



Clinical Update

For Telephone Triage Nurses

September - October 2012

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- **West Nile Virus**

West Nile Virus (WNV)

What is West Nile Virus (WNV)?

WNV is a disease carried by mosquitoes. It can be spread to humans through a mosquito bite. WNV infections happen more often in summer and early fall than other seasons. This is why it is called a seasonal epidemic in North America. WNV can be a serious illness.

These facts have been reported to the CDC as of September 2012:

- 48 states have had cases of WNV in people, birds, or mosquitoes
- 2,636 cases of WNV have been reported in people
- 118 people have died from WNV
- Close to 75% of WNV cases have been from Texas, Mississippi, Louisiana, South Dakota, and Oklahoma.
- 50% of all cases have been from Texas

How is WNV spread?

WNV is spread by bites from infected mosquitoes. These insects get WNV from biting infected birds. When a mosquito with WNV bites a human, the virus is spread. WNV is only spread from mosquitoes to humans. It cannot be spread from person-to-person. It cannot be spread through touching or kissing a person with WNV. It is safe for mothers with mosquito bites to keep breastfeeding. A woman with WNV symptoms who is breastfeeding should continue to breastfeed; however, she should speak with her doctor.

What are the symptoms of WNV?

A person will show signs of WNV within 3-14 days after the mosquito bite.

- Close to 80% of people with WNV will have **no symptoms**.
- Close to 20% of people with WNV will have **mild symptoms**. These may be fever, headache, body aches, swollen lymph nodes, nausea, and vomiting. They may also have a rash on their chest, stomach, and back. This is called West Nile Fever.
- Only 0.7% of people with WNV will have **serious symptoms**. These may be high fever, stiff neck, and muscle weakness, numbness, or paralysis. WNV can also cause confusion, seizures, blurry eyesight, and coma. These problems are more likely to happen in people over 60 years old with WNV.



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How is WNV treated?

There is no specific treatment for WNV. People with a mild case of WNV may be sick for a few weeks. They will get better on their own. They do not need to see a doctor. People with a serious case of WNV may need treatment in a hospital. They will be given IV fluids, airway support, and nursing care. People who have serious symptoms should see a doctor right away. Pregnant or nursing women should see their doctor if they may have WNV.

Who is at greatest risk for WNV?

- All people who are bitten by a mosquito are at slight risk for WNV. Spending a lot of time outdoors may increase this risk. Though, even in an area with known WNV, less than 1% of mosquitoes are infected and carry the virus.
- People over 60 years old with WNV have a higher chance of getting serious symptoms. Older people should protect themselves from mosquito bites.
- People needing a medical procedure are not at risk for WNV. All donated blood and organs are checked for WNV before use.

How can WNV be prevented?

There are many ways to prevent the spread of WNV. There are ways the community can work to control the number of mosquitoes. There are also ways to protect against mosquito bites. Prevent WNV by:

- Getting rid of standing water where mosquitoes could lay eggs. Standing water can be in flower pots, bird baths, and shallow pools.
- Fixing windows and screens. This will keep mosquitoes out of the home.
- Using insect repellent when outside. This is important at dawn and dusk when mosquitoes are most active.
- Wearing long pants and shirts when outside. This will protect against mosquito bites.
- Reporting dead birds to a local Health Department. They will have instructions on how to safely dispose of the bird.



References:

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What is a good insect repellent (bug spray)?

DEET is an insect repellent that works well to keep away mosquitoes. Higher strength DEET works better, but all DEET over 50% works the same.

- The American Academy of Pediatrics recommends that children over 2 months of age can use DEET up to 30% strength.
- Health Canada recommends that adults use DEET of 5-30% strength.
- The Centers for Disease Control (CDC) state that pregnant women can use DEET.



The best way to put it on is to first spray it on your hands. Then rub it on skin areas that will be exposed while outdoors. Do not spray it near the eyes, mouth, or irritated skin. DEET should be washed off with soap and water once indoors. Be sure to read all of the instructions on the label.

When should someone see their doctor?

A person should see his or her doctor right away if there are any symptoms of a serious WNV infection. These are:

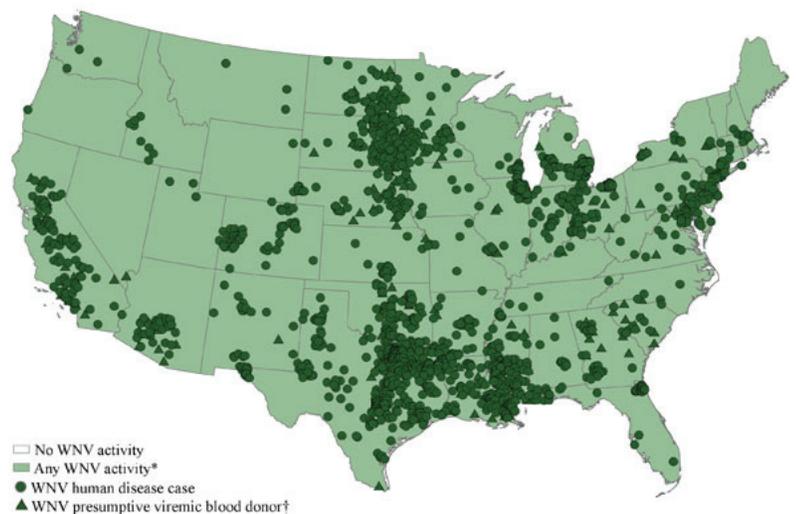
- High fever
- Stiff neck
- Muscle weakness, numbness, or paralysis
- Confusion
- Seizure
- Loss of eyesight
- Coma

Pregnant or nursing women should see their doctor if they think that they have WNV. Since there is no specific treatment, other people with mild symptoms of possible WNV do not need to see a doctor.

Is West Nile Virus in My Community?

In the United States... As of September 11, 2012, 48 states have reported West Nile virus infections in people, birds, or mosquitoes. There have been a total of 2,636 cases of West Nile virus disease in people including 118 deaths, according to the CDC.

In Canada... As of September 1, 2012, 162 clinical case of West Nile Virus in people have been reported to the Public Health Agency of Canada (PHAC).



Source: Centers for Disease Control and Prevention (CDC). Last accessed 09.15.2012. <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>