

West Nile Viral Infection: Blood Transfusions and Organ Donations

West Nile virus (WNV) may be transmitted by blood transfusion or organ donation but this is rare.

Investigations have shown that blood transfusions and transplanted organs may be the cause of WNV infection in recipients.

Can I get infected with West Nile virus by donating blood?

No. You cannot get WNV by donating blood.

Transfusion-related WNV cases are reported and investigated as the first step in prevention.

The Centers for Disease Control and Prevention (CDC), Food and Drug Administration (FDA), blood collection agencies, and state and local health departments investigate possible cases of WNV transmission through blood transfusion and organ transplantation. State and local public health departments report cases of WNV infection in patients who have received blood transfusions in the four weeks before they got sick to the blood collection agency that collected the donation, and to the CDC through Arbo-NET, the national database where information about cases of WNV are kept.

Any remaining blood products from donors whose blood was transfused to patients with confirmed or suspected WNV infection are withdrawn.

Physicians are asked to notify public health authorities of any patients who develop symptoms of WNV infection within four weeks of receiving a blood transfusion or organ transplantation. In addition, patients with WNV infection whose symptoms begin in the weeks preceding blood or organ donation should also be reported. Prompt reporting of these persons helps facilitate withdrawal of potentially infected blood components.

Blood Banks avoid collecting blood from suspect donors

The FDA issued an alert to blood banks and organizations to be vigilant in excluding individuals who may have early symptoms of WNV from donating blood. Most people who have WNV do not show symptoms, making it difficult to defer them from donation. Blood banks are vigilant to defer all of those who may have minor illnesses, especially in areas where WNV is most active.

In addition, cases of WNV infection in people who donated blood in the two weeks preceding illness onset should also be reported to the CDC and blood collection agencies where the sick person donated blood. The blood collection agency will destroy potentially infectious units of blood.

If you have been diagnosed with WNV by your doctor, you should not donate blood for 120 days. If you are diagnosed shortly after giving blood, you should tell your blood center. Donation centers try to ensure that donors who recently had WNV do not give blood for 120 days. Let the center know if you have had a WNV infection. They will help you decide if it is safe for you to donate.

Is the blood supply screened?

Since 2003, all blood banks started using blood screening tests for WNV. The screening methods allow blood banks to destroy potentially infectious blood before it is given to anyone. The implementation of donor screening for WNV has reduced the risk of transfusion-associated WNV infection substantially.

Although the blood donation is removed from the blood supply as soon as the initial screening test shows that it could be infected, it may take several more weeks to confirm the infection.

People should not avoid donating blood, or getting blood transfusions or organ transplants

Blood is lifesaving. Donating blood is safe, and we encourage blood donation now and in the future. Approximately 4.5 million persons receive blood or blood products annually. Although persons needing blood transfusions or organ transplants should be aware of the risk for WNV infection, the benefits of receiving needed transfusions or transplants outweigh the potential risk for WNV infection. A small number of WNV infections acquired from blood transfusions have been reported. This risk may be higher during the summer when WNV is most likely to infect blood donors.

The risk of getting WNV from an organ is not known and likely varies; a few cases have been documented. The number of WNV cases in a year, the time of year, and where the organ donor lives can impact your chance of getting WNV from a transplanted organ. You should contact your doctor if you think you have symptoms caused by WNV or other concerns.

Is there enough blood to meet the needs of hospitals?

Although there is always an increased demand for blood products during summer months, only a relatively few units of blood will be removed from the blood

supply even if a few uninfected products are removed because of "false positive" tests.

Blood donations usually decrease in summer. The CDC encourages people who can donate to consider making a donation during summer months to help ensure adequate blood supplies for all who need them. If you have symptoms consistent with possible WNV infection (such as fever and headache) you will be deferred from donating at that time but will be allowed to donate again when you feel better.

A person who has had West Nile virus, can still donate blood after they completely recover.

With West Nile virus infection, the viremia usually is transient, and people clear the virus very quickly. Blood centers will take precautions to be sure that donors who have been diagnosed with WNV have fully recovered before donating.

Concerned about getting West Nile virus after a transfusion?

You should be aware of the potential risk for WNV infection and the need to monitor your health. There are no specific medicines that can treat WNV infection. You should contact your doctor if you think you have symptoms of WNV. They may be able to give you medicine to help lessen some of your symptoms. Recent receipt of a blood transfusion or organ transplantation by a person with WNV infection does not necessarily implicate the transfusion/transplantation as the source of infection.

Having a positive test for WNV does not always mean illness will follow.

A positive result in the blood means that the person has been recently bitten by an infected mosquito. Most infected people do not become ill at all, and only a very small number develop West Nile fever or more serious disease. It is thought that there is immunity from WNV for a long period after becoming infected, possibly for life.

Blood banks notify the persons with positive blood tests for WNV. A subsequent blood sample will be requested in order to help confirm the infection. We thank you in advance for your cooperation in protecting the national blood supply, and helping to validate the tests that are being used.

Most WNV infections do not cause any symptoms, and do not require any medical attention. There is nothing in particular that you need to do because of the infection. It is also likely that you have antibodies to prevent you from getting sick with WNV in the future. If you were infected with WNV, this does tell you that there is a risk of infection in your area, and it is important for the rest of your family to protect themselves.

Of course if you do feel ill you should consult your health care provider.