

# WEST NILE VIRUS



## BASIC INFORMATION

### DESCRIPTION

A virus that can cause a mild or, less often, a serious disease in humans. Outbreaks often occur in the summer and continue into the fall, but can happen year round. Most people who are infected will not show any symptoms. About 20% will have mild symptoms typically lasting a few days. This is called West Nile fever. A few (1 in 150 infected persons) will develop severe disease.

### FREQUENT SIGNS AND SYMPTOMS

- Mild symptoms:
  - Fever.
  - Headache.
  - Body aches.
  - Nausea and vomiting.
  - Swollen lymph glands.
  - Skin rash on the chest, stomach, and back.
- Severe symptoms can include high fever, headache, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, vision loss, numbness, and paralysis.

### CAUSES

Bite of an infected mosquito. Mosquitoes are carriers that become infected when they feed on infected birds. Infected mosquitoes can then spread the infection to humans and other animals when they bite. In a very few cases, it has spread through blood transfusions, organ transplants, breastfeeding, and during pregnancy from mother to baby. It is not spread through casual contact such as touching or kissing a person with the virus. People may develop symptoms between 3 and 14 days after they are bitten by an infected mosquito.

### RISK INCREASES WITH

- People who spend a lot of time outdoors.
- Presence of mosquitoes in or around the home.
- People with chronic disease, weak immune system, or the elderly are more likely to develop severe illness.

### PREVENTIVE MEASURES

- When outdoors, use mosquito repellent containing DEET on the skin. Wear protective, light-colored clothing. Spray clothing with DEET or permethrin products.
- Put screens on windows and doors. Drain standing water from buckets, flower pots, and other items.
- Don't handle dead birds. Call local health department.
- Mosquito control programs in communities can help.
- Vaccines for the virus are being researched.

### EXPECTED OUTCOMES

Mild symptoms clear up without treatment. In severe cases, most patients recover with hospital care, but it may be fatal.

### POSSIBLE COMPLICATIONS

- Encephalitis (inflammation of the brain).
- Meningitis (inflammation of the lining of the brain).
- Meningoencephalitis (having both of the above).
- Permanent brain damage or muscle weakness, or death (rare).



## DIAGNOSIS & TREATMENT

### GENERAL MEASURES

- Most people will not seek or need medical care. Mild symptoms are similar to other virus infections that people usually treat themselves.
- See your health care provider if you have any concern about the symptoms. A physical exam may be done and questions asked about your symptoms and activities. A blood test may be done if needed to confirm diagnosis.
- No treatment is available to cure the infection. Drugs may help relieve symptoms such as fever or headache.
- Severe symptoms require hospital care. Treatment can include fluids given through a vein (IV), breathing support (sometimes with a machine), and steps to prevent more complications.
- To learn more: Centers for Disease Control and Prevention, (888) 246-2675; website: [www.cdc.gov](http://www.cdc.gov), or call your local health department.

### MEDICATIONS

You may use nonprescription drugs for mild symptoms such as fever, pain, or headache. Antibiotics do not help virus infections.

### ACTIVITY

No limits for people with mild symptoms.

### DIET

No special diet.



## NOTIFY OUR OFFICE IF

- You or a family member has symptoms of West Nile virus infection that you are concerned about.
- Symptoms are severe, get emergency care.

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Special notes:

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