Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

Diagnostic Testing

Key Information

- The Food and Drug Administration (FDA) has issued an Emergency Use Authorization (EUA) for two diagnostic tools for Zika virus, the Zika MAC-ELISA and Trioplex Real-Time RT-PCR Assay, which are being distributed to qualified laboratories that are certified to perform high-complexity tests in the United States. Visit Information for State & Local Public Health Laboratories (http://www.cdc.gov/zika/state-labs/index.html) for information on the Zika MAC-ELISA and Trioplex Real-Time RT-PCR Assay.
- **Clinicians:** Contact your state or local health department to facilitate testing. Instructions follow.
- **See FDA's website for information on other diagnostic tests authorized for emergency use.**
- **Zika virus disease is a nationally notifiable condition**. State, local, and territorial health departments should report laboratory-confirmed and probable cases to CDC. Healthcare providers should report suspected Zika virus disease cases to their state, local, or territorial health department to facilitate diagnosis and mitigate risk of local transmission.

Updated: May 15, 2016

During the first week after onset of symptoms, Zika virus disease can often be diagnosed by performing real-time reverse transcription-polymerase chain reaction (rRT-PCR) on serum. Additionally, now urine samples should be collected less than 14 days after onset of symptoms for rRT-PCR testing. Virus-specific IgM and neutralizing antibodies typically develop toward the end of the first week of illness; cross-reaction with related flaviviruses (e.g., dengue and yellow fever viruses) is common and may be difficult to discern. Plaque-reduction neutralization (PRNT) testing can be performed to measure virus-specific neutralizing antibodies and discriminate between cross-reacting antibodies in primary flavivirus infections.

Please refer to the instructions for sending diagnostic specimens to CDC (http://www.cdc.gov/ncezid/dvbd/specimensub/arboviral-shipping.html), which also includes detailed instructions for completing the CDC specimen submission form 50.34 [PDF - 2 pages] (http://www.cdc.gov/laboratory/specimen-submission/pdf/form-50-34.pdf). **Please note:** Because Zika virus testing is not listed in the drop-down menu for the Test Order Name field of form 50.34 (located on 1st page, top left), you will need to select "ARBOVIRUS SEROLOGY" and then type "Zika testing" in the Brief Clinical Summary field located at the top of the second page of the form.

Test results will typically be available approximately 3 weeks after specimen receipt. Reporting times for test results may be longer during summer months or when arbovirus activity increases. **ALL RESULTS WILL BE SENT TO THE APPROPRIATE STATE OR LOCAL HEALTH DEPARTMENT**. Specimens should **NOT** be submitted directly to CDC. All submissions should go through your state or local health department.

Specimen Collection and Submission

Instructions for the Collection and Submission of Fetal Tissues for Zika Virus Testing

Collection and Submission of Body Fluids for Zika Virus Testing

File Formats Help:

How do I view different file formats (PDF, DOC, PPT, MPEG) on this site? (http://www.cdc.gov/Other/plugins/)

(http://www.cdc.gov/Other/plugins/#pdf)

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National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) (http://www.cdc.gov/ncezid)

Division of Vector-Borne Diseases (DVBD) (http://www.cdc.gov/ncezid/dvbd/index.html)