WEST NILE VIRUS PREVENTION & CONTROL

To decrease exposure to mosquitoes and the infections that they may carry:



Avoid outside activity when mosquitoes are most active, especially at dawn and dusk.



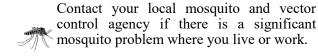
When outdoors, wear protective clothing (long pants and long sleeves) and apply insect repellant containing DEET according to label instructions.



Make sure that doors and windows have tight fitting screens. Repair or replace screens that have tears or holes in them.



Eliminate all sources of standing water on private property. Stock ornamental ponds and animal watering troughs with fish that eat mosquito larvae.



This brochure has been modified from material provided by the California Department of Public Health, Vector-Borne Disease Section, Sacramento, CA.

(916) 552-9730 www.cdph.ca.gov

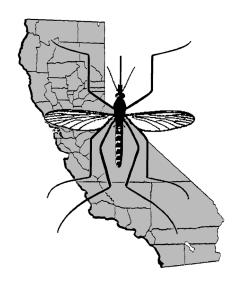
For more information call:

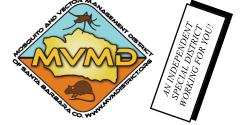
MOSQUITO and VECTOR MANAGEMENT DISTRICT of Santa Barbara County

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TELEPHONE: (805) 969-5050 E-MAIL: mvmdistrict@mvmdistrict.org Visit our WEBSITE: www.mvmdistrict.org CALIFORNIA SURVEILLANCE AND FACTS ABOUT

West Nile Virus





MOSQUITO and VECTOR MANAGEMENT DISTRICT

of Santa Barbara County

WHAT IS **WEST** NILE **VIRUS?**



West Nile Virus (WNV) is a mosquito-borne virus that has been found in Asia, eastern Europe, Africa, and the Middle East. The virus was first detected in the United States in New York City during 1999.

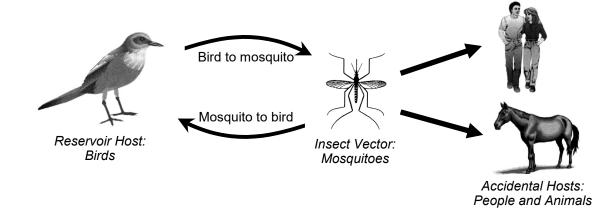
The majority of people and animals that are infected with the virus have a mild illness or no symptoms. In rare cases, the virus can cause a more serious condition called encephalitis, an inflammation of the brain. The elderly and immune impaired are at highest risk for disease caused by WNV. In 2004, WNV occurred in all 58 California counties with more than 800 human cases (27 fatal) and 536 horse cases (228 fatal). Nationwide, over 37,088 human cases (1,549 fatal) occurred from 1999-2012.

HOW DO PEOPLE AND ANIMALS GET WEST NILE VIRUS?

WNV is transmitted to people and animals by infected mosquitoes. Most mosquito species are capable of carrying the virus, however very few individual mosquitoes are actually infected. A mosquito first acquires the infection by feeding on a bird with virus in its blood. The virus lives in the mosquito and is transmitted to a new host in the mosquito's saliva when the insect bites a person, animal, or another bird.

Humans, horses, and other animals are accidental hosts for WNV. Human-to-human, and animal-to-human animal-to-animal. transmission does not occur. The virus is most prevalent from May to October when mosquitoes are most abundant.

TRANSMISSION CYCLE OF WEST NILE VIRUS





WHAT ARE THE SYMPTOMS OF WEST NILE VIRUS IN PEOPLE?

Most people who are infected with WNV have no symptoms whatsoever. However, of those who become ill, symptoms can include fever, headache, nausea, body aches, mild skin rash, or swollen lymph nodes. In a few cases, the disease will progress to encephalitis (inflammation of the brain), often with severe high fever, stiff neck, headache. disorientation, tremors, convulsions, muscle weakness, and paralysis. The time between the mosquito bite and the onset of illness, known as the incubation period, ranges from 5 -15 days in humans. It is estimated that 1 in 150 people who are infected with WNV will require hospitalization (about 6% of these Elderly and immune cases are fatal). compromised people are the most susceptible. There is no specific treatment for WNV infection, although supportive care is important.

