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West Nile Virus and Mosquito & Vector Control Awareness Week is April 22-28, 2012

Mosquitoes and warm weather go hand in hand. Coinciding with the arrival of mosquito season, the California State Legislature declared the week of April 22-28, 2012 as West Nile Virus and Mosquito & Vector Control Awareness Week in California. West Nile virus is a disease transmitted by mosquitoes that can result in debilitating cases of meningitis and encephalitis, and lead to death in humans, horses, some bird species and other wildlife.



The following safety precautions are recommended by the County of San Bernardino Division of Environmental Health Services – Mosquito and Vector Control Program:

- Eliminate or manage all sources of standing water to discourage mosquito breeding.
- Avoid spending time outside when mosquitoes are most active, especially at dawn and the first two hours after sunset.
- If you are outdoors when mosquitoes are biting, wear long pants and long-sleeved shirts.
- Apply insect repellent containing EPA-registered active ingredients such as DEET, Picaridin, IR3535, and Oil of lemon eucalyptus (PMD). Always apply according to label instructions.
- Make sure doors and windows have tight-fitting screens. Repair or replace screens that have tears or holes.
- Contact the County of San Bernardino Division of Environmental Health Services Mosquito and Vector
 Control Program if there is a significant mosquito problem or potential mosquito breeding source where
 you live or work.

According to the California Department of Public Health (CDPH), 158 human cases of West Nile virus were reported in California in 2011. Of the reported cases, there were nine fatalities. CDPH and the federal Centers for Disease Control and Prevention predict West Nile virus will again pose a public health threat in California in 2012. Adequately funded mosquito and vector control, disease surveillance and public awareness programs are the best way to prevent outbreaks of West Nile virus and other diseases borne by mosquitoes and other vectors.

To read more about West Nile virus, visit CDPH's website at http://westnile.ca.gov/. To learn more about the County of San Bernardino Division of Environmental Health Services – Mosquito and Vector Control Program, click here.

Asian Tiger Mosquito

The Asian tiger mosquito (ATM) (Aedes albopictus) is a small black and white striped mosquito. The name "tiger mosquito" comes from its white and black color pattern. (Note that other mosquitoes in San Bernardino County also have white striped legs.) The Asian tiger mosquitoes lay their eggs in water-filled natural and artificial containers like cavities





in trees, old tires, and small containers;

they do not lay their eggs in ditches or basins. These mosquitoes usually do not fly more than about $\frac{1}{2}$ mile from their breeding site.

Unlike many of our mosquitoes in San Bernardino County, the Asian tiger mosquito feeds during daylight hours, not at night. About four or five days after feeding on blood, the female mosquito lays her eggs just above the surface of the water in a hard-sided container like a tree hole, old bucket or tire. When rain or sprinkler covers the eggs with water, the larvae hatch. After 4 to 7 days, during which there are four larval and pupae development stages, an adult Asian tiger mosquito emerges.

The Asian tiger mosquito was introduced into the United States via imported used tires; movement of these tires has spread the species to more than 20 states since 1985. Most southern, eastern and mid-western states in the U.S. have Asian tiger mosquitoes. There had been temporary introduction of Asian tiger mosquitoes into California since 2001, but none of these populations had become established. In October 2011, populations of ATM were found in the El Monte community of Los Angeles. After thorough surveys, the findings seem to exhibit properties of established populations. Efforts by vector control agencies in Los Angeles County have been aggressive in their surveillance to determine the ATM distribution.

The Asian tiger mosquito is a known vector of dengue fever, dengue hemorrhagic fever, St. Louis Encephalitis (SLE), Chikungunya fever and some filarial nematodes. In California, dengue and SLE may be the most important medical threats posed by this mosquito.

The Asian tiger mosquito's bite is irritating to most people. They are persistent biters. Because they breed in nearly any sort of water-filled container, they often become very common and bothersome, even in neighborhoods where there are normally few mosquitoes. If established in southern California, the Asian tiger mosquito could easily become the most important nuisance mosquito.

The San Bernardino County Mosquito and Vector Control Program is actively doing surveillance for this mosquito using ovitraps in the communities we serve. We urge the public to report any daytime biting mosquitoes to our program. To prevent the Asian tiger mosquito and other local mosquitoes from breeding in your neighborhood we recommend the following:

- Remove any water-filled containers like old tires, food containers and buckets from your yard.
- Keep mosquitoes from breeding in bird baths, pet water dishes and plastic wading pools by emptying them regularly or every 3-4 days.
- Report piles of discarded tires or other accumulations of water-holding containers to the Mosquito and Vector Control Program.

Article written by Wakoli Wekesa, Ph.D., Vector Ecologist

New Health Education Presentation / Event Request Form

The Division of Environmental Health Services – Health Education Program has created a new form for health education presentation / event requests. Click here to download the form. We ask that you please return the completed form at least 2 weeks prior to your planned event. We will respond within 1 week of receiving your submission (please note: submission of form does not guarantee representation at your event).

The Mosquito and Vector Control program provides inspections, education and disease surveillance services in the cities of Colton, San Bernardino, Grand Terrace, Fontana, Highland, Loma Linda, Needles, Redlands, Rialto, Upland, Yucaipa and all unincorporated areas in our County.

If you have any questions or comments, please contact Amanda Gaspard, Health Education Specialist, at 800-442-2283 or Amanda.Gaspard@dph.sbcounty.gov.

