



**MotherToBaby**

Medications & More During Pregnancy & Breastfeeding  
Ask The Experts

**Fact Sheet**

by the **Organization of Teratology Information Specialists (OTIS)**

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## **West Nile Virus Infection**

In every pregnancy, a woman starts out with a 3-5% chance of having a baby with a birth defect. This is called her background risk. This sheet talks about whether exposure to West Nile Virus Infection may increase the risk for birth defects over that background risk. This information should not take the place of medical care and advice from your health care provider.

### ***What is West Nile Virus (WNV)?***

WNV is a virus that can infect humans, birds, mosquitoes, horses and some other mammals. It is commonly found in Africa, West Asia and the Middle East. Since 1999, WNV has been found in North America.

If an infected mosquito bites a human, the human can become infected. The incubation period (the time from bite to the start of symptoms) is usually 2 to 14 days. You cannot get WNV from birds or horses.

### ***What are the symptoms of WNV?***

Most people infected with WNV will have no symptoms or very mild symptoms. About 20% of infected people will develop more serious symptoms of WNV. These symptoms may include fever, headache, being very tired, body aches, swollen glands and sometimes a skin rash on the trunk of the body.

Less than 1% of infected people will develop severe infection that leads to swelling of the brain or of the area around the brain and spinal cord. These symptoms include headache, high fever, neck stiffness, confusion, tremors, convulsions, muscle weakness, paralysis and coma.

Generally, symptoms of WNV last only a few days but can last up to two weeks. Symptoms of severe WNV may last several weeks and some people may experience long-term illness.

### ***How is WNV treated?***

There is no specific treatment for WNV. Pain relievers such as acetaminophen may help relieve some minor symptoms. Individuals with severe WNV infection may need care in the hospital. You should contact your health care provider if you think you have developed WNV infection.

### ***I am pregnant. How do I prevent mosquito bites?***

Mosquitos are most active during early morning and dusk. The Centers for Disease Control and Prevention (CDC) recommends staying indoors during the times of day when mosquitoes are most active. Pregnant women should protect themselves when outdoors by using a mosquito repellent that contains DEET or picaridin. With proper use, these products will not increase the chance of birth defects or other pregnancy problems. For more information, please see the MotherToBaby fact sheet DEET at <https://mothertobaby.org/fact-sheets/deet-nn-ethyl-m-toluamide-pregnancy/pdf/> and insect repellents <https://mothertobaby.org/fact-sheets/insect-repellents/pdf/>.

To further decrease your exposure to mosquitoes, frequently change the water in birdbaths and drain or empty outdoor containers that collect water, as this is where mosquitoes can breed.

### ***I am pregnant and have been diagnosed with WNV. Can this harm my baby?***

Little information is available regarding exposure to WNV during pregnancy. There is a case report of a pregnant woman, who passed the virus to her unborn baby. The baby was born with serious medical problems. One case report does not establish a connection. In contrast, in studies of over 90 women who had WNV during pregnancy the risk of adverse effects from WNV in the babies of infected women appeared to be low. No consistent pattern of defects has been identified. While reassuring, given the small number of women who have been studied, more research

is needed before we can say whether a baby may have problems if a mother develops WNV during pregnancy.

***I am breastfeeding. Can I use insect repellents?***

Yes. Breastfeeding mothers must also protect themselves from mosquito bites by using DEET or picaridin. No reports or problems associated with using these products while breastfeeding have been noted. Oral ingestion of these products should be avoided by preventing the infant from licking areas where they are applied. Please see the MotherToBaby fact sheets on [DEET](#) and [Insect repellents](#) for further general information. Be sure to talk to your health care provider about all of your breastfeeding questions.

***I have been diagnosed with WNV. Should I continue to breastfeed?***

Little is known about the passage of WNV through breast milk. In one case, a woman was infected with WNV after the birth of her child. The virus was present in both the baby and the breast milk. However, the child had no symptoms and remained healthy.

Because there are important benefits to breastfeeding and the chance for passing WNV through breast milk is unknown, the CDC recommends that women should not stop breast feeding because of WNV infection. Talk with your pediatrician about continuing to breastfeed if you have a confirmed active case of WNV.

***My partner had WNV. Will his exposure harm my pregnancy?***

There are no studies looking at the possible risks to a pregnancy if the father has WNV around the time of conception or during the pregnancy. In general, exposures that fathers have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures and Pregnancy at <https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/pdf/>.

**References Available Upon Request**

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