



DALLAS COUNTY
DEPARTMENT OF HEALTH AND HUMAN SERVICES
EPIDEMIOLOGY

Zachary Thompson
Director

Dr. Christopher Perkins
Health Authority/Medical Director

From: Jessica Smith, MPH, Senait Woldai, MPH
Wendy Chung, MD, Chief Epidemiologist
To: Dallas County Medical Providers
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HEALTH ADVISORY: Sexual Transmission of Zika Virus

Dallas County Health and Human Services (DCHHS) has received confirmation from the Centers of Disease Control and Prevention (CDC) that Zika virus infection has been confirmed in two persons residing in Dallas County. One patient developed illness symptoms after returning from a country in South America with active Zika transmission. The second patient had not recently traveled outside of the U.S., but subsequently developed illness symptoms after sexual contact with the traveler. There was no risk to a developing fetus with these cases; both patients have recovered fully from their illnesses.

Symptoms occur in 1 in 5 persons infected with Zika virus and include fever, conjunctivitis, rash, and/or arthralgia.¹ The illness is typically mild and resolves within one week. However, Zika infection in pregnant women may be associated with congenital microcephaly and fetal losses. Guillain-Barre syndrome has also been reported in patients after suspected Zika infection.

Zika virus is transmitted to persons primarily through the bite of an infected *Aedes* species mosquito. Recent temperatures in our area were not conducive to *Aedes* mosquito activity, although such mosquitoes are usually present in our area during the warmer late-spring and summer months. Vector surveillance has also confirmed the absence of this species in vicinity BG mosquito traps at this time.

Probable spread of the virus through sexual contact has been described in one prior case report. Maternal-fetal transmission of Zika virus has been documented in pregnancy and possible transfusion transmission events have also been reported.

Clinicians should consider Zika virus infection in patients (including pregnant women²) with 2 or more compatible symptoms (e.g., fever, rash, conjunctivitis or joint pain) within 2 weeks of travel to an area with autochthonous Zika virus transmission.³ In addition, Zika infection should be considered in patients with compatible clinical syndrome but without travel history, who report recent unprotected sexual contact (within the previous 2 weeks) with a person with a compatible history of illness and history of travel.

The current outbreak of Zika virus in the Americas is unprecedented in magnitude, and clinical guidance is anticipated to evolve as more information rapidly accrues. At this time, all area clinicians should refer to most updated information available at (<http://www.cdc.gov/zika/>) and be aware of the following:

Current DCHHS Testing Guidance:

Currently, all PCR and serologic testing for Zika virus in Texas is being referred to CDC. The DCHHS laboratory is anticipated to gain capacity to conduct PCR testing for Zika virus beginning in mid-February. To discuss testing, clinicians should contact the DCHHS Epidemiology division at 214-819-2004 or 214-677-7899 (on-call 24/7) and complete the required DCHHS Zika Virus Clinical Specimen Submission Form.⁴ Instructions for specimen submission to DCHHS are available at: DCHHS Submission Instructions for Zika Virus Testing.⁵

Patients MUST meet the following epidemiologic criteria BEFORE a specimen can be sent to DCHHS:

1. Any patient (including pregnant women²) with **2 or more symptoms** compatible with Zika virus infection (e.g., fever, rash, joint pain, or conjunctivitis) **within 2 weeks of travel** to an area with Zika virus transmission.³
2. Any patient with symptoms of Guillain-Barré syndrome (GBS) within 1 month of travel to an area with Zika virus transmission.
3. Infants born to women with positive or inconclusive test results for Zika infection.⁶
4. Infants with microcephaly or intracranial calcifications born to women who have traveled to an area with Zika virus transmission while pregnant.⁶
5. Patients with compatible illness who do not meet above testing criteria, but for whom there may be concern for alternate (e.g. sexual, non-perinatal) modes of transmission,⁷ should be discussed with DCHHS Epidemiology division for case-by-case evaluation and determination of approval for testing.

CDC recommends that diagnostic testing for dengue and chikungunya also be considered in patients with possible Zika virus infection who have traveled within the previous 2 weeks to an area with ongoing transmission.⁸ Testing for dengue and chikungunya is available from commercial laboratories.

Patient Counseling:

- All persons should take steps to avoid mosquito bites to prevent mosquito-borne diseases.
- Patients with suspected infection with Zika virus should be advised to avoid mosquito bites for 7 days following illness onset.
- Fever should be treated with acetaminophen; aspirin and other non-steroidal anti-inflammatory drugs should be avoided until dengue can be ruled out to reduce the risk of hemorrhage.
- Pregnant women should defer travel to areas with Zika virus transmission. For interim guidelines for pregnant women, providers should refer to most updated CDC and ACOG/SMFM websites.
- Although more specific guidance is expected to be available as additional information becomes known, given the current evidence for potential sexual transmission, persons who have traveled to areas with active Zika transmission may consider using condoms during sexual activity, particularly if their partner is pregnant.

Public Health Notification:

Healthcare providers in Dallas County who identify persons with possible infection with Zika virus are requested to report such cases to DCHHS by phone within 1 working day at (214) 819-2004.

1. CDC Health Advisory. Recognizing, Managing, and Reporting Zika Virus Infections in Travelers Returning from Central America, South America, the Caribbean, and Mexico (1/15/16): <http://emergency.cdc.gov/han/han00385.asp>
2. CDC. Interim Guidance for Pregnant Women During a Zika Virus Outbreak — United States, 2016 (1/19/2016): <http://www.cdc.gov/mmwr/volumes/65/wr/mm6502e1.htm>
3. CDC. Areas with Zika Transmission (2/1/16): <http://www.cdc.gov/zika/geo/index.html>
4. DCHHS Zika Virus Specimen Submission Form (2/1/16): http://www.dallascounty.org/department/bhs/documents/DCHHS_Zika_SubmissionForm_020116.pdf
5. DCHHS Submission Instructions for Zika Virus Testing (2/1/16): http://www.dallascounty.org/department/bhs/documents/DCHHS_Zika_SubmissionGuidance_020116_Interim.pdf
6. CDC. Interim Guidelines for the Evaluation and Testing of Infants with Possible Congenital Zika Virus Infection — United States, 2016 (1/26/16): <http://www.cdc.gov/mmwr/volumes/65/wr/mm6503e3.htm>
7. CDC COCA Call. Zika Virus — What Clinicians Need to Know (1/26/16): http://emergency.cdc.gov/coca/calls/2016/callinfo_032616.asp
8. CDC Memorandum. Updated diagnostic testing for Zika, chikungunya, and dengue viruses in US Public Health Laboratories (1/13/16): <http://www.cdc.gov/zika/pdfs/denvchikvzika-testing-algorithm.pdf>