



Tulsa City-County Health Department

Environmental Health Services Division

Public Health Fact Sheet

West Nile Virus



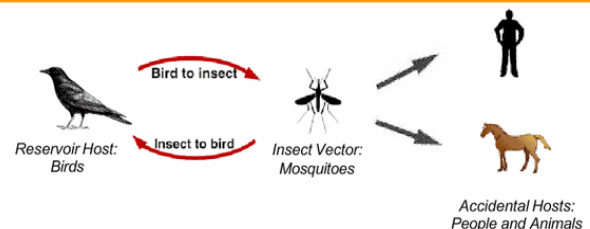
While West Nile Virus has entered the U.S. in only the last few years, it is very similar to several other types of encephalitis virus that have been present in the U.S. for a long time. These include St. Louis encephalitis, Eastern Equine encephalitis and Western Equine encephalitis, among others. None of these viral diseases poses a major health threat to the general population. On rare occasion, it can cause serious problems for people over 50 or those with compromised immune systems, for these people severe consequences could arise.

Your chances of becoming seriously ill from West Nile Virus are extremely small. You can only get the virus naturally by being bitten by an **infected mosquito** (blood transfusion and organ transplants may be other means of getting the virus). Studies have shown that in most areas less than 1% of the existing mosquito population carries the virus at any given time. This means that if you got bitten 100 times, one of the mosquitoes might have had the virus. If you should get bitten by an infected mosquito, your chances of developing any signs of illness are less than one in five. Should you actually develop symptoms, statistics show that only 1 person out of 150 infected people will develop a serious illness.

There have been no indications that humans can contract West Nile Virus from any infected animals (birds or horses). The primary route of transmission is through being bitten by an infected mosquito. Therefore, it is wise to take certain precautions when outdoors. These include wearing long pants and long sleeved shirts; using insect repellent containing DEET; regularly emptying any containers that hold water; keeping the grass, weeds and any shrubbery trimmed near the house; trying not to be out in the early evening, dusk or dawn when mosquitoes are most active.

While West Nile Virus is not a major threat to humans, it is a much greater health threat to birds, horses, and a few other types of animals. Mortality rates in birds with West Nile Virus are very high, especially in certain groups of birds (crows, blue jays, hawks, and owls). Horses can contract the disease at a much greater rate than humans and the mortality rate is 40% - 50%. A horse vaccine for West Nile Virus has been developed and horse owners should contact their veterinarians as soon as possible in order to protect their animals. Livestock watering troughs are good mosquito habitat and can breed thousands of mosquitoes. Livestock owners need to completely empty and refill their watering troughs at least once a week in order to hold down the mosquito population in their area.

Transmission Cycle of West Nile Virus



This year, the Tulsa Health Department will again be assisting the Oklahoma State Department of Health with the West Nile Virus Surveillance Program by collecting mosquitoes and birds to be tested for West Nile Virus. The **only birds randomly tested** will be **CROWS, BLUE JAYS, CARDINALS, HAWKS, OWLS, AND EAGLES**. This may change as condition warrants. To report a dead bird, please call 595-4344. To place a complaint about mosquitoes, please call 595-4219. For general information about West Nile Virus, please call 595-4500.

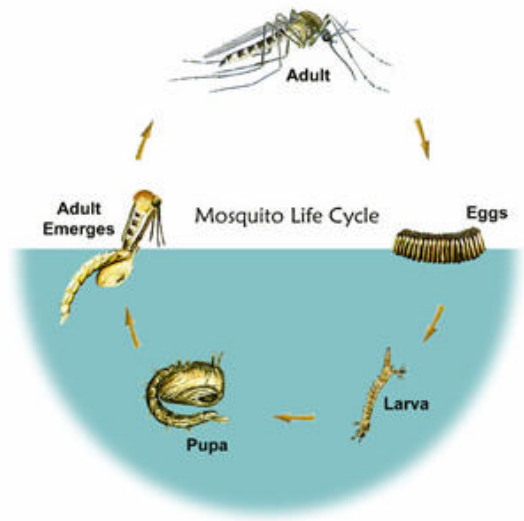
Dead Bird Hotline 595-4344



Mosquito Life Cycle

Mosquitoes need standing water in which to breed.

The female mosquito lays her eggs on the surface or at the edge of the water. The eggs hatch in 24-48 hours and the larvae (wrigglers) develops in the water from 7 to 10 days. They then go through a short pupal stage before emerging as adults. Only females bite because they need a blood meal before every egg-laying episode. A female will lay 1 to 3 rafts of eggs and they generally only survive for 4 to 6 weeks.



Homeowner Checklist for Mosquito Control

The Best Protection From The West Nile Virus Is To:

1. Reduce the number of mosquito bites you receive.
2. Remove all standing water in the area where you live.

3. Complete the following checklist:

Eliminate Standing Water That Collects On Your Property



- Dispose of tin cans, old tires, bottles, jars, buckets, drums, ceramic pots and other containers, or make sure they contain no standing water.
- Clean clogged gutters and/or slope to downspouts.
- Drain improperly installed and sagging swimming pool covers.
- Change the water in birdbaths at least twice weekly.
- Clean and chlorinate swimming pools, outdoor spas, saunas and hot tubs- If not in use, keep them empty and covered.
- Change water and scrub containers/ vases holding plants twice weekly.
- Empty your pet's watering pan daily.
- Repair leaky pipes and faucets.
- Screen rain barrels and openings to water tanks.
- Eliminate weeds, tall grass and other mosquito breeding places.
- Use larvicide where standing water cannot be removed or fill holes.
- Stock ornamental ponds with mosquito eating fish.
- Remind neighbors to eliminate breeding sites on their property.
- Make sure doors and windows have tight-fitting screens in good repair.

Mosquito Hotline 595- 4219