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**PUBLIC HEALTH DIVISION**  
Napa County Health & Human Services Agency

**Health & Human Services Agency**  
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## HEALTH ADVISORY FEBRUARY 2, 2016

### ZIKA VIRUS

**TO:** Healthcare Providers and Hospital ICPs

**FROM:** Karen Relucio, MD, Public Health Officer  
Communicable Diseases Program

#### **SUMMARY:**

In May 2015, Zika virus started circulating in the Western Hemisphere. The first locally-acquired case in the Americas was reported in Brazil. Zika virus is transmitted by the bite of infected *Aedes aegypti* and *Aedes albopictus* mosquitoes, which are aggressive day biters (also the vectors of: Dengue, Chikungunya, and Yellow Fever viruses). Local transmission of the virus has been reported in Mexico, the Caribbean, Central America, and South America – check CDC for up-to-date information.

More information can be found at: [cdc.gov/zika](http://cdc.gov/zika)

#### **CURRENT SITUATION**

- On January 15, 2016, the Centers for Disease Control and Prevention (CDC) began issuing travel advisories (<http://wwwnc.cdc.gov/travel/notices>) for people, particularly pregnant women, traveling to places where ongoing Zika virus transmission has been documented.
- To date, NO local transmission has been documented in the United States; however, case-patients with Zika virus have been reported in travelers returning back to United States.
- Public Health can help facilitate diagnostic testing (since testing is unavailable commercially) and work to mitigate the risk of local transmission (the mosquito vectors do not currently exist in Napa County at this time but surveillance is on-going).

#### **Actions Requested of Healthcare Professionals:**

1. **Report** suspected cases of Zika virus with appropriate symptomology and travel history to Napa County Public Health by phone at **(707) 253-4231**.
2. **Test** patients with appropriate symptomology and travel history by arranging testing through Napa County Public Health. The Laboratory Requisition Form can be found here: <http://countyofnapa.org/publichealth/CD/healthalerts/>
3. **Advise** patients to avoid mosquito bites. Refer travelers, particularly pregnant women, to CDC Travel Advisories for current information about travel. <http://wwwnc.cdc.gov/travel/notices>

## **CURRENT RECOMMENDATIONS:**

### **REPORTING/ SURVEILLANCE**

- Suspect Zika (also consider Dengue and Chikungunya) in travelers with acute onset of fever, maculopapular rash, arthralgia, or conjunctivitis within 2 weeks after return from a place with local Zika transmission
- Report suspected cases of Zika virus to Napa County Public Health by phone at **(707) 253-4231**.
- Inform and evaluate pregnant women who traveled to areas with Zika virus transmission while pregnant (<http://www.cdc.gov/mmwr/volumes/65/wr/mm6502e1.htm>)
- Evaluate fetuses and infants of women infected with Zika virus during pregnancy for possible congenital infection and microcephaly (<http://www.cdc.gov/mmwr/volumes/65/wr/mm6503e3.htm>)

### **TESTING**

- There are no commercially available diagnostic tests; testing should be coordinated through Napa County Public Health by calling CD control at **(707)253-4231**.
  - Submit specimens to Napa County Public Health with the Laboratory Requisition Form: <http://countyofnapa.org/publichealth/CD/healthalerts/>  
**2344 Old Sonoma Rd. Bldg. G**  
**Phone: (707) 253-4231**  
**Fax: (707) 299-4479**
  - Serum or CSF
    - Serum: Draw 2-5 cc in a red top or tiger-top tube; specimen should be spun and serum removed from clot before submission.
    - CSF (only if available): 1-2 mL in sterile, leak-proof, screw cap plastic tube. (*Note: CSF specimens should not be collected for the sole purpose of Zika virus testing*).
- Store samples at 4-8°C. If samples are delivered fewer than 72 hours from collection date, specimens may be sent on cold pack. If  $\geq$  72 hours, freeze specimens and ship on dry ice.
- Other specimens from newborns for expecting mothers suspected of having Zika virus can be tested, please call **(707)253-4231** for consultation.
  - Laboratory assays (serum and CSF)
    - PCR : specimens collected  $\leq$  7 days post-symptom onset
    - Serology (IgM, IgG): specimens collected  $\geq$  4 days post-symptom onset

### **PREVENTION**

- There are no vaccines to prevent Zika infection.
- Travelers to regions with known Zika virus transmission should monitor CDC travel alerts (<http://wwwnc.cdc.gov/travel/notices>) and for pregnant women, consider postponing travel.

- Preventing mosquito bites is the only control measure to avoid becoming infected. (<http://www.cdc.gov/features/stopmosquitoes/>)

## **BACKGROUND:**

### **CLINICAL**

- Clinical illness is usually mild, and symptoms last several days to a week.
- Differential diagnosis for Zika virus disease may include: Dengue, Chikungunya, Leptospirosis, Malaria, Rickettsia, Parvovirus, Group A streptococcus, Rubella, Measles, Adenovirus, and Enterovirus
- Severe cases requiring hospitalization are rare; case fatalities are rare.
- Guillain-Barré syndrome has been reported in patients following suspect Zika virus infection (relationship of Zika virus infection is not known)
- There are reports of a substantial increase in number of babies born with microcephaly in 2015 in Brazil. **NOTE:** a true baseline of condition unknown. Some of the infants with microcephaly have tested negative for Zika virus.
- Excerpt from CDC material below ([http://emergency.cdc.gov/coca/ppt/2016/01\\_26\\_16\\_zika.pdf](http://emergency.cdc.gov/coca/ppt/2016/01_26_16_zika.pdf))

## **Zika Virus Compared to Dengue and Chikungunya**

<b>Features</b>	<b>Zika</b>	<b>Dengue</b>	<b>Chikungunya</b>
<b>Fever</b>	<b>++</b>	<b>+++</b>	<b>+++</b>
<b>Rash</b>	<b>+++</b>	<b>+</b>	<b>++</b>
<b>Conjunctivitis</b>	<b>++</b>	<b>-</b>	<b>-</b>
<b>Arthralgia</b>	<b>++</b>	<b>+</b>	<b>+++</b>
<b>Myalgia</b>	<b>+</b>	<b>++</b>	<b>+</b>
<b>Headache</b>	<b>+</b>	<b>++</b>	<b>++</b>
<b>Hemorrhage</b>	<b>-</b>	<b>++</b>	<b>-</b>
<b>Shock</b>	<b>-</b>	<b>+</b>	<b>-</b>

### **TREATMENT**

- No specific treatment for Zika infection; the only treatment option available is supportive care of rest, fluids, and use of analgesics and antipyretics (after Dengue has been ruled out).

## RESOURCES

- CDC Health Advisory (January 15, 2016): <http://emergency.cdc.gov/han/han00385.asp>
- CDC COCA Call (January 26, 2016): Zika Virus – What Clinicians Need to Know? slides posted at: [http://emergency.cdc.gov/coca/ppt/2016/01\\_26\\_16\\_zika.pdf](http://emergency.cdc.gov/coca/ppt/2016/01_26_16_zika.pdf)
- Up-to-date transmission map: <http://www.cdc.gov/zika/geo/index.html>).
- More information can be found at: [cdc.gov/zika](http://cdc.gov/zika)