West Nile Virus Infection

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

How do you get WNV?

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?

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.

How can I find out if I am infected with WNV?

WNV can be detected by a blood test which can be ordered by your healthcare provider.

I have a WNV infection. Can it make it harder for me to become pregnant?

Based on the data available, it is not known if WNV infection can make it harder to get pregnant.

Does having WNV increase the chance for miscarriage?

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

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

Every pregnancy starts with a 3-5% chance of having a birth defect. This is called the background risk.

In studies of over 90 women who had WNV infection 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.

Would having/getting WNV infection cause other pregnancy complications?

There is limited information on WNV infection in pregnancy. One study looked at 28 pregnancies with known WNV infection. No differences in birth weight, length, or head circumference was found.

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

In 17 children of people with WNV while they were pregnant, testing showed normal development at 2 years of age. There is 1 case report of a WNV infection at 27 weeks of pregnancy where the baby had brain abnormalities at birth, However, a case report cannot prove a link between the infection and the abnormalities.
Can I breastfeed while I have WNV?

Little is known about passage of WNV through breast milk, and there are only a small number of cases where it is documented. In 1 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. 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.

If a male has WNV, can it make it harder to get a partner pregnant or increase the chance of birth defects?

There are no studies looking at WNV and male 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/.

Please click here for references.