

West Nile Virus (WNV) – Commonly Asked Questions

What is West Nile virus?

It is a mosquito-borne virus that usually produces mild flu-like symptoms such as a fever, headache and body aches. After having WNV, immunity develops – in other words, you can only get it once. Although rare, the infection can become severe and cause West Nile encephalitis, which, in some cases, can be fatal. People who are older or immune-compromised are at greater risk for these complications.

From the first detection in the United States in 1999 through August 19, 2007, there were 24,551 human cases of WNV-related illness in the United States reported to the Centers for Disease Control and Prevention, including 981 fatalities. This compares to approximately 65,000 deaths **each year** from the flu.

In Washington, WNV was first diagnosed in humans during 2006 in three individuals known to have acquired the disease within the state. As of August 15, 2007, there have been no human infections identified; however three horses have been confirmed positive with WNV. Although vaccines and booster shots are available for horses only, none of the horses diagnosed were treated prior to the infection.

Do all mosquitoes carry West Nile virus?

No, there are 250 species of mosquitoes known in Washington State. Thurston County has six species of mosquitoes known to be able to carry WNV. Two common species, *Culex pipiens* and *Culex tarsalis* can breed in small amounts of water such as in ditches, clogged gutters, buckets, cans, birdbaths, tires, tarps, etc. One species tends to stay within one half mile of where it hatches, the other may fly twenty miles away. Current estimates are that less than 1% of bites from infected mosquitoes will result in WNV.

Can I catch West Nile virus from infected people, birds, horses, etc.?

WNV can only be caught from mosquitoes. The mosquitoes can infect birds, horses and people. It is not spread person-to-person, horse-to-horse, bird-to-bird, bird-to-human, etc. **It is only spread by mosquitoes.**

I found a dead bird – what now?

Contact the Thurston County Health Department at (360) 754-3355 x.7524 for more information on collecting the bird for testing.

What is the city doing about mosquitoes?

The first rule of medicine is “Do no harm.” The city is approaching WNV in this way. We want to be sure our response does not cause more problems than the virus. We are preparing a phased response that calls for careful monitoring of the virus, and responding prudently to the level of risk. City staff regularly attend regional WNV workgroup meetings to share information that is being collected in the area and working to develop a joint response plan, that will be implemented at the direction of the County Health Department.

In the first and current phase, we recommend taking personal protection actions, such as wearing long sleeves, avoiding mosquito areas at dusk, using repellants. If we reach a stage where humans are at high risk for contracting WNV, we will alert the community and give appropriate recommendations.

What about the nearby wetland, stormwater pond, etc.?

Wetlands and “wet” stormwater ponds have natural mosquito predators present. Many aquatic insects eat young mosquitoes, as do salamanders, tadpoles and fish. Birds, bats, dragonflies, salamanders and frogs eat adult mosquitoes. Encourage these predators, and avoid using pesticides that will harm beneficial insects.

What about my or my neighbor’s tarps, tire pile or other garbage?

Small amounts of stagnant water where mosquitoes breed is a concern, because there are fewer predators to eat the young mosquitoes. Once the mosquitoes can fly, they can be eaten by birds, bats and dragonflies. We encourage everyone to identify areas on their property where stagnant water collects, and either remove the containers, or empty them at least once a week. Encourage others to do the same.

In the case of dumping or unmanaged garbage, contact Development Services at 754-4180. Be aware that enforcement can be a slow process. You may wish to be extra careful to use the recommended personal mosquito precautions – keeping screens in good repair, using mosquito repellant, wearing long sleeves outdoors at dusk, etc.

Can I add fish, frogs, etc. to my pond?

Washington Department of Fish and Wildlife: 902-2724

In general you should not add fish or frogs to stormwater ponds or natural ponds and wetlands. Some species are known to threaten native species, and even native animals may spread wildlife diseases from one pond or lake to another. A permit from the Washington Department of Fish and Wildlife is needed to release species into large ponds or water that connects to natural bodies of water.

It is permissible to release fish commonly available in pet stores into small, contained backyard garden ponds if they do not connect with, or occasionally flood into natural water bodies. Aerating small ponds, and adding native plants around the edges to attract mosquito-eating birds is recommended.

I want to treat my pond, wetland, yard, etc. for mosquitoes. What or who do you recommend?

At this time we do not recommend treating for mosquitoes. It is more effective to protect yourself from WNV by following the personal protection recommendations. Treatment of any water besides lined garden ponds requires both a permit from the Department of Ecology and a licensed pesticide applicator to do the work. For lined garden ponds consider aerating, adding fish (see above) and adding wildlife attracting plants. A low-toxic pesticide is Bti – *Bacillus thuringiensis israeliensis*. Bti is a bacterium that is toxic to mosquito and midge larvae. As with any pesticide, follow label directions carefully.

What can I do to protect my family and myself?

For more info, please call Dan Smith at (360) 754-4140 or send an e-mail to desmith@ci.tumwater.wa.us.

Personal

- Wear long sleeves and long pants when going out at dusk or in the early morning.
- Avoid going into mosquito-infested areas at dawn and dusk when the insects are most active.
- Use a mosquito repellent when necessary.

Mosquito Repellents – Use Wisely

Carefully follow label directions. EPA recommends the following precautions when using insect repellents:

- Apply repellents only to exposed skin and/or clothing (as directed on the product label). Do not use under clothing.
- Never use repellents over cuts, wounds, or irritated skin.
- Do not apply to eyes and mouth, and apply sparingly around ears. When using sprays do not spray directly onto face; spray on hands first and then apply to face.
- Do not allow children to handle the products, and do not apply to children's hands. When using on children, apply to your own hands and then put it on the child.
- Do not spray in enclosed areas. Avoid breathing a repellent spray, do not use near food.
- Use just enough repellent to thinly cover exposed skin and/or clothing. If needed, apply a bit more.
- After returning indoors, wash treated skin with soap and water or bathe. This is particularly important when repellents are used repeatedly in a day or on consecutive days. Also, wash treated clothing before wearing it again.
- If you suspect that you or your child are reacting to an insect repellent, discontinue use, wash treated skin, and then call your local poison control center. If/when you go to a doctor, take the repellent with you

Yard & House

- Repair and use screens in windows and doors.
- Find and reduce the areas in your yard where stagnant water collects such as: tarps and covers, wheelbarrows, toys, buckets, tires, cans, etc.
- Change water in birdbaths, pet dishes, potted plant saucers, animal troughs, wading pools, etc. at least weekly.
- Encourage mosquito predators in your yard. Examples are birds, bats, dragonflies, salamanders, frogs, aquatic insects, and fish.
- Clean out roof gutters so the water flows freely.
- Repair leaky faucets and sprinklers.