Zika Virus Infection

Current Situation
Zika virus is being transmitted primarily through the bites of \textit{Aedes} species mosquitoes. The mosquitoes are the same species that transmit dengue and chikungunya viruses which have also been associated with travel-related illness over the past few years. There have been recent reports that Zika virus is spread through blood transfusion and sexual contact. Rarely, the virus may spread from mother to child around the time of birth. It also may be possible to spread the virus from a mother to her baby during pregnancy.

In May 2015, the Pan American Health Organization (PAHO) issued an alert regarding the first confirmed Zika virus infection in Brazil. The outbreak in Brazil led to reports of Guillain-Barré syndrome and pregnant women giving birth to babies with birth defects and poor pregnancy outcomes. In response, CDC has issued travel notices for people traveling to regions and certain countries where Zika virus transmission is ongoing.

All pregnant women with a history of travel to an area with Zika virus transmission should be evaluated. Pregnant women reporting clinical illness consistent with Zika virus disease during or within 2 weeks of travel should be tested for Zika virus infection. In addition, asymptomatic pregnant women who have traveled to Zika-affected areas should be tested for the Zika-virus between 2-12 weeks post travel.

In addition, any persons (adults and children) with a travel history to a Zika-affected area with two or more of the following symptoms within 2 weeks of travel are being asked to follow-up with their health care provider. Infection should be considered in patients exhibiting acute onset of fever, maculopapular rash, arthralgia, myalgia, or conjunctivitis. Clinical disease usually is mild, however, during the current outbreak, Zika virus infections have been confirmed in pregnant women, in several infants with microcephaly and in women who have had fetal losses.

Because of the similar geographic distribution and clinical presentation of Zika, patients with symptoms consistent with Zika virus disease should also be evaluated for dengue and chikungunya virus infection, in accordance with existing guidelines.

Education
Until more is known and out of an abundance of caution, pregnant women should postpone travel to any area where Zika virus transmission is ongoing. Pregnant women who still intend to travel to these areas should talk to their doctor or other healthcare provider prior to leaving, be advised of potential risks and about prevention-primarily about mosquito bite prevention. Women trying to become pregnant should consult with their healthcare providers before traveling to these areas and strictly follow steps to avoid mosquito bites during the trip. Men who have traveled to Zika-affected areas and have pregnant partners should abstain from sex or consistently and correctly use condoms for the duration of the pregnancy for all forms of sexual activity. Men who have traveled to Zika-
affected areas and have non-pregnant partners should consider abstaining from sexual activity or consistently and correctly use condoms. Pregnant women and their male sex partners should discuss the male partner’s potential exposures and history of Zika-like illness with the pregnant woman’s health care provider (http://www.cdc.gov/zika/symptoms/). Providers should consult CDC’s guidelines for evaluation and testing of pregnant women.

Treatment
No specific antiviral treatment is available for Zika virus disease. Treatment is generally supportive and can include rest, fluids, and use of analgesics and antipyretics. Because of similar geographic distribution and symptoms, patients with suspected Zika virus infections also should be evaluated and managed for possible dengue or chikungunya virus infection. Aspirin and other non-steroidal anti-inflammatory drugs (NSAIDs) should be avoided until dengue can be ruled out to reduce the risk of hemorrhage. Persons who have a fever should be treated with acetaminophen. People infected with Zika, chikungunya, or dengue virus should be protected from further mosquito exposure during the first week of illness to reduce the risk of local transmission.

Report
Zika virus is an arboviral disease and a Standard Notification Notifiable Disease, and therefore must be reported to Infectious Diseases & Outbreaks (ID&O) within 5 days of suspected diagnosis. To report the suspected case, please go to www.adph.org/epi, REPORT Card.

Specimen Collection and Shipping
- Specimen submissions must meet criteria and be approved by ADPH for testing for Zika, chikungunya, or dengue virus. Follow the instructions below to properly collect and send specimens to BCL for forwarding to CDC. Please specify name(s) of the arbovirus (es) for which you are requesting on the test requests. Note: CDC is recommending that when testing for Zika, to also test for chikungunya and dengue. Follow CDC’s instructions for collecting and sending diagnostic specimens, http://www.cdc.gov/ncezid/dvbd/specimensub/arboviral-shipping.html.
- Complete a BCL Requisition Form for each specimen and test ordered, http://www.adph.org/bcl/assets/BCL_Requisition_Form.pdf. Include specimen collection date, date of symptom onset, as well as dates, locations of recent travel, and relevant vaccine history.
- Specimens may be dropped off at your local county health department to be couriered to BCL overnight or can be shipped directly to BCL at 8140 AUM Drive, Montgomery, AL 36117 (at your expense). Specimens for Zika virus testing will be forwarded to CDC.

Resources
- Interim Guidelines for Pregnant Women During a Zika Virus Outbreak-United States, 2016: http://www.cdc.gov/mmwr/volumes/65/wr/mm6502e1.htm
- Interim Guidelines for the Evaluation and Testing of Infants with Possible Congenital Zika Virus Infection – United States, 2016: http://www.cdc.gov/mmwr/volumes/65/wr/mm6503e3.htm
• Interim Guidelines for Prevention of Sexual Transmission of Zika Virus – United States, 2016:  
  http://www.cdc.gov/mmwr/volumes/65/wr/mm6505e1er.htm?s_cid=mm6505e1er_w.htm


• Interim Guidelines for Health Care Providers Caring for Pregnant Women and women of Reproductive Age with Possible Zika Virus Exposure – United States, 2016:  
  http://www.cdc.gov/mmwr/volumes/65/wr/mm6505e2er.htm?s_cid=mm6505e2er.htm_w


• If you have a question about specimen collection and shipping, call BCL at 334-260-3400.

• If you have a question about reporting a suspected case, call ID&O at 1-800-338-8374.