

## **COUNTY OF IMPERIAL**

# PUBLIC HEALTH DEPARTMENT

ROBIN HODGKIN, M.P.A.

Director

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Health Officer

#### PUBLIC HEALTH ADVISORY

February 26, 2015

#### Aedes Aegypti Mosquitoes Detected in Imperial County

Keep Vigilant for Dengue and Other Mosquito-borne Diseases

*Aedes Aegypti* mosquitoes have been detected for the first time in Imperial County. These mosquitoes are the principal vectors of dengue virus, chikungunya virus, yellow fever, and other diseases.

An outbreak of dengue occurred in recent months in San Luis Rio Colorado in Sonora, Mexico, located south of Yuma, Arizona. Confirmed cases of dengue associated with this outbreak have been reported in Yuma and Mexicali, Baja California. Locally acquired cases of dengue have also been identified in Mexicali. No cases of dengue virus have been reported to date in Imperial County.

Imperial County Public Health Officer Stephen Munday urges local health-care providers to be vigilant for the signs and symptoms of dengue disease. Dengue infection is caused by any one of four distinct but closely related dengue virus serotypes. Infection with any of the four dengue serotypes can produce the full spectrum of illness and severity.

The spectrum of illness can range from a mild, non-specific febrile syndrome to classic dengue fever, to the severe forms of the disease: dengue hemorrhagic fever and dengue shock syndrome. Severe forms typically manifest after a two- to sevenday febrile phase.

Signs and symptoms of dengue infection include fever, nausea, vomiting, rash, aches and pains, leukopenia, and positive tourniquet test. Other warning signs are



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abdominal pain or tenderness, persistent vomiting, clinical fluid accumulation (ascites, pleural effusion), mucosal bleeding, lethargy, restlessness, liver enlargement >2 cm, and an increase in HCT concurrent with rapid decrease in platelet count. Signs of more severe disease are plasma leakage leading to shock and fluid accumulation with respiratory distress, severe bleeding, and organ involvement (liver: AST or ALT  $\geq$  1000; CNS: impaired consciousness; and failure of heart and other organs.

Dengue can be diagnosed by isolation of the virus, by serological tests, or by molecular methods. Diagnosis of acute or recent dengue infection can be established by testing serum samples during the first 5 days of symptoms and/or early convalescent phase (more than 5 days of symptoms).

Early clinical recognition of dengue infection and anticipatory treatment for those who develop dengue hemorrhagic fever or shock syndrome can save lives. While no therapeutic agents exist for dengue infections, the key to the successful management is timely and judicious use of supportive care, including administration of isotonic intravenous fluids or colloids, and close monitoring of vital signs and hemodynamic status, fluid balance, and hematologic parameters.

Immediately report suspect cases of dengue to the Public Health Department by calling (442) 265-1350 or by email to <a href="mailto:phepireport@co.imperial.ca.us">phepireport@co.imperial.ca.us</a>

For more information on dengue go to:

http://www.cdc.gov/Dengue/

http://www.cdph.ca.gov/HealthInfo/discond/Pages/Aedes-albopictus-and-Aedes-aegypti-Mosquitoes.aspx

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