

ANSWERS TO COMMON QUESTIONS

Q. How do people get the West Nile virus?

A. Being bitten by a mosquito that is infected with West Nile virus.

Q. Can you get the West Nile virus from a person?

A. No. West Nile virus can only be contracted through the bite of an infected mosquito.

Q. Can you get the West Nile virus from birds?

A. There is no evidence that a person can get the virus from handling live or dead infected birds. West Nile virus can only be contracted through the bite of an infective mosquito.

Q. What happens if you're infected with the West Nile virus?

A. Most infected people show no symptoms of disease. Mild symptoms include fever, headache, and body aches, often with skin rash and swollen lymph glands. More severe cases can be marked by headache, high fever, stiff neck, disorientation, coma, tremors, paralysis and very rarely death.

Q. How fatal is this disease?

A. Approximately 3% - 12% of the symptomatic cases result in death. Fatalities are more likely in people over the age of 50.

Q. What is the treatment?

A. There is no known cure for West Nile fever. Hospitals apply supportive care.

Q. How common is West Nile virus in the U.S.?

A. In 1999, there were 62 confirmed clinical cases of West Nile fever in the US (all in the New York City area), representing the first recorded cases of this infection in North America. In 2002 & 2003 there were 13,500 human cases and over 500 deaths east of the Rocky Mts. Also, year 2003 saw 3 human cases of Eastern Encephalitis in NJ. This serious human disease is always in NJ but human cases had not occurred for a few years. See www.cdc.gov for maps of the spreading outbreak.

PERSONAL PRECAUTIONS

To reduce the annoyance of mosquito bites and prevent transmission of mosquito-borne infections, a few common sense measures should be followed. These include:



- Avoid very shaded areas where mosquitoes may be resting during daylight. A few bite in daylight.
- Limit outdoor activity in the evening when mosquitoes are most active.
- Wear clothing that protects your skin such as long-sleeved shirts and pants.
- Use insect repellents. Repellents that contain 20-30% DEET can be very effective in preventing insect bites. Use repellents only as directed; using more DEET than necessary will not improve protection. Do not apply repellent to children's hands and caution them to avoid getting repellent in their eyes. Do not use repellents on infants. As with all products, the user should follow the manufacturer's usage recommendations.
- **Eliminate Standing Water in Your Yard**
REMEMBER, mosquito populations can be reduced on your property and in your neighborhood by eliminating standing water that collects in unused birdbaths, boats, cans, buckets, tires, toys, un-used pools, roof gutters, and any other container that holds water.

For additional information regarding the public health aspects of WNFV, please contact your personal physician or Camden County Health Department (856) 374-6300. Report dead crows to 1-800-999-9045. For more information regarding mosquitoes, their biology or their control see the Mosquito Commission page at www.camdencounty.org, or contact: Camden County Mosquito Control Commission, DePalma Complex, Egg Harbor Road, Lindenwold, NJ 08021. Tel: 856-566-2945. FAX: 856-566-2989. See also - www.njmosquito.org



West Nile Fever Virus



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WHAT IS WEST NILE VIRUS?

West Nile Fever is a disease caused by a mosquito-borne virus and is closely related to St. Louis encephalitis (SLE) virus. SLE has occurred in humans in Camden County but not recently. West Nile Virus (WNV) is typically found primarily in countries bordering the Mediterranean Basin. It is not known how the WNV got to the United States in 1999. The WN virus was detected in 4 states in 1999. By 2003 the virus was in 45 states. In the last two years in the United States over 500 people have died from WNF.

VECTORS OF WNV

WN virus is new to this country but it is transmitted through the bite of our local mosquitoes. It has been isolated from at least 21 species of mosquitoes in N.J. In most countries, mosquitoes belonging to the genus *Culex* are the primary vectors. In the United States, the common house mosquito (*Culex pipiens*) is considered a principal vector species. *Culex pipiens* is the principal mosquito species found in urban and suburban environments. Mosquitoes of the genus *Aedes* are another vector and are common in this area. Both lay eggs in polluted water collecting in roadside ditches, catch basins, artificial containers such as old tires and in swimming pools that are not in use. *Culex* prefer avian hosts for its bloodmeal but some of these mosquitoes and most *Aedes* will readily bite humans and other mammals.

WNV TRANSMISSION CYCLE

WNV infections are characterized by a bird-mosquito cycle. The European transmission

cycle is similar to that of St. Louis encephalitis virus in the United States. Therefore, WNV in the United States is thought to have a similar mode of transmission.

VERTEBRATE RESERVOIR

Wild birds are the principal hosts of WNV in the U.S. WNV has been isolated from over 70 avian species in this region. Some birds are able to maintain a long-term infection. Consequently, migratory birds are considered to be instrumental in transporting the virus to new areas. Mammals are much less important in maintaining WNV infections, however, WNV has been isolated from several mammalian species as well as seals and frogs. Therefore the bird is the most common carrier of the virus and the mosquito is the vector that transmits the virus.

WNV IN HUMANS

When people become infected with WNV an influenza-like illness may follow. In humans, the virus has an incubation period of 3 to 10 days. Therefore, symptoms may appear suddenly and are often characterized by high fever, headache, backache, fatigue, and nausea. There is no specific treatment for persons infected with WNV nor is there a vaccine. Most people recover from infection completely within two weeks. A few can develop encephalitis and/or meningitis. However, 3% to 12% of these cases result in fatalities. Most fatal cases occur in people greater than 50 years of age. Infected humans are not able to pass the infection to new mosquitoes or directly to other humans.



WNV IN BIRDS

Most birds do not normally show any symptoms of WNV infection. Rather they serve as natural reservoirs of the virus and are able to pass the virus to feeding mosquitoes. However, some avian species appear to be susceptible to the virus, displaying varying degrees of illness. Crows are a good indicator of the virus as they quickly show signs of illness ranging from encephalitis (inflammation of the brain), poor flight, erratic walk and death. In 2004 Camden County will collect crows for testing but collections may not be needed in all municipalities at all times.

WNV IN HORSES

Horses infected with WNV have been reported as having encephalitis with a 30% fatality rate in N.J. One hundred fifty two horses were ill in N.J. in 2003. Symptoms may include fever, staggering gait, weakness and paralysis. There is an effective vaccine available from your veterinarian.

WNV CONTROL

Since many species of mosquito are common in New Jersey they have been kept under control by governmental agencies for many years. This has limited the spread of various diseases. Mosquitoes and birds have been monitored every year and this will continue.