# WEST NILE VIRUS

## What You Need to Know



## WHAT IS WEST NILE VIRUS (WNV)?

West Nile virus (WNV) is a seasonal epidemic in North America that flares up in the summer and continues into the fall. It can infect humans, birds, horses, and some other mammals. In a small number of people infected by the virus, the disease can be serious, even fatal.

#### **HOW IS WNV SPREAD?**

- WNV is most often spread to humans by the bite of an infected mosquito. The mosquito becomes
  infected by biting a bird that carries the virus. Horses and other mammals bitten by mosquitoes that
  carry the virus can also become infected. Whenever mosquitoes are active, there is a risk of getting
  WNV; however, the risk is highest from late July through September.
- In a very small number of cases, WNV has been spread through blood transfusions, organ transplants, breastfeeding, and during pregnancy from mother to baby.
- WNV is not spread through casual contact such as touching or kissing a person with the virus.

#### WHAT ARE THE SYMPTOMS OF WEST NILE VIRUS?

If symptoms develop, they typically appear 3 to 14 days after the bite of an infected mosquito.

- Serious symptoms in a few people. About one in 150 people infected with WNV will develop severe illness. Symptoms can include high fever, headache, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, vision loss, numbness, and paralysis. These symptoms may last several weeks, and neurological effects may be permanent.
- Mild symptoms in some people. Up to 20% of people who become infected display symptoms such as headache, body aches, joint pains, vomiting, diarrhea, rash, and swollen lymph glands.
   Most people with mild illness recover completely, but fatigue and weakness can last for weeks or months.
- No symptoms in most people. Most people (80%) infected with WNV do not have any symptoms.

### WHAT IS THE TREATMENT FOR WNV?

There is no treatment for WNV infection. Illness may last weeks to months, even in healthy persons. In more severe cases people may need hospital care for supportive treatment such as intravenous fluids, pain medications, and nursing care.

#### WHAT SHOULD I DO IF I THINK I HAVE WNV?

Mild WNV illness usually improves without medical attention. Seek medical attention immediately if symptoms of severe WNV illness develop, such as unusually severe headaches or confusion; this may indicate encephalitis (inflammation of the brain) or meningitis (inflammation of the membranes that surround the brain and spinal cord). Severe WNV illness usually requires hospitalization. Pregnant women and nursing mothers who develop symptoms that could be WNV are encouraged to see their health care provider.

#### WHO IS AT RISK OF GETTING SICK FROM WNV?

 People over the age of 50 years are more likely to have serious illness with WNV and should take special care to avoid mosquito bites.

- Being outside increases the risk of being bitten by an infected mosquito. Taking steps to avoid mosquito bites when outside working, playing or relaxing will lower your risk of getting sick from WNV.
- The risk of getting WNV through blood transfusions and organ transplants is very small and should not prevent people from having surgery. All donated blood is screened for WNV (and many other viruses) before being used. If you have concerns, talk with your health care provider.
- Pregnancy and nursing do not increase the risk of becoming ill from WNV, and the risk that WNV may pass to a fetus or an infant through breastmilk is still being evaluated. Talk with your health care provider if you have concerns.

#### **HOW CAN WEST NILE VIRUS BE PREVENTED?**

The best way to prevent EEE infection is to prevent mosquitoes from biting you.

- Use Environmental Protection Agency (EPA)-registered insect repellant.
  - o All EPA-registered insect repellants are evaluated for safety and effectiveness, and will contain DEET, picaridin, IR3535, Oil of Lemon Eucalyptus or para-menthane-diol as the active ingredient. Repellents containing a higher percentage of the active ingredient typically provide longer-lasting protection. Always follow the product label instructions.
  - Be careful using repellent on the hands of children as it may irritate the eyes and mouth.
- Get rid of mosquito breeding sites by removing standing water around your home:
  - Turn over any type of container that can collect water. Once a week, empty out items that hold water such as tires, buckets, planters, toys, pools, birdbaths, pet bowls, flowerpots, and trash containers.
  - Clean clogged roof gutters, particularly if leaves tend to plug up the drains.
- Treat standing water that cannot be eliminated, such as retention ponds or drainage ditches, with a mosquito larvicide. Mosquito larvicide is easy to use and can be purchased at most home improvement stores.
- Wear protective clothing such as long-sleeved shirts and pants.
- Limit outdoor activity from dusk to dawn when mosquitoes are most active.
- Maintain window and door screens to keep mosquitoes out of buildings. Do not prop open doors.

