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JOINT HEALTH UPDATE

ALAMEDA COUNTY AND CITY OF BERKELEY

ZIKA VIRUS

March 2, 2017

KEY UPDATES – (Since last Zika Health Advisory, 10/24/16)

☑ **Situation Update**

- Alameda County, including the City of Berkeley, has reported 35 cases of Zika virus infections & California has reported 505 (including 88 pregnant women, and 4 infants with birth defects, and 6 due to sexual transmission) as of 02/24/2017. All California cases are travel-associated, with no locally acquired mosquito-borne transmission. Case counts are updated weekly on Fridays at https://www.cdph.ca.gov/HealthInfo/discond/Documents/TravelAssociatedCasesofZikaVirusinCA.pdf

☑ **Testing Update – Increased Availability & Faster Turnaround Times via Commercial Labs**

- **Alameda County Public Health Department (ACPHD) and Berkeley Public Health (BPH) are now encouraging providers to route Zika virus testing through commercial labs for uncomplicated situations.** Routing directly to authorized* commercial labs does not compromise quality and improves turnaround time by up to five weeks.
- **Clinicians should continue to obtain testing through Public Health (ACPHD or BPH) in complex or questionable situations,** such as:
    - A fetus or infant with microcephaly or signs of congenital Zika virus syndrome whose mother was potentially exposed to Zika virus;
    - A person with Guillain-Barré syndrome and potential exposure to Zika virus; or
    - When sexual, local mosquito-borne, laboratory, or blood transfusion/organ transplant exposure is suspected.
        - In these situations, the testing request and approval process will remain the same as it has been. The clinician will complete the Zika Virus Testing Request Form (http://www.acphd.org/zika/specimen-submission.aspx) and fax to 510-273-3744 to obtain approval and receive instructions ***prior*** to sending specimens.
        - For **Berkeley residents only**, the clinician will complete the Zika Testing Request Form at http://www.ci.berkeley.ca.us/uploadedFiles/Health_Human_Services/Level_3_-_Public_Health/Zika%20Virus%20Testing%20Request%20Sept%202016%20fillible.pdf and fax to 510-981-5345 to obtain approval and receive instructions ***prior*** to sending specimens
- If there are clinical circumstances where it is unclear whether a specimen should be routed through ACPHD or a commercial lab, clinicians should consult with the ACPHD Acute Communicable Disease section during normal business hours M-F 9am – 5pm by calling 510-267-3250. For Berkeley residents only, contact the Berkeley Communicable Disease program by calling 510-981-5292.
- **Consider testing for dengue & chikungunya in symptomatic patients** because areas of active Zika also have dengue & chikungunya transmission as well, and dengue and Zika serologic tests have significant cross-reactivity. Positive Zika IgM test results may actually be due to a prior or current dengue infection. There is currently no FDA-approved Zika IgG test. Providers ordering Zika tests from commercial laboratories must specifically request dengue and chikungunya tests if indicated.

ACTIONS REQUESTED OF CLINICIANS:

- **OBTAIN TRAVEL HISTORY** from patients with a febrile and/or rash illness.
- **ASSESS ALL PREGNANT WOMEN FOR ZIKA EXPOSURE^ AT EVERY VISIT.**
- **CONSIDER ZIKA TESTING** for the following persons with possible Zika infection:
  - Pregnant women, regardless of symptoms,
  - Persons with Zika symptoms, defined as at least 1 of the following: fever, maculopapular rash, arthralgia, &/or conjunctivitis with onset of symptoms <14 days from a possible exposure,
  - Patients with Guillain-Barré Syndrome,
  - Infants with microcephaly, intracranial calcifications, or other congenital abnormalities and a mother who had possible Zika virus exposure,
  - Infants born to mothers with laboratory evidence of Zika virus infection during pregnancy or in the 8 weeks prior to conception, regardless of clinical abnormalities, OR
  - Infants born to mothers who had possible Zika exposure but were not tested for Zika while pregnant.
- **ORDER ZIKA VIRUS TESTING THROUGH COMMERCIAL LABORATORIES** for patients (including pregnant women) who are asymptomatic or have uncomplicated clinical illness and Zika virus exposure related to travel to an area with Zika.
- **ORDER ZIKA VIRUS TESTING THROUGH PUBLIC HEALTH FOR THE FOLLOWING SITUATIONS:**
  - A fetus or infant with microcephaly or signs of congenital Zika virus syndrome whose mother was exposed to Zika virus,
  - A person with Guillain-Barré syndrome and exposure to Zika virus, OR
  - When sexual, local mosquito-borne, laboratory exposure, or blood transfusion/organ transplant exposure is suspected is suspected.
  - **FAX the ACPHD ZIKA VIRUS TESTING REQUEST FORM (**available at (http://www.acphd.org/zika/specimen-submission.aspx) **to ACPHD at** 510-273-3744 to obtain approval and receive further instructions **prior to sending specimens.**
    - **For Berkeley residents only**, fax the COB Zika Virus Request Form (available at http://www.ci.berkeley.ca.us/uploadedFiles/Health_Human_Services/Level_3_-_Public_Health/Zika%20Virus%20Testing%20Request%20Sept%202016%20fillible.pdf) **to BPH at** 510-981-5345 to obtain approval and receive further instructions **prior to sending specimens.**
- **COUNSEL WOMEN who are pregnant or who are attempting to conceive** about travel precautions and use of barrier methods for all sexual contact (vaginal, oral, or anal) with sexual partners who have possible Zika exposure^.
- **COUNSEL TRAVELERS TO ZIKA AFFECTED AREAS to use barrier methods for all sexual contact (**vaginal, oral, or anal**) for the following time frames: MEN** for **6 months** after symptom onset or last possible Zika exposure & **WOMEN** for **8 weeks** after symptom onset or last possible Zika exposure to prevent sexual transmission to their partners.
- **REPORT suspected or confirmed** Zika infections diagnosed by a commercial laboratory to public health. Fax a Confidential Morbidity Report form and the Zika test reports to 510-273-3744**. For Berkeley residents only**, Fax a Confidential Morbidity Report and Zika test reports to 510-981-5345.

