

**West Nile Virus and Pregnancy
Frequently Asked Questions**
Georgia Department of Public Health

Are pregnant women at higher risk of getting WNV?

No. All people who are exposed to mosquitoes are at equal risk of becoming infected with WNV. Most people infected with WNV do not develop any symptoms of illness, some people develop flu-like symptoms, and a very few people infected with WNV develop neurologic disease that can be fatal. People who are over the age of 50 years and people who have compromised immune systems are more likely than others to develop severe illness when infected with WNV. In general, pregnant women are not more likely than other people to develop severe illness.

What are the dangers of being infected with WNV during pregnancy?

Most women infected with WNV during pregnancy will not have any signs of illness, while some may develop WNV fever or WNV neurologic disease. There is limited evidence to suggest that WNV can be transmitted to a fetus when the mother is infected during pregnancy, regardless of whether the mother has symptoms of illness. There is not enough information to determine if WNV infection during pregnancy causes birth defects; however, there have been a few reports of babies with mild or severe birth defects born to mothers infected with WNV during pregnancy. Because of the possible risk to the fetus, pregnant women should always take precautions to avoid mosquito bites. Women should consult their healthcare providers to discuss any concerns they may have about their health.

What are the dangers of being infected with WNV while breast-feeding?

Laboratory tests have found WNV in the breast milk of infected women. Limited experience indicates that a mother can transmit WNV to her infant through breast milk, even if the mother has no symptoms of illness when infected. It is possible, although probably not common, for infants to develop illness if they are infected with WNV. To prevent becoming infected and transmitting WNV to their infants, breast-feeding mothers should always take precautions to avoid mosquito bites. Women should consult their healthcare providers to discuss any concerns they may have about breast-feeding.

Should pregnant women be tested for WNV infection?

Healthy pregnant women do not need to be screened for WNV infection during pregnancy. There is currently no treatment for WNV infection or illness, and no therapy to prevent WNV infection from being passed to a fetus from an infected mother. From a public health



perspective, it is important to identify pregnant women infected with WNV in order to study whether there is a link between infection during pregnancy and adverse birth outcomes. If a pregnant woman develops illness associated with WNV, such as encephalitis, meningitis, flaccid paralysis, or unexplained fever, in an area where WNV transmission is occurring, she should see her healthcare provider to be tested for WNV.

What can pregnant women do to prevent becoming infected with WNV?

The most effective way to prevent becoming infected with WNV is to limit exposure to mosquito bites. This can be accomplished through personal protective measures and through source reduction activities.

Personal protective measures include:

- Wear long sleeves and pants when outdoors to reduce the amount of skin exposed for mosquitoes to bite.
- Avoid going outdoors at dusk and dawn or whenever mosquitoes are most actively biting in your area.
- When outdoors, wear insect repellent containing DEET on exposed skin and/or on clothing to prevent mosquito bites. Information about DEET and pregnancy is below.
- Make sure doors and windows remain closed or have tight-fitting screens with no holes for mosquitoes to enter the house.

Source reduction activities, or elimination of mosquito breeding areas around the home, include:

- Dispose of old tin cans, jars, tires, plant pots, and any other container that can hold water.
- Store wheelbarrows, buckets, boats, etc upside-down so water cannot accumulate in them.
- Inspect rain gutters and downspouts and remove any leaves or other debris.
- Empty stagnant birdbaths, lily ponds, wading pools, etc at least once a week.
- Properly maintain and treat backyard swimming pools. Cover any pool not in use so rainwater and leaves do not accumulate in it. Be sure the cover does not hold pockets of water.
- Remember, mosquitoes can breed in as little as ½ inch of standing water.

Are insect repellents containing DEET safe for use during pregnancy and while breast-feeding?



DEET (*N,N*-diethyl-*m*-toluamide, also known as *N,N*-diethyl-3-methylbenzamide) has been on the market for nearly 50 years and has an outstanding safety profile. DEET is the most effective and most widely used repellent currently available. Numerous studies have evaluated the use of DEET during pregnancy and have found no evidence for safety concerns when DEET is used according to manufacturers' instructions. Studies have also failed to identify risk associated with DEET use in women who are breastfeeding. Given the potential risk to mother and fetus from West Nile virus and other serious mosquito-borne viruses, pregnant women should consider using DEET to protect against mosquito bites in areas where mosquito-borne viruses are known to be active (this includes all of Georgia). Adults should use repellents containing no more than 35% DEET. Pregnant women should discuss DEET or other repellents with their healthcare provider prior to use.

If I become infected with WNV while pregnant or while breastfeeding, what can I expect?

It is still not known exactly what to expect when infected with West Nile virus during pregnancy. The risk of adverse effects is small, but still possible. Your healthcare provider will monitor your pregnancy closely and may perform many tests to make sure the fetus is healthy. Your healthcare provider will also run many tests on your baby after delivery to determine if there are any abnormalities. If you are infected after delivery while breastfeeding your infant, your healthcare provider may suggest you stop breastfeeding until you have recovered. You should discuss the situation with your doctor.

Your healthcare provider is required to report your WNV infection to Georgia public health authorities. The Centers for Disease Control and Prevention (CDC) has developed a registry for following pregnant and breastfeeding women who are infected with WNV. Your healthcare provider may be asked to enroll you in the registry so that the relationship between WNV and pregnancy outcomes can be studied. Your doctor will discuss this with you if needed.

