



West Nile Virus & Mosquitoes: Frequently Asked Questions (FAQ's)

Here are the 12 most asked questions on west nile virus and mosquitoes.

1. ***How are People and animals Infected with the West Nile Virus (WNV)?***

The WNV is transmitted to people and animals by bites from infected mosquitoes. Only certain species of mosquitoes carry the virus and very few mosquitoes actually are infected. In Colorado, these viruses are transmitted to people by a species called *Culex tarsalis*, a medium-sized mosquito that feeds in the few hours around dawn and dusk. During the day they rest in shady, secluded areas, such as under porches, roof overhangs, tall grass, shrubs, and storm sewers. They breed in almost any source of standing water, including irrigated fields, old tires, hoof prints, flowerpots, tree holes, or any puddle of water that lasts for more than a few days.

The virus is maintained in a bird-mosquito-bird cycle. Mosquitoes are infected by feeding on a bird with virus in its blood. The virus is transmitted to a new host in the mosquitoes' saliva when the insect bites another person or animal. Humans and horses are incidental dead-end hosts in that they cannot infect other mosquitoes. Person-to-person transmission does not occur. **The virus is prevalent from May to September when mosquitoes are most abundant, but the risk to humans occurs primarily from August through early September.**

2. ***What is "mosquito control"?***

Mosquito control is the process of actively reducing the number of mosquitoes. Comprehensive mosquito control can use one or more approaches that target different environments and life stages of the mosquito.

3. ***Why should mosquitoes be controlled?***

The most important reason to control mosquitoes is to reduce the likelihood of diseases such as West Nile virus being transmitted to people through mosquito bites. Throughout history, no insect has been a more significant contributor to human discomfort, disease, and death than the mosquito.

Even mosquitoes that do not transmit disease can be bothersome in their biting behavior. In severe instances nuisance mosquitoes can be economically detrimental to businesses, and reduce the quality of life for residents.

4. ***How is mosquito control accomplished?***

Most mosquito control programs reduce mosquito populations through a multi-faceted approach known as Integrated Pest Management (IPM). A mosquito has four life stages - egg, larva, pupa, and adult. In the life cycle of the mosquito, only the adult stage does not require standing water. An IPM program targets each life stage of the mosquito, but is intended to eliminate as many mosquitoes as possible before they emerge as biting adults.

5. ***What is the City of Greeley's Mosquito Control Program?***

The City of Greeley contracts out it's mosquito control program to an independent contractor who performs a multi-faceted approach focusing on attacking the 3 life stages of the mosquito in standing water thru weekly site inspections and larviciding practices and weekly light trap monitoring of adult mosquito activity.

6. Can we eliminate mosquitoes?

No, mosquitoes live in many different habitats, and it is impossible to find and treat all of the places that they breed. Furthermore, mosquito control is not intended to eliminate mosquitoes. The goal of a mosquito control program is to reduce adult mosquito populations to a level that minimizes the possibility of people and animals getting sick from diseases associated with mosquitoes, and reduces biting to a level that most people find tolerable.

7. Am I producing mosquitoes in my yard?

Mosquitoes require water for the immature stages to develop. Any source of standing water, big or small, can produce mosquitoes. To reduce the number of mosquitoes in your neighborhood, it is important to eliminate any standing water (from rain or irrigation) from your home and yard. Cleaning rain gutters, turning over buckets, and draining wading pools are important actions, but there are other, less obvious places that mosquito larvae can develop. Flower pots (especially if plants are being rooted), aquariums on porches, covered and uncovered boats, trash and recycle bins, and irrigation control boxes are all commonly overlooked as potential larval mosquito habitat in people's yards.

8. Why are mosquitoes in my grass, shrubs, and garden?

Mosquitoes go to these cooler, humid, shady areas in your yard during the daytime to rest and escape hot dry air that will quickly kill them. Thinning shrubs and cutting down tall grass and weeds will reduce the harborage areas and number of mosquitoes in your yard.

9. Why am I getting mosquito bites during the daytime?

Some species of mosquitoes actively seek a blood meal during the daytime; others will bite during the daytime if you disturb them. It is important to remember that the mosquitoes that transmit disease in Colorado are much more active and aggressive around dawn and dusk, especially the two hours immediately following sunset.

10. How far do mosquitoes fly?

Mosquitoes typically fly a few hundred yards up to two miles from the place they emerge, depending on species and environmental factors. Some common mosquitoes in Colorado are known to fly 10 miles or more.

11. Do all mosquitoes bite?

Only adult female mosquitoes bite. Female mosquitoes need the protein in the blood to produce eggs. Not all species of mosquitoes bite humans - some species prefer birds, large mammals, or even snakes. During the aquatic stages of its life a mosquito feeds on algae and other small organic matter.

It is also important to remember that mosquitoes are not the only small flying insect that bites! Other small and biting insects are commonly mistaken for mosquitoes, including midges, no-see-ums, and black flies.

12. ***What is the most important thing I can do to reduce the chance of myself or my family getting West Nile virus or another mosquito transmitted disease?***

Avoid getting bitten by mosquitoes! No amount of mosquito control can completely prevent diseases associated with mosquitoes. Taking simple precautions makes a big difference in the likelihood of getting WNV.

- Eliminate all sources of standing water on your property because standing water provides a place for mosquitoes to develop.
- Avoid spending time outside when mosquitoes are most active, especially at dawn and dusk.
- If you go out, apply insect repellent containing DEET, picaridin, or oil of lemon eucalyptus.
- Make sure window screens are well maintained.

These simple actions will help keep you and your family from getting bitten by mosquitoes that may be carrying WNV.

Weld County Department of Public Health's Mosquito Program

For several years now, the Weld County Public Health Department and the State of Colorado Public Health Department have been operating zone monitoring programs that provide a sense of the WNV activity and human health threats in the entire county.

For more information from the County and State Health Departments, please see the links below:

Weld County: www.co.weld.co.us/Departments/HealthEnvironment/index.html

State: <http://www.colorado.gov/cs/Satellite/CDPHE-DCEED/CBON/1251607766375>

Colorado Fight the Bite: <http://www.fightthebitecolorado.com/>

Center for Disease Control: West Nile Virus & Preventing Mosquito Bites: www.cdc.gov/features/StopMosquitoes