

# West Nile Virus: Symptoms

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## **Q. What are the symptoms of West Nile virus infection?**

**A.** Most people who are infected with the West Nile virus will not have any type of illness. It is estimated that 20% of the people who become infected will develop West Nile fever: mild symptoms, including fever, headache, and body aches, occasionally with a skin rash on the trunk of the body and swollen lymph glands.

The symptoms of severe infection (West Nile encephalitis or meningitis) include headache, high fever, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, and paralysis. It is estimated that 1 in 150 persons infected with the West Nile virus will develop a more severe form of disease.

## **Q. What is the incubation period in humans (i.e., time from infection to onset of disease symptoms) for West Nile encephalitis?**

**A.** Usually 3 to 14 days.

## **Q. How long do symptoms last?**

**A.** Symptoms of mild disease will generally last a few days. Symptoms of severe disease may last several weeks, although neurological effects may be permanent.

## **Q. If I have West Nile Fever, can it turn into West Nile encephalitis?**

**A.** When someone is infected with West Nile virus (WNV) they will typically have one of three outcomes: No symptoms (most likely), West Nile Fever (WNF in about 20% of people) or severe West Nile disease, such as meningitis or encephalitis (less than 1% of those who get infected). If you develop a high fever with severe headache, consult your health care provider.

WNF is typically a mild disease in people, characterized by symptoms such as fever, body aches, headache and sometimes swollen lymph glands and rash. WNF generally lasts only a few days, though in some cases symptoms have been reported to last longer, even up to several weeks. WNF does not appear to cause any long-term health effects. There is no specific treatment for WNV infection. People with WNF recover on their own, though symptoms can be relieved through various treatments (e.g. medication for headache and body aches, etc.).

Some people may develop a brief, WNF-like illness (early symptoms) before they develop more severe disease, though the percentage of patients in whom this occurs is not known.

Occasionally, an infected person may develop more severe disease such as “West Nile encephalitis,” “West Nile meningitis” or “West Nile meningoencephalitis.” Encephalitis refers to an inflammation of the brain, meningitis is an inflammation of the membrane around the brain and the spinal cord, and meningoencephalitis refers to inflammation of the brain and the membrane surrounding it. Although there is no treatment for WNV infection itself, the person with severe disease often needs to be hospitalized. Care may involve nursing IV fluids, respiratory support, and prevention of secondary infections.

For more information, visit [www.cdc.gov/westnile](http://www.cdc.gov/westnile), or call the CDC public response hotline at (888) 246-2675 (English), (888) 246-2857 (Español), or (866) 874-2646 (TTY)