West Nile Virus Infection

This sheet talks about exposure to West Nile virus infection in a pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

What is West Nile virus (WNV) and how does it spread?

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. Humans are infected with WNV after being bitten by an infected mosquito; humans cannot get WNV from birds or horses.

What are the symptoms of WNV and how is it treated?

The incubation period (the time from bite to the start of symptoms) is usually 2 to 14 days. Most people infected with WNV will have no symptoms or very mild symptoms. About 20% (1 in 5) 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. Generally, symptoms of WNV last only a few days but can last up to two weeks.

Less than 1% (1 in 100) 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. Symptoms of severe WNV may last several weeks and some people may experience long-term illness.

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 healthcare provider if you think you have developed WNV infection.

Does having WNV increase the chance for miscarriage?

Miscarriage can happen in any pregnancy. Studies on women have not been done to see if WNV infection in pregnancy increases the chance of miscarriage.

Does having WNV in pregnancy increase the chance of birth defects?

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. Little information is available about exposure to WNV during pregnancy. In studies of over 90 women who had WNV during pregnancy, the risk of harmful effects from WNV in the babies appeared to be low. No consistent pattern of birth defects has been identified.

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. More research is needed to know whether a baby may have problems if a mother develops WNV during pregnancy.

Does having WNV in pregnancy cause long-term problems for the baby?

Studies on long-term development of children whose mothers had WNV during pregnancy have not been done.

Can I breastfeed while sick with WNV?

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 Center for Disease Control and Prevention (CDC) recommends that women should not stop breastfeeding because of WNV infection. If you suspect that the baby has symptoms of WNV, contact the child’s healthcare provider. Talk to your healthcare provider about all your breastfeeding questions, including continuing to breastfeed if you have a confirmed active case of WNV.
If a man has WNV, could it affect his fertility (ability to get partner pregnant) or increase the chance of birth defects?

There are no studies looking at WNV and a man’s fertility. There are also no studies looking at pregnancies that were fathered by men with WNV. 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 at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/pdf/.

Please click here for references.