Government of the District of Columbia
Department of Health

Center for Policy, Planning and Evaluation Administration
Division of Epidemiology–Disease Surveillance and Investigation

August 3, 2016

Health Notice for Health Care Providers

Updates and Reminders on Zika Virus Disease

Summary
The District of Columbia (DC) Department of Health (DOH) has posted several important health notices, related to Zika virus disease (ZVD) (http://doh.dc.gov/page/health-notices). We ask that health care providers continue to collect travel history information when evaluating patients and to report suspected cases of ZVD and other travel-associated illnesses to DOH so that we can work with you to facilitate diagnosis and mitigate the risk of local transmission.

There have been 14 cases of laboratory confirmed Zika virus infection in DC, all of which have been travel-related. As of July 27, 2016, states had reported a total of 1,657 travel-associated ZVD cases to the Centers for Disease Control and Prevention (CDC). Of these, 15 were sexually transmitted, and 5 had GBS. **To date in DC, ZVD has not been spread by local mosquitoes or via blood transfusion**. Local transmission has now been confirmed in Florida (Miami-Dade County).

In this notice we provide important updates on ZVD testing in DC and testing recommendation updates from the CDC. Please share this notice with all appropriate staff at your facility.

Updates:

1) ZVD Testing in DC

- **Miami, Florida will be considered an area of active Zika virus transmission for travel that occurred on or after June 15, 2016**. Areas of risk will be updated based on information provided by the Florida DOH: http://www.cdc.gov/zika/intheus/florida-update.html.
- **Urine testing will now be performed at the DC Public Health Laboratory (PHL). Urine should be submitted simultaneously with serum samples as indicated** (see "Testing Algorithms").
    - Collect 5 - 15 ml of urine in a sterile screw-top container (15 ml centrifuge tube). Please use parafilm to seal the container and prevent spillage. A clean catch is not necessary.
- Real-time reverse transcription–polymerase chain reaction (rRT-PCR) PHL. Results will be reported in approximately five business days.
    - rRT-PCR testing for Zika, chikungunya and dengue is performed simultaneously.
- Zika IgM Antibody Capture Enzyme-linked immunosorbent assay (Zika MAC-ELISA) is now being performed by the DC PHL. Results will be reported in approximately 14 business days, however if additional confirmatory tests are required this may extend the reporting time.
- Currently, ZVD testing is performed by the PHL and CDC **at no cost to the patients**.
    - Two tiger-top Vacutainer tubes should be used to collect 6mL of whole blood per tube (2 mL for infants). Two tubes per person are requested in the event that a re-test is needed.

- Commercial laboratories that offer Zika testing perform rRT-PCR only (no serology or PRNT confirmation), have an associated cost, and do not test for dengue or chikungunya.

2) Testing Algorithms

The CDC released new recommendations for testing on July 25, 2016 as described in the following document: http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm?s_cid=mm6529e1_e.The key changes to testing in DC are highlighted below:

- rRT-PCR testing will now be performed on **serum and urine samples** from **symptomatic** patients collected **less than 2 weeks** after symptom onset (previous cut-off was one week).
  - A positive rRT-PCR result in either is confirmation of a recent Zika virus infection.
  - If the result is negative, IgM antibody testing will be performed, followed by plaque reduction neutralizing testing (PRNT) when appropriate.
- rRT-PCR testing will now be performed on **serum and urine samples** from **asymptomatic pregnant women** collected **less than 2 weeks** after exposure (previously rRT-PCR was not recommended in asymptomatic patients).
  - Possible exposures include travel to a Zika-affected area or sexual contact with a person who traveled to or resides in a Zika-affected area without using barrier methods.
  - If the rRT-PCR is negative, the patient should return for IgM testing **2-12 weeks** after the last possible exposure.
- IgM antibody testing will still be performed on serum samples from **symptomatic pregnant women** collected **2-12 weeks** after symptom onset, and on samples from **asymptomatic pregnant women** collected **2-12 weeks** after their last possible exposure.
  - Based on these results, confirmatory testing by reflex rRT-PCR and PRNT may be done.
- IgM antibody testing may be considered in **pregnant women** presenting **more than 12 weeks** after symptom onset or last possible exposure on a case-by case basis.
  - If fetal abnormalities are found on ultrasound, rRT-PCR will be performed on maternal samples, regardless of whether they have previously tested negative for ZVD.
- For timely and appropriate testing, **information on pregnancy status, presence of symptoms, and symptom onset/last know exposure will need to be submitted via email** with all samples.

