



DEPARTMENT OF HEALTH AND HUMAN SERVICES

Larry Meredith, Ph.D., Director

DIVISION OF PUBLIC HEALTH
PUBLIC HEALTH AND COMMUNICABLE DISEASE

920 GRAND AVENUE
SAN RAFAEL, CA 94901
PHONE: (415) 499-6841
FAX (415) 499-6855

FRED S. SCHWARTZ, M.D.
PUBLIC HEALTH OFFICER

////// **PUBLIC HEALTH UPDATE** ////

July 5, 2005

To: Marin County Veterinarians in Large Animal Practice

Subject: **SURVEILLANCE AND REPORTING OF ARBOVIRAL
ENCEPHALITIS VIRUSES IN HORSES AND RATITES**

This Public Health Update is based on a document issued by the State of California Animal Health Branch and the Veterinary Public Health Section and modified for local use in Marin County.

The California Department of Health Services (DHS) and the California Department of Food and Agriculture (CDFA) **will again supplement the costs (as available funding permits) of diagnostic testing on clinically affected horses for arboviral encephalitis viruses.** These include western equine encephalitis (WEE), eastern equine encephalitis (EEE), and West Nile Virus (WNV). These diseases may affect humans, horses, ratites (ostriches, emus, rheas, etc.), and other birds and mammals. Your continued support of the surveillance program in California is important to both human and animal health. **Please see the *Marin County Department of Health & Human Services Equine Rabies and Arbovirus Testing Policy and Procedures for equine submission and reporting instructions.*** Ratite specimen submissions should be coordinated through the California Animal Health and Food Safety (CAHFS)* Laboratory at the University of California, Davis (530-752-8700).

Veterinarians are often the first to detect the emergence of zoonotic diseases such as WNV. In 2004, California became the WNV disease epicenter with virus detected in all California counties. Equines were especially impacted as 540 clinical equine cases were confirmed. Mortality (dead or euthanized horses) exceeded 40%. The virus has already been detected this year in California, and the Centers for Disease Control and Prevention have predicted that California will again be the epicenter for WNV. A significant level of WEE virus activity in sentinel chickens and mosquitoes has also been observed in recent years.

As a reminder, rabies must be considered as a differential diagnosis when evaluating a horse with signs of encephalitis. Appropriate precautions should be taken. It is essential that Marin County Public Health Laboratory be notified of any horse with encephalitis and a history compatible with rabies regardless of WNV or other arboviral testing results.

Horse owners are strongly recommended to ensure their horse's WNV vaccines are up to date. A comprehensive vaccination plan should be developed in consultation with the veterinary practitioner. Both commercially available WNV vaccine products have been shown to provide a high level of protection when used in accordance with the manufacturer's labeled directions. Please note vaccination does not interfere with WNV IgM serum testing.

Prevention of WNV, WEE, and EEE also includes eliminating mosquitoes and their breeding grounds in standing stagnant water. Approved mosquito repellants are also effective.

Precision in case reporting by the veterinary practitioner is critical to mosquito control efforts that prevent WNV infection in both horses and humans. It is very important that each laboratory submission form is completed in its entirety. More specifically, it is imperative to include and communicate on the specimen submission form:

- **The exact physical location(s) of the horse during the two weeks prior to the onset of clinical disease.** (Please ensure that this information is included in addition to accurate owner contact information.)
- **Detailed clinical signs**
- **The present condition of the horse (including dead and euthanized)**
- **An accurate vaccination history**
- **If the horse is alive at the time of the lab-submission and dies later or is euthanized, please report this immediately to the equine WNV hot-line at 800-268-7378 and Marin County Public Health Department Laboratory (415-499-6849).** Please report the name and contact information for the veterinarian, the name of the horse, and the name and contact information for the horse owner. The purpose for reporting the death of the horse is that the horse head should subsequently be submitted to UC Davis for rabies and arbovirus testing if the horse previously tested negative for West Nile Virus and for rabies if the horse previously tested positive for an arbovirus. It is important to rule out rabies even if the horse tested positive for an arbovirus because it is possible that the horse had both rabies and an arbovirus. Rabies must be ruled out because it is transmissible to humans and has an extremely high mortality rate.

When this information is received, it not only expedites surveillance efforts, but also eliminates valuable time required in follow-up data retrieval efforts with your clinic and the owner. Your assistance is extremely important and will be greatly appreciated.

For more information on WNV please visit the California WNV website at <http://www.westnile.ca.gov> and at the CDFA equine WNV website at http://www.cdfa.ca.gov/ahfss/ah/wnv_info.htm and the Marin County Department of Health & Human Services website at <http://www.co.marin.ca.us/depts/hh/main/hs/PublicHealth/WNV/WNV.cfm>.

If you require additional information, please contact the local CDFA Animal Health District Office (Redding District, telephone 530-225-2140), the CDFA equine West Nile Virus number at 800-268-7378, or the DHS Veterinary Public Health Section at (916) 552-9740.

As always, the Marin County Department of Health and Human Services appreciates your efforts in keeping the animal and human populations of Marin County healthy.

Sincerely,

Celia F. Golden, MD, MPH
Deputy Public Health Officer
Marin County Department of Health
& Human Services

Fred S. Schwartz, MD
Public Health Officer
Marin County Department of Health
& Human Services

