

### EH&S FACT SHEET Environment, Health and Safety Information for the Berkeley Campus



## West Nile Virus

#### What is West Nile virus?

West Nile (WN) virus originated in remote areas of Africa, Asia, eastern Europe, and the Middle East. It is transmitted by mosquitoes. The virus was first detected in the United States in New York City in 1999. Usually people and animals that are infected with the virus show no symptoms or suffer only mild illness. In rare cases, the virus can cause a more serious condition called encephalitis, an inflammation of the brain, which can be fatal. Individuals over the age of 50 have the highest risk for encephalitis caused by WN virus.

#### How do people and animals get West Nile virus?

WN virus is transmitted to people and animals by infected mosquitoes. Only certain species of mosquitoes carry the virus and very few mosquitoes are actually infected. A mosquito first acquires the infection by feeding on a bird (the reservoir host) with virus in its blood. The virus lives in the mosquito (the insect vector), and is transmitted in the mosquito's saliva to a new host when the insect bites a person or animal (the accidental hosts).

Humans and other animals, including horses, are accidental hosts for WN virus. There is no evidence of Human-to-human contact transmission, but there have been cases of blood or organ transfusion transmission, and mother-to-fetus transmission is being investigated. The virus is most prevalent from May to October when mosquitoes are most abundant.

## What are the symptoms of West Nile virus?

Most people who are infected with WN virus 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. Those experiencing a severe headache should seek medical attention immediately. In a few cases, the disease will progress to encephalitis (inflammation of the brain). The time between the mosquito bite and the onset of illness, known as the incubation period, ranges from 5 to 15 days in humans. It is estimated that 1 in 150 people who are infected with WN virus will require hospitalization. There is no specific treatment for infection with WN virus, although supportive care is important.

What is the University doing about West Nile virus?

The University's Pest Management Services is working closely with the Alameda County Mosquito Abatement District to prepare for the possibility of WN virus in the area. Together, they have increased surveillance of mosquitoes on campus and treated mosquito breeding areas. The Mosquito Abatement District is treating the

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# What can you do about West Nile virus?

storm drains and catch basins on a regular basis with a growth regulator and a safe bacterial agent that kills mosquito larvae.

The University Health Services staff has had training on the West Nile virus and will be working closely with public health authorities as the summer progresses.

There are many things you can do on campus to help prevent the growth of mosquitoes and the spread of West Nile virus to this area:

- Mosquitoes need water to initiate the lifecycle, so eliminate all standing water. This includes anything that can hold water for a few days, such as a tarp or open container.
- Report any clogged gutters to your building manager or other appropriate personnel.
- Minimize outside activity at dawn and dusk (when mosquitoes are most active).
- Keep window screens in good repair (if available) to prevent mosquitoes from entering.
- When outside for extended periods, wear long sleeved shirts and long pants and use insect repellant (follow label directions carefully).
- Keep outside lighting to a minimum near entry doors.
- Report dead birds, especially crows or other corvids (e.g., jay, magpie, raven), to the Dead Bird Surveillance Program at 877-WNV-BIRD or arbovirus@dhs.ca.gov. DO NOT TOUCH the dead bird!

For more information about WN virus, visit the Centers for Disease Control web site

(http://www.cdc.gov/ncidod/dvbid/westnile/index.htm) or contact the Office of Environment, Health & Safety at 642-3073.