3) Pre- and Post-natal Management

- Pregnant women with evidence of recent flavivirus infection should be considered to have possible ZVD and should be monitored in the same way as women with confirmed ZVD.
- A positive Zika test in amniotic fluid may indicate fetal infection, however a negative test does not rule out infection.
- Zika virus testing is recommended for ALL infants born to mothers with confirmed Zika virus or recent flavivirus infection. Both **cord blood AND infant serum** should be collected for testing the infant (previously cord blood alone was recommended).

4) Sexual Transmission

The CDC released new guidance on July 25, 2016 for the prevention of sexual transmission as described in the following document: http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e2.htm.

- Sexual transmission from women to their sexual partners has now been documented.
- Pregnant women should use barriers or abstain from sexual contact with **male or female partners** who have travelled to areas with ongoing ZVD transmission.

Review of ZVD symptoms and testing recommendations

- Clinical illness is consistent with ZVD if a patient has one or more of the following symptoms: **acute onset of fever, rash, arthralgia, or conjunctivitis**.
- Testing is recommended for any person with a **positive travel history and who develops one or more** of the symptoms consistent with ZVD **within two weeks** of travel or sexual exposure.
- All **asymptomatic pregnant women** who have traveled to areas with active Zika virus transmission while pregnant or during the **eight weeks before conception** will be tested.
- Samples from the following groups **will not be tested**: 1) men, children, and women who are not pregnant who have a positive travel history but are asymptomatic, and 2) men, children, and women who are not pregnant whose travel to areas with active Zika virus transmission was **more than 12 weeks ago (exceptions will be made if appropriate)**.

Reminders about procedures for submitting case reports

- To report suspected cases, fill out the **current** Zika Disease Case Report form **completely** (http://doh.dc.gov/publication/zika-virus-information) and fax it to 202-442-8060. Include the **email address of the submitter and the patient's provider** on the form. Please let the patient know to expect a call from the DOH once you submit the form.
- After receiving the Zika Disease Case Report Form, DOH will send the submitter/provider a detailed email with further instructions to coordinate sample pick-up for testing.
    - **Paper copies** of both the CDC 50.34 form and DC PHL Clinical Specimen Receipt/Chain of Custody form should be included with the specimen when picked up by the courier. **These forms should not be submitted to DOH via email.**
- If your facility has a key contact(s) who will coordinate sample pick-up, please send an email to DOH.EPI@dc.gov with your facility name, facility address, and the name and contact information (email, phone number) for the designated person.
- When calling with inquiries, please leave a **direct number** where you can be reached (not the general number for your facility) to help expedite our response.
- As soon as test results are received, DOH will report test results to the provider, not the patient.

Important health messages during mosquito season

- As the summer months progress, please be vigilant of ZVD symptoms in persons who have *not* traveled outside of the US. If you are concerned about ZVD in a patient *without* a positive travel history, please contact the DOH.
- Returning travelers from an area with active Zika virus transmission should wear insect repellant and avoid mosquito bites for **three weeks** to prevent local transmission, even if they are not sick.

Please contact the Division of Epidemiology–Disease Surveillance and Investigation with questions:

Phone: 202-442-8141 (8:15am-4:45pm) | 1-844-493-2652 (after-hours calls)
Fax: 202-442-8060
Email: doh.epi@dc.gov

Additional Resources

- DOH Information on Zika virus: http://doh.dc.gov/publication/zika-virus-information
- DOH Health Notices for Health Care Providers: http://doh.dc.gov/page/health-notices
- Zika testing algorithms: http://www.cdc.gov/zika/hc-providers/tools.html
- CDC information on Zika: http://www.cdc.gov/zika
- How to measure head circumference in infants: http://www.cdc.gov/zika/pdfs/microcephaly_measuring.pdf

- Additional instructions for submitting specimens for Zika virus testing: http://www.cdc.gov/ncezid/dvbd/specimensub/arboviral-shipping.html