



# Mississippi Canyon Oil Spill Response

## Facts about Dengue

### What is dengue? What are its signs and symptoms?

Dengue fever is a mosquito-borne disease caused by any of one of four closely related dengue viruses. Common symptoms of dengue include high fever, severe headache, severe pain behind the eyes, and joint/muscle pain. Generally, younger children have a milder illness than older children and adults (CDC, 2009; WHO, 2009).

A more severe form of dengue infection is dengue hemorrhagic fever (DHF) which may lead to severe abdominal pain, difficulty breathing, circulatory failure, and death (CDC, 2009; WHO, 2009).

### Where is dengue commonly found?

The disease is commonly found in tropical and sub-tropical habitats, and is endemic in at least 100 countries in Asia, the Pacific, the Americas, Africa, and the Caribbean. It is estimated that there are 50-100 million cases annually worldwide (WHO, 2009; CDC, 2009).

In the United States, most cases occur in residents of Puerto Rico, the U.S. Virgin Islands, American Samoa, and Guam, which are all endemic for dengue viruses. A small dengue outbreak also occurred in Hawaii in 2001.

Dengue is rare in the continental United States, but since 1980, cases have been reported along the Texas-Mexico border and in Florida. Recently, 28 dengue cases have been reported from Key West, Florida, since September 2009 (CDC, 2010).

### How does a human become infected by dengue?

The viruses are transmitted when an infected female *Aedes* mosquito bites a person (WHO, 2009). In the Western Hemisphere, the most important vector of the virus is *Aedes aegypti* (CDC, 2009). Dengue cannot be spread directly from person to person.

### What is the treatment for dengue?

Although no specific medication is used to treat dengue, people who suspect they have dengue should consult a physician. Non-aspirin fever-reduc-

ing medicine is often recommended in addition to rest and drinking plenty of fluids (CDC, 2009; NIH, 2010).

There also is no specific treatment for DHF, although early medical management (e.g., fluid replacement therapy) can reduce the fatality rate to <1% (CDC, 2009).

### Are there ways to prevent dengue?

Currently, no vaccine exists to prevent dengue; therefore, the best prevention method is to reduce or eliminate areas of standing water (e.g., plastic containers, used automobile tires, buckets) where mosquitoes can lay their eggs (CDC, 2009).

Personal protective measures against mosquito bites can also reduce the risk of infection and include the following (USACHPPM, 2005):

- Stay in air-conditioned or well-screened areas when indoors.
- When outdoors, wear long-sleeved shirts and long pants.
- Properly apply mosquito repellents containing 20-30% DEET on skin and clothing.

### References:

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