





History of West Nile Virus

West Nile Virus was first isolated in Uganda in 1937. It is commonly found in birds. It also affects humans and other mammals, such as horses. The range includes Africa, Eastern Europe, West Asia, and the Middle East.

The first documented case of West Nile Virus in the US was discovered in New York City in 1999. Over the past nine years, the virus has been detected in every US state except Alaska and Hawaii.

How is West Nile Virus Transmitted?

West Nile Virus is transmitted by the female mosquito. The female mosquito becomes infected with the virus by biting an infected bird. After an incubation period of 10 to 14 days, she can transmit the virus to her next host. Most female mosquitoes need a blood meal before laying eggs.

Symptoms of West Nile Virus

The typical incubation period is 5 to 15 days after the mosquito bite. Eighty percent of people infected will never know they had the virus. Twenty percent will develop mild symptoms including fever, headache, body aches, mild skin rash, or swollen lymph nodes. One in 150 people infected will develop severe symptoms. These symptoms include

encephalitis (swelling of the brain), high fever, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, neurological damage, paralysis, and unfortunately death.

Elderly individuals are at greater risk for the severe symptoms. Nevertheless, everyone should take precautions.

How to Avoid West Nile Virus?

There is no human vaccine to ward off this virus. Here are some tips to help reduce mosquitoes and the risk of West Nile Virus in your area.

- Remove standing water from containers, tarps, kiddy pools, and tires
- Wear repellant with DEET
- Aerate ornamental ponds
- Chlorinate pools
- Clean gutters/birdbaths
- Fill low-lying areas
- Drill holes in garbage and recycling cans
- Wear long sleeves/pants

Dead Bird Collection

The West Nile Virus technician will collect crows, blue jays, and hawks for testing. Call 814-563-3117.

Mosquito Surveillance

The Conservation District began its West Nile Virus program in 2005. The program includes trapping mosquitoes, larval and adult mosquito control, and public education.



There are two types of mosquito traps we use: the gravid trap and the light trap. The gravid trap collects egg laying female mosquitoes and the light trap captures biting female mosquitoes.

Larval mosquito control includes looking for standing water and for larval mosquitoes. A biological larvicide, either *Bacillus thuringiensis israelensis* or *Bacillus sphaericus*, is applied to the water and quickly kills the larval mosquitoes.

Adult mosquito control is only performed if trap numbers are above 50 or when West Nile Virus is present. A backpack mist sprayer is used to apply Flit 10ec to vegetation in the area of high infestation. The truck sprayer is used to treat large areas with high mosquito populations. Anvil 10+10 is used in this sprayer.

If you have any questions, or would like an educational program, please contact the Conservation District at 814-563-3117.