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DEPARTMENT OF HEALTH AND HUMAN SERVICES  
OFFICE OF COMMUNITY & PUBLIC HEALTH

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## Symptoms and Care of West Nile Virus Infection *Fact Sheet*

### **What is West Nile virus?**

West Nile virus was first seen in the U.S. in 1999 in the New York City area (Queens). The virus lives in birds and is passed from bird to bird by certain types of mosquitoes. Occasionally, an infected mosquito will pass the virus to humans or other animals. Most healthy people do not get sick from the virus, but sometimes it can cause symptoms. When a person gets ill from West Nile virus, they may have serious symptoms including encephalitis (inflammation of the brain) or meningitis (inflammation of the lining of the brain and spinal cord); encephalitis and meningitis can also be caused by head injury, bacterial infections, or, most commonly, other viral infections.

### **How do people get the virus?**

West Nile virus is spread to humans by the bite of an infected mosquito. The mosquito bites an infected bird, which then infects the mosquito. The infected mosquito may then bite and infect a human. West Nile virus is not spread by person-to-person contact such as touching, kissing, or caring for someone who is infected.

### **What are the symptoms of West Nile virus?**

Most people who get infected with West Nile virus have no symptoms at all; some can experience mild illness called West Nile Fever with symptoms such as fever, headache, body aches, nausea, loss of appetite, vomiting, a skin rash, and eye pain, before fully recovering. In outbreaks, some people also developed mild rash or swollen lymph glands. In some individuals, particularly the elderly, West Nile virus can cause serious disease that affects brain tissue. At its most serious, it can cause permanent neurological damage and can be fatal. Encephalitis (inflammation of the brain) symptoms include the rapid onset of severe headache, high fever, stiff neck, confusion, loss of consciousness (coma), and muscle weakness. Death may result in some cases.

### **Is a woman's pregnancy at risk if she gets West Nile infection?**

There is no documented evidence that a pregnant woman or the fetus is at increased risk due to infection with West Nile virus.

### **How are West Nile infection and West Nile encephalitis treated?**

There are no specific therapies. In more severe cases, intensive supportive therapy is indicated, i.e., hospitalization, intravenous (IV) fluids and nutrition, airway management, ventilatory support (ventilator) if needed, prevention of secondary infections (pneumonia, urinary tract, etc.), and good nursing care.

### **Is there a vaccine against West Nile virus?**

No. Several drug manufacturers have applied to work on a vaccine, but an approved vaccine will be years away.

### **How long does it take to get sick if bitten by an infected mosquito?**

Being bitten by an infected mosquito will not necessarily make you sick since most people who are infected with West Nile virus have no symptoms or experience mild illness. If illness were to occur, it would be within 5 to 15 days of being bitten by an infected mosquito.

### **I've gotten a mosquito bite. Should I be tested for West Nile virus?**

No. Even in areas where West Nile Virus has been detected most mosquitoes are not infected. Illnesses related to mosquito bites are rare, especially in New Hampshire. However, you should see a doctor immediately if you develop symptoms such as high fever, confusion, muscle weakness, severe headaches, stiff neck, or if your eyes become sensitive to light. Patients with mild symptoms should recover completely, and do not require any specific medication or laboratory testing.

### **What should a person do if he/she thinks they have West Nile encephalitis?**

If a person has signs of encephalitis, with fever, muscle weakness, and confusion, he or she should seek medical care as soon as possible.

### **Who is at risk for getting West Nile encephalitis after being bitten by an infected mosquito?**

Persons older than 50 years of age have the highest risk of severe disease.

### **What proportion of people die when infected with West Nile virus?**

Fewer than 1% of people infected with West Nile virus develop encephalitis, and among those hospitalized with West Nile encephalitis, the case fatality rate ranges from 3% to 15%. Therefore, fewer than 1 in 1,000 of people infected with West Nile virus die.

### **For more information call the New Hampshire Department of Health and Human Services, West Nile Virus Info line, at 1-866-273-NILE (6453).**

For health care providers with clinical questions or to report human suspect or probable cases please contact the Bureau of Communicable Disease Control at 1-800-852-3345 ext. 4496.