WHICH ANIMALS GET WEST NILE VIRUS?

An infected mosquito can bite any animal, but not all animals will become infected. The disease most often affects birds, but occasionally causes disease in other animals as well.

Birds

Wild birds are th animals from which the mosquito primarily acquires the virus. Infection has been



reported in more than 250 bird species. Although many birds that are infected with WNV will not appear ill, WNV infection can cause serious illness and death in some birds. The most severe illnesses are seen among the corvid birds, which include crows, ravens, jays, and magpies. American Crows constitute the majority of the birds reported dead due to WNV.

Horses

Horses are also susceptible to WNV. Like people, most horses bitten by mosquitoes will not become ill. The disease does not seem to be specific to a particular breed or age of horse.



Signs of the disease include stumbling, circling, hind leg weakness, inability to stand, muscle tremors, and death. A WNV vaccine as well as vaccines for Eastern Equine Encephalitis (EEE) and Western Equine Encephalitis (WEE) are available for horses and should be given in early spring. For information, see http://www.cdfa.ca.gov/ahfss/ah/wnv info.htm.

WHAT IS THE CALIFORNIA WEST NILE SURVEILLANCE PROGRAM?

More than 900 human cases of WNV were documented in California during 2005. More outbreaks occurred from 2006 through 2013. In order to provide advanced warning of potential WNV outbreaks, many agencies throughout the state participate in a cooperative WNV surveillance program. Since 1969, this program has conducted surveillance for WEE, St. Louis Encephalitis (SLE) and other viruses. In 2000, it was expanded to enhance the ability to detect WNV. A protocol to report and test dead birds was added to the existing surveillance system for encephalitis cases, mosquito testing, and monitoring of sentinel chickens.

Encephalitis Case Surveillance

The California Department of Public Health (DPH) tracks cases of human, horse, and ratite (e.g. emu, ostrich) encephalitis. The routine testing of encephalitis cases for WNV will assist in the early detection of the virus in California. Human and animal encephalitis cases are also routinely tested for WEE and SLE viruses.

Mosquito Testing

Mosquitoes throughout the state are sampled for the presence of WNV, WEE, and SLE. Local mosquito control agencies also monitor the abundance and type of mosquitoes.

Sentinel Chicken Testing

More than 200 chicken flocks are strategically placed throughout the state and are tested routinely year-round to detect evidence of infection from WNV, WEE, and SLE.



Dead Bird Surveillance

California began to test dead crows and other birds for WNV in 2000. Monitoring dead birds will help identify where WNV is occurring in the State and give advance warning of possible outbreaks. Individuals and private organizations as well as state and local government agencies participate in the surveillance program by reporting dead bird sightings. DPH arranges to collect the dead bird from the location it was found if a need for WNV testing is appropriate.

WHAT DO I DO IF I SEE A DEAD BIRD?



AMERICAN CROW

American Crows are found throughout most of California. They have entirely black plumage, black beak, and black feet. Adult size is 17-21 inches from tip of tail to tip of beak.

If you find a dead bird, particularly a crow, other corvid (e.g. jay, magpie, raven), or a hawk, please contact either the phone number or website below promptly. Do not touch the bird with your bare hand. DPH will record all dead bird reports and will arrange for pickup and laboratory testing for WNV when appropriate.

Dead Bird Reporting and West Nile Virus Information

West Nile Virus Dead Bird Surveillance Program California Department of Public Health Vector-Borne Disease Section

Toll Free Telephone: 877-WNV-BIRD (877-968-2473)

Website: http://www.westnile.ca.gov