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ATTENTION

Public Health Update

The Westchester County Department of Health provides public health updates to members of the medical community on important issues affecting public health in Westchester

4 September 2002

West Nile Virus Update

- **CDC reports a cluster of West Nile Virus infections in Georgia and Florida, potentially related to transplant and/or transfusions from an infected donor.**
- **A total of 12 human cases of West Nile viral disease have been diagnosed as of 9/4/02 among residents in the New York City metropolitan area (New York and Connecticut states), including two fatal cases.**
- **No human cases of West Nile Virus have been identified in Westchester County.**
- **Physicians are reminded to educate patients about taking personal protective measures against mosquito bites and eliminating standing water around their homes. Please refer to the Physician's Corner and West Nile Virus pages on the WCDH website (www.westchestergov.com/health) for additional information, including materials for patient education.**

Please distribute to staff in the Departments of Internal Medicine, Pediatrics, Family Medicine, Neurology, Infectious Diseases, Emergency Medicine, Critical Care and Laboratory Medicine

Dear Colleagues,

We are writing to update you on several issues related to West Nile Virus (WNV):

Possible WNV infections due to transplants and/or transfusions*

The CDC, the Food and Drug Administration, the Georgia State Department of Health, and the Florida Department of Health are currently investigating illnesses among four recipients of organ transplants from a

* Taken from <http://www.cdc.gov/od/oc/media/pressrel/r020903.htm>

single donor from Georgia. One of these persons died on August 29. Preliminary evidence, as described below, indicates that three of the four patients were infected with WNV and that the organ transplants appear to be the source of these infections.

All four persons received an organ transplant from a Georgia resident who died in early August, following a motor vehicle accident. Before death, this person received multiple blood transfusions. Two Georgia residents received organs from this donor, and both became ill with fever and encephalitis. One of these patients remains hospitalized, but is improving. The other patient died; examination of autopsy specimens at the CDC was consistent with WNV. In addition, two Florida residents received organs from this donor. One developed a neurological illness and remains hospitalized. A second developed fever, is recovering at home; WNV test results for whom are still pending.

Concern about the possibility that blood transfusion or organ transplantation may have been the vehicle for transmission of WNV infection to recipients of organs from a single donor has prompted CDC's current investigation. WNV is primarily spread to humans via the bite of an infected mosquito. Although transmission of WNV via blood transfusion or organ transplantation has been a theoretical possibility, transmission via these routes has not been previously documented.

As a precautionary measure, remaining blood products from the blood donors of the transfusions given to the organ donor from Georgia are being recalled. A copy of the CDC fact sheet on WNV and blood transfusions as of 9/1/02 (most current available) is included at the end of this alert and can also be found at <http://www.cdc.gov/ncidod/dvbid/westnile/ga/transfusion.htm>.

Regional and Westchester WNV Update

Since Labor Day Weekend, five new cases of West Nile viral disease were diagnosed among residents of New York City (NYC), bringing the current 2002 count of human cases in NYC to six. One of these recent cases resulted in the first known WNV-related death in NYC this year. Four of the six NYC cases, including the WNV-related fatality, are residents of Queens. The other two cases are residents of the Bronx. In addition, mosquito and bird surveillance findings indicate WN viral activity in all 5 boroughs of the city. In 1999, there were 45 human cases of WNV in NYC requiring hospitalization (with four deaths), in 2000 there were 14 cases of human WNV (one death) and in 2001 there were seven cases of WNV (no deaths).

Thirteen human cases of WNV disease have been confirmed in New York state, 11 of which are residents of the NYC metropolitan area and two of which are residents of upstate counties. These cases have occurred in Nassau County (two cases), Suffolk County (three cases, one death), New York City (six cases, one death), Yates County (one case) and Onondaga County (one case). In addition, one case from Greenwich, Connecticut has been confirmed. Information on national surveillance can be found at the Centers for Disease Control and Prevention site: <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>

West Nile virus activity has been detected in birds and mosquitoes, but not humans, throughout Westchester County (see Table 1). In response to these findings, the Health Department is increasing surveillance of dead birds, mosquitoes, mosquito breeding sites, larviciding, and public education. **No spraying for mosquitoes is planned for Westchester County at this time.**

This is currently the time of greatest risk for acquiring WNV infection. **WCDH continues to request that physicians remain alert for potential cases of WN viral disease for the remainder of the adult mosquito season** (which ends after the first sustained frost).

