Safety Note #85

FIELDWORK SAFETY: WEST NILE VIRUS



Information available from the Department of Health Services indicates 830 cases of West Nile Virus (WNV) occurred in California during 2004. Twenty-four of the 2004 WNV cases resulted in fatalities. Seventy-eight percent of the 2004 WNV cases occurred in Los Angeles, Riverside, and San Bernardino counties.

WNV is caused by the transmission of a flavivrus through the bite of a mosquito. The virus primarily infects birds where it reproduces in the bird's bloodstream. Mosquitoes acquire the virus when they feed on infected birds and subsequently, transmit the virus when the feed on other animals such as humans, horses, or chickens.

The immune systems for the majority (about 80 percent) of people infected with WNV will successfully overcome the virus and infected individuals will only experience mild flu-like symptoms or no symptoms. People at greatest risk for developing WNV symptoms are those over the age of 50 or with compromised immune systems. Typically, WNV symptoms occur three to 14 days after someone has been bitten by an infected mosquito

The following fieldwork precautions should be taken for West Nile virus prevention:

- The best defense against WNV is to not be bitten by a mosquito. Therefore, avoid conducting fieldwork during peak mosquito activity times (dawn and dusk to two hours after sunset) and in favorable mosquito habitat such as wetlands, along streams, lakes, or oceans, and moist shaded portions of wooded, brush-covered, or grassy areas.
- Wear a long-sleeved shirt and long pants with boots in the field. Tucking your pants into your boots or socks helps prevent mosquito access to your skin.
- Use insect repellants containing compounds such as DEET (repels mosquitoes) on exposed skin and permethrin (kills mosquitoes on contact) on clothing only.
- Promptly seek professional medical attention if you suspect you are experiencing serious WNV symptoms such as high fever, headache, stupor, disorientation, tremors, numbness, paralysis, swollen lymph nodes, skin rash on chest, stomach, and/or back, body aches, or nausea.

Additional information about WNV is available at the Los Angeles County Cooperative Extension internet site: http://celosangeles.ucdavis.edu/ and at http://westnile.ca.gov/home.htm.