treatment.

*How do I keep them out of my home?*

- If mosquitoes regularly invade your house, inspect screens in windows, doors and porches for holes or tears. Likewise, fill gaps around window and doors with weatherstripping.

*I like the outdoors and will not let mosquitoes drive me out. What advice can you give to help me compete?*

- When possible, wear long sleeved shirts and long pants with enough thickness to prevent mosquitoes from reaching the skin. Dark colors attract mosquitoes, so wear lighter tones if you're going to be outside. Also apply an E.P.A. registered insect repellent to keep mosquitoes at bay. Check label directions for specific guidelines for use.

*I have heard some concerns about DEET. What are the latest findings?*

- Deet is one of the most effective insect repellents on the market. Based on extensive toxicity testing the E.P.A. concluded that normal use of Deet does not present a health concern to the general population. To assure safe application follow label directions on products containing Deet. Use those products that contain smaller concentrations (e.g., 20-30% or less) of Deet and apply the repellent to clothing rather than directly to the skin if there is a concern.

*Are there times of day to avoid going outside?*

- Mosquitoes are often hungriest and most active at dawn and dusk. If possible, stay indoors or in a tightly screened area to avoid bites, during these times.

*How about using candles?*

- Use of citronella candles are of limited effectiveness because of variable outdoor wind movement.

*Any other effective gismos to control mosquitoes?*

- Devices that are advertised as physical attractants or repellents of mosquitoes are limited in use and should be thoroughly investigated before being purchased. Recent field tests have shown that electrocuting devices using ultraviolet light as an attractant are ineffective in reducing mosquito populations and mosquito biting activity.

*How about other animals, such as my dog?*

- Mosquitoes not only feast on human blood but target other mammals, as well as birds and amphibians. Generally, animals are not harmed by mosquitoes. However, some species of mosquitoes may play a role in transmitting heartworm in dogs. During times of high infestation, keep pets inside the house, a screened-in kennel or porch area. Avoid walking your pet during prime mosquito "feeding time". Check with a veterinarian for preventive measures for dog heartworm.

*What about scratching mosquito bites?*

- When the female mosquito bites, our body reacts by releasing histamine at the bite site. This causes the itching and swelling. Overzealous scratching can break the skin and lead to secondary infection. Apply a topical anti-histamine treatment to relieve the itching and swelling.

For further information please check the Purdue Entomology publications:

*Mosquitoes in and Around the Home* <<http://extension.entm.purdue.edu/publications/E-26.pdf>>

*West Nile Virus in Indiana* <<http://extension.entm.purdue.edu/publications/E-240.pdf>>

*The Biology and Medical Importance of Mosquitoes in Indiana* <<http://extension.entm.purdue.edu/publications/E-242.pdf>>

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