Reporting and Follow-Up of West Nile Virus-Infected Blood Donors

West Nile virus (WNV) infection, including neuroinvasive disease, fever, and infections detected by blood banks, was made reportable in 2005. WNV positive donors detected by blood banks are reported directly to local health departments instead of to the California Health Department of Health Services (CDHS). The purpose of this document is to offer guidelines to local health departments on how to follow-up WNV positive blood donors and what to report to CDHS.

- A licensed blood collection agency that detects a WNV infection in a donor will report the infection within two weeks of donation directly to the local health department corresponding to the donor’s residence. Blood collection agencies will report:
  - Confirmed WNV infections or
  - Presumptively positive donors (PVDs), who are donors that have two reactive nucleic acid-amplification tests (NAT) or an initial NAT that is reactive at a high signal/cut-off (S/CO).
- Local health departments should report blood donors who test positive for WNV to their local vector control district as soon as possible, so that enhanced mosquito surveillance and control can be conducted in the vicinity of the case’s resident.
- Local health departments should report blood donors who test positive for WNV to the California Department of Health Services, Viral and Rickettsial Disease Laboratory (VRDL) since these infections are tracked as well (reporting form below).
- Donors who are confirmed viremic or NAT positive will not necessarily be ill, nor will they initially have positive IgM or IgG WNV tests.
- Local health departments should follow up with the donor after two weeks of the date of donation to assess if the patient subsequently became ill. The WNV case history form (below) may be used for this purpose.
  - If the donor did become ill as a result of WNV infection, the case history form should be sent to VRDL so that the case may be classified appropriately.
  - Additional serological testing is not required.
- In the event that a person is identified with WNV illness by the local health department, and the person donated blood in the two weeks prior to illness but was not previously identified by the blood bank as infected with WNV, the local health department needs to notify the appropriate blood collection facility so that the potentially infected blood products can be tracked.
- Questions about blood bank reporting issues should be directed to Jon Rosenberg, M.D., (510) 620-3427 or jrosenbe@dhs.ca.gov or Anne Kjemtrup, D.V.M., Ph.D. (916) 552-9746 or akjemtru@dhs.ca.gov.
Report of West Nile Virus-Positive Blood Donor to the California Department of Health Services

1. Blood Collection Facility:
   a. Name:_______________________________________
   b. Address: ___________________________________Zip Code_________
   c. Telephone number: (_____) _________ - _______________
   d. Contact person: ______________________________

2. Blood Unit Identification Number: ___________________________

3. Date of Collection: _______/ _____/ ______________

4. Donor’s name:__________________________________________

5. Case identification number assigned by the blood center______________
   (this tracking code should be different from the index blood unit identification number or other operational identification numbers. It is to be used to track the case investigation)

6. Donor’s date of birth: __/__/____

7. Donor’s gender: M/F

8. Donor’s Address_ _____________________________________________
   ZIP code: _ _ _ _ _    Tel: (________) _____________________

9. This test was confirmed: Y/N  If Y, confirmatory test and result:_______________________

10. NAT #1 S/CO:_____

11. NAT #2 S/CO:_____ (if done)

12. Blood testing laboratory (optional): Name:___________________________________________
    Address:___________________________________________________________________________
    Phone: (___)___-______

13. Comments__________________________________________________________

_______________________________________________________________________
_______________________________________________________________________

Updated 07/21/06
West Nile Virus (WNV) Infection Case Report

Patient Information:
Last Name: ____________________________ First Name: ____________________________ DOB: __/__/____ Medical Rec #: ____________________________
Address: ____________________________ City: ____________________________ Zip Code: ____________________________
Phone: Home (______) Work (______) Occupation: ____________________________
Sex: □ Male □ Female □ Unknown
Ethnicity: □ Hispanic □ Non-Hispanic □ Unknown
Race: □ White □ Asian/ Pacific Islander □ Black □ American Indian/Alaskan Native □ Unknown □ Other: ____________________________

Physician Information (Mandatory):
Name: ____________________________ Facility: ____________________________
Pager/Phone: (______) Fax: (______) Email: ____________________________
Date of first symptom(s): __/__/____ □ Hospitalized or □ ER / Outpatient
If hospitalized, admit date: __/__/____ Discharge date: __/__/____ If patient died, date of death: __/__/____

Clinical syndrome:
- Encephalitis □ Yes □ No □ Unk
- Aseptic meningitis □ Yes □ No □ Unk
- Acute flaccid paralysis □ Yes □ No □ Unk
- Febrile illness □ Yes □ No □ Unk
- Asymptomatic □ Yes □ No □ Unk
- Other □ Yes □ No □ Unk

Do the following apply anytime during current illness:
- In ICU □ Yes □ No □ Unk
- Fever ≥38° □ Yes □ No □ Unk
- Headache □ Yes □ No □ Unk
- Rash □ Yes □ No □ Unk
- Stiff neck □ Yes □ No □ Unk
- Muscle pain/weakness □ Yes □ No □ Unk
- Altered consciousness □ Yes □ No □ Unk
- Seizures □ Yes □ No □ Unk

Exposures/Travel within 4 wks of onset (specify details):
- Mosquito bites/exposure: □ Yes □ No □ Unk
- Traveled outside of California: □ Yes □ No □ Unk
- Traveled outside the U.S.: □ Yes □ No □ Unk
- Ever traveled outside the U.S.: □ Yes □ No □ Unk

Other pertinent information (specify details):
- Immunocompromised patient: □ Yes □ No □ Unk
- Yellow fever vaccination:
  - Date: __/__/____
- Donated blood:
  - Date: __/__/____
- Donated organ:
  - Date: __/__/____
- Received blood:
  - Date: __/__/____
- Received organ:
  - Date: __/__/____
- Current pregnancy: □ Yes □ No □ Unk
  - Week of gestation: ______
- If infant, breast fed?: □ Yes □ No □ Unk

Knowledge of WNV prior to illness:
- Did patient do anything to avoid mosquito bites? □ Yes □ No □ Unk
  - if yes, - used insect repellent?: □ Yes □ No □ Unk
  - drained standing water near home?: □ Yes □ No □ Unk

Other significant history (social, family, etc.):
- ____________________________

For questions regarding testing or specimens, call Cynthia Jean (510) 307-8606
Fax this form to (510) 307-8599 or mail to CDHS VRDL – West Nile Virus, 850 Marina Bay Parkway, Richmond CA 94804

Rev 04/05

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Other lab results (MRI/CT, LFTs, etc.): ____________________________

Past medical history:
- Hypertension: □ Yes □ No □ Unk
- Diabetes Type: □ Yes □ No □ Unk
- Other: ____________________________