To ensure the rapid identification of human WN virus infection, we are requesting that providers **report immediately** by telephone to the Westchester County Department of Health any adult or pediatric patient with suspected viral encephalitis as defined below:

- a. Fever $\geq 38^{\circ}\text{C}$ or 100°F , and
- b. Altered mental status (altered level of consciousness, agitation, lethargy) and/or other evidence of cortical involvement (e.g., focal neurologic findings, seizures), and
- c. CSF pleocytosis with predominant lymphocytes and/or elevated protein and a negative gram stain and culture, with or without

- d. Muscle weakness (especially flaccid paralysis) confirmed by neurologic exam or EMG.

In addition, to help assess the possible risk of transmission of WNV by blood transfusion or transplant, the WCDH requests that providers report:

- a) persons with probable or confirmed WNV infection who donated blood the week before their illness began, or
- b) persons with unexplained febrile-associated meningitis or encephalitis which developed 3 to 21 days after receipt of a blood transfusion or transplant.

WCHD also is reminding physicians of the importance of educating their patients, particularly those over the age of 50 who are at higher risk of developing more severe disease if infected with WNV, to take precautions against mosquito bites. All patients/residents should be urged to eliminate standing water around their homes. Further information and fact sheets for patients are available at WCDH website

www.westchestergov.com/health).

TO REPORT A SUSPECT CASE AND ARRANGE FOR TESTING, CALL THE WESTCHESTER COUNTY DEPARTMENT OF HEALTH AT:

(914) 813-5159 Mon-Fri 8:30 AM - 4:30 PM
(914) 813-5000 24 hours/day; 7 days/week

Table 1: Summary of West Nile Virus Findings in Westchester County to Date

West Nile Positive Results 2002 YTD	
Birds	24
Mosquito Pools	20
Humans	0

The Westchester County Health Department thanks the medical and laboratory communities for their continued collaboration in the investigation of communicable diseases.

Sincerely,

Belinda Ostrowsky

Belinda Ostrowsky, MD, MPH
Director Communicable Diseases

Ada Huang

Ada Huang, MD
Deputy Commissioner, Disease Control

We would like to acknowledge and thank the New York City Department of Health, particularly Drs. Marcelle Layton and Annie Fine, for providing much of the above information.

CDC Q&A for West Nile Virus: Blood Transfusion (as of 9/1/2002)

Q. Is West Nile virus transmitted by blood transfusion?

A. To date, there are no documented instances where West Nile virus was transmitted through transfusion. However, the virus may be transiently present in the blood of those infected, so it is possible that this could occur.

Q. What is being done about this possibility?

A. On August 17, FDA issued an alert to blood banks and organizations to be vigilant in excluding individuals who may have early symptoms of West Nile virus from donating blood. In addition, the Food and Drug Administration and the Centers for Disease Control and Prevention have asked that blood banks and others report any cases where a blood recipient develops West Nile virus for investigation of whether transfusion could have been involved. Such an investigation is now being conducted by CDC to determine whether blood transfusion or donor organs may have been a source for the possible West Nile virus cases in the current transplant recipients.

Q. What else can be done to protect people against this possible threat?

A. In this case, even though a blood source is unproven at this time, as a precaution, to protect others, blood banks are recalling any remaining units of blood products from all donors whose blood was administered to the transplant donor. There is currently no validated blood test to screen donated blood. If it is shown that people without symptoms can transmit West Nile virus through donating blood, public health partners will work with others to help facilitate the availability of such a test.

Q. Should people avoid donating blood or getting blood transfusions?

A. Blood is life saving and is currently in short supply. Donating blood is safe and we encourage blood donation now and in the future. For patients who need a blood transfusion, the benefits far outweigh any risks.

Q. How can blood banks avoid collecting blood from donors who may have West Nile virus?

A. Most people who have West Nile virus do not show symptoms, making it difficult to defer them from donation. However, some individuals develop minor symptoms of fever and headache. Blood banks need to be vigilant to defer all of those who may have minor illnesses, especially in areas where West Nile virus is most active.

Q. If a person has had West Nile virus, can they still donate blood?

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

Q. If I recently had a transfusion, should I be concerned about getting West Nile virus?

A. There have been no cases where transmission by blood transfusion has been documented. Although, by natural routes, infection would probably be expected in 2-14 days, it is unknown what incubation period would be expected if transmission were transmitted by transfusion. If you have symptoms of West Nile virus or other concerns you should contact your physician.

<http://www.cdc.gov/ncidod/dvbid/westnile/qa/transfusion.htm>