^ A **possible Zika exposure** is defined as:

(a) Travel to areas with Zika in the 2 weeks before symptom onset (or within 8 weeks prior to conception through pregnancy for pregnant women); OR

(b) Unprotected sexual contact (vaginal, oral, or anal) with a partner who traveled to an area with Zika (within 8 weeks of travel for female travelers, and within 6 months of travel for male travelers).

***Authorized Commercial Lab Essentials**

As of 3/2/17 ACPHD is aware of the following labs using FDA approved testing for both molecular (R-PCR) and serologic (IgM) Zika testing: ARUP Laboratories, BioReference Laboratories, LabCorp, Mayo Medical

Laboratories, Quest Diagnostics, Viracor Eurofins. Providers who wish to use other facilities should contact them prior to sending specimens to ensure they meet the requirements outlined in this Health Advisory:

- The commercial lab should be using FDA-authorized assays for Zika PCR and IgM.
- The commercial lab should also be capable of performing dengue and chikungunya PCR and IgM antibody testing: both these viruses are co-circulating in many of the places where Zika virus transmission is occurring, there is clinical overlap in symptoms/signs, and in particular, determining dengue infection status is very important since dengue infection (current or prior) can affect the results of Zika testing.
- The commercial lab has committed to forwarding Zika IgM positive or indeterminate specimens for PRNT (Plaque Reduction Neutralization Test) by a qualified public health laboratory (CA Department of Public Health or CDC).

For a list of Zika virus laboratory tests that have been granted Emergency Use Authorization from the Federal Drug Administration (FDA), visit:
http://www.fda.gov/MedicalDevices/Safety/EmergencySituations/ucm161496.htm

☑ **Test Interpretation**

Interpreting Zika Virus test results can be complex, but correct interpretation is necessary for advising individuals, determining the need for additional testing, and preventing transmission.

- CDC Interim Guidance for Interpretation of Zika Virus Antibody Test Results: https://www.cdc.gov/mmwr/volumes/65/wr/mm6521e1.htm?s_cid=mm6521e1_w
- CDPH Zika Virus Information for Healthcare Providers: http://www.cdph.ca.gov/HealthInfo/discond/Documents/ZikaVirusInformationforHealthcareProviders.pdf

☑ **Guidance from CDC**

CDC has released updated guidance online for U.S. laboratory testing for Zika virus infection. The guidance is available at https://www.cdc.gov/zika/laboratories/lab-guidance.html. Frequently asked questions are addressed at https://www.cdc.gov/zika/laboratories/lab-guidance-faq.html. This guidance updates recommendations for testing specimens for possible Zika virus infection by U.S. laboratories. Updates to the guidance with clinical implications for Alameda County health care providers include the following:

- In addition to specimens listed in CDC's clinical guidance (*1*–*3*), whole blood can now be tested for Zika virus RNA in accordance with the Emergency Use Authorization (EUA) for Zika virus nucleic acid testing (NAT)* for: a) symptomatic persons tested up to 14 days after onset of symptoms, b) asymptomatic pregnant women tested within 14 days of last possible Zika virus exposure, and c) infants tested for congenital Zika virus infection.
- PRNT can be used to test for congenital Zika virus infection in children aged ≥18 months; maternally derived antibodies in the infant are expected to have waned, and therefore PRNT results will reflect infant-derived antibodies.

* Whole blood is not an approved specimen for all NAT EUA assays; health care providers should confirm with their testing laboratory that it can accept whole blood specimens prior to collecting and submitting this sample type. https://www.cdc.gov/mmwr/volumes/65/wr/mm6546a7.htm?s_cid=mm6546a7_w

☑ **RESOURCES**

- Alameda County Public Health Department – Zika Virus: http://www.acphd.org/zika.aspx
- CDPH Zika Virus Homepage: http://www.cdph.ca.gov/HealthInfo/discond/Pages/Zika.aspx
- CDC Zika Virus General Information: http://www.cdc.gov/zika/
- CDC Areas with Zika: https://www.cdc.gov/zika/geo/
- CDC MMWR Zika Reports: https://www.cdc.gov/mmwr/zika_reports.html
- MotherToBaby.org – A resource for patients and providers to call, text, email, or live chat with someone from the **Organization of Teratology Information Specialists (OTIS) about Zika virus:** https://mothertobaby.org/