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**Region IV Public Health**  
Clark, Cowlitz, Skamania, Wahkiakum counties  
and Cowlitz Tribe

# Health Advisory

Please deliver a copy of the accompanying alert to each provider in your organization.

**Thank you**

**Questions regarding this alert may be directed to the office of:**

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**Health Officer**

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**Deputy Health Officer**

Clark County Public Health  
Cowlitz County Health Department  
Skamania County Health Department  
Wahkiakum County Department of Health and Human Services  
(360) 397-8412

**Please Distribute**

Categories of Health Alert messages:

**Health Alert:** conveys the highest level of importance; warrants immediate action or attention.

**Health Advisory:** provides important information for specific incident for situation; may not require immediate action.

**Health Update:** provides updated information regarding an incident or situation; no immediate action necessary.



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## HEALTH ADVISORY July 23, 2010

### **Dengue infection increases among people traveling to tropical areas**

The Centers for Disease Control and Prevention (CDC) is advising health care providers in the U.S. to be aware of the increased potential for dengue infection in travelers returning from certain tropical and subtropical areas, including areas within the United States.

Dengue transmission has been increasing to epidemic levels in many parts of the tropics and subtropics where it had previously been absent or mild. Dengue-affected areas are widely distributed throughout Africa, Asia, the Americas, the Pacific and the Caribbean. This year, more than 50 countries have reported evidence of dengue transmission, including 17 countries in Asia, 17 in the Americas, 10 in Africa, seven in the Caribbean, and one in the Pacific. Tourists as well as individuals responding to international disasters (e.g., Haiti earthquake), participating in medical or religious missionary work, and visiting friends and relatives may be returning from dengue-affected areas and should be evaluated for dengue infection if they present with dengue-like illness during or after their travel.

Each year, 0 to 14 cases of travel-associated dengue fever are reported in Washington. However, this year could be different. With an extensive dengue outbreak occurring in Puerto Rico and evidence of continued transmission in Key West, Florida, travel to certain domestic locations may now pose a risk for travelers. The mosquitoes known to transmit dengue virus, *Aedes aegypti* and *Aedes albopictus*, are present throughout much of the southeastern United States.

#### Symptoms

Dengue virus infections can manifest as a subclinical infection or dengue fever (DF), and may develop into potentially fatal dengue hemorrhagic fever (DHF). DF is a self-limited febrile illness characterized by high fever plus two or more of the following: headache, retro-orbital pain, joint pain, muscle or bone pain, rash, mild hemorrhagic manifestations (e.g., bleeding of nose or gums, petechiae, or easy bruising), and leukopenia. Because the incubation period for dengue infection ranges from 3 to 14 days, the patient may not present with illness until after returning from travel.

#### Clinical management

Clinical management of DF consists of symptomatic treatment (avoid aspirin, NSAIDs and corticosteroids, as they can promote hemorrhage) and monitoring for the development of severe disease at or around the time of defervescence. A small proportion of patients develop DHF, which is characterized by presence of resolving fever or a recent history of fever, lasting 2 to 7 days, any hemorrhagic manifestation, thrombocytopenia (platelet count  $\leq 100,000/\text{mm}^3$ ), and increased vascular permeability,

evidenced by hemoconcentration, hypoalbuminemia or hypoproteinemia, ascites, or pleural effusion. DHF can result in circulatory instability or shock. Adequate management requires timely recognition and hospitalization, close monitoring of hemodynamic status, and judicious administration of intravascular fluids. There is no antiviral drug or vaccine against the dengue virus. Updated guidelines for the management of dengue can be found at [http://whqlibdoc.who.int/publications/2009/9789241547871\\_eng.pdf](http://whqlibdoc.who.int/publications/2009/9789241547871_eng.pdf)

**Recommendations for Physicians and other Healthcare Providers in Southwest Washington**

1. Consider DF and DHF when evaluating patients returning from dengue-affected areas—both domestic and abroad—who present with an acute febrile illness within two weeks of their return. (See the world distribution of dengue maps at <http://wwwnc.cdc.gov/travel/yellowbook/2010/chapter-5/dengue-fever-dengue-hemorrhagic-fever.aspx>.)
2. Collect specimens from patients who have symptoms consistent with dengue infection and who have traveled to Haiti within the past 30 days and submit these specimens directly to the CDC Dengue Branch for dengue testing. A completed CDC Dengue Case Investigation Form with “Haiti Travel” printed on the heading of the form (<http://www.cdc.gov/Dengue/resources/caseformhaiti.pdf>) must accompany the specimens for each patient to be tested in the Dengue Branch.

Whenever possible, submit paired acute and convalescent samples to facilitate optimal diagnostic testing.

<b>Type of sample</b>	<b>Interval since onset of symptoms</b>	<b>Type of analysis</b>
Acute	Until day 5	RT-PCR for dengue virus
Convalescent	6 to 30 days	ELISA for dengue IgM

2 cc. (ml) of centrifuged serum accompanied by a Dengue Case Investigation Form (<http://www.cdc.gov/Dengue/resources/caseformhaiti.pdf>) should be sent to:

Centers for Disease Control and Prevention  
 Dengue Branch  
 1324 Cañada Street  
 San Juan, Puerto Rico 00920  
 Tel: (787) 706-2399; fax (787) 706-2496

Infection with dengue virus is a notifiable condition in Washington. When submitting the specimen, healthcare providers should notify their local health department. Please report all suspect cases to the appropriate health department (Clark, Cowlitz, Skamania or Wahkiakum County) at the following numbers:

- Clark County Public Health: (360) 397-8182.
- Cowlitz County Health Department: (360) 414-5599
- Skamania County Community Health: (509) 427-3850
- Wahkiakum County Health and Human Services (360) 795-6207

### More information

- Criteria for the processing of dengue samples at the CDC Dengue Branch are available at: [http://www.cdc.gov/Dengue/resources/TestpolEng\\_2.pdf](http://www.cdc.gov/Dengue/resources/TestpolEng_2.pdf).
- Additional information about dengue is available at: <http://www.cdc.gov/dengue/>
- CDC's toll-free information line, 800-CDC-INFO (800-232-4636) TTY: (888) 232-6348, available 24 hours a day, every day.