

**Alabama Department of Public Health – Health Alert Network (HAN)**  
**Zika Testing and Recommendations for Subsequent Zika IgM Antibody Testing**  
**6/23/16**

**Summary**

Testing for Zika virus infection using real-time reverse-transcription polymerase chain reaction (rRT-PCR) molecular assays is now commercially available. Currently, commercial laboratories that offer rRT-PCR testing do not provide Zika IgM ELISA testing with PRNT confirmation and have no routine process to forward specimens to another testing laboratory. Therefore, when requesting Zika rRT-PCR testing from a commercial laboratory, providers should retain an aliquot of the serum for Zika IgM ELISA testing if the rRT-PCR testing is negative.

**Background**

A positive rRT-PCR test is confirmation of Zika virus infection. However, because of the decline in the level of viremia over time and possible inaccuracy in reporting of dates of illness onset, a negative rRT-PCR result does not exclude Zika virus infection. In such cases, CDC recommends serologic testing by ELISA for Zika IgM antibody.

Since December 31, 2014, all test results for arboviral diseases, including Zika virus, are reportable to the Alabama Department of Public Health's (ADPH) Infectious Diseases & Outbreaks Division (ID&O). Physicians, nurses, and laboratory directors **are required to** report all results (positive, negative, inconclusive, and equivocal) to ID&O within 5 days.

**Alabama Department of Public Health Zika Consultation**

ADPH requests that providers contact ID&O for consultation prior to ordering Zika testing on patients, whether using ADPH's Bureau of Clinical Laboratories (BCL) or a commercial laboratory. Providers should call ID&O at 1-800-338-8374 to request a Zika Consultation Form.

**Recommendations for Providers using ADPH's BCL to Test for Zika Virus**

- The BCL is able to conduct rRT-PCR Zika testing. Once testing is approved, specimen collection and shipping instructions will be given to the Provider for testing by the BCL.
- For specimens submitted to BCL, rRT-PCR requires submission of urine and patient-matched serum specimen.
- Drawing and storing additional specimens is not necessary when testing authorized specimens submitted to the BCL.

**Recommendations for Providers using Commercial Laboratories to Test for Zika Virus**

- Appropriate samples for rRT-PCR testing vary per commercial lab. Please consult each laboratory for guidance as to appropriate specimen types for testing.
- rRT-PCR testing should be performed for patients possibly exposed to Zika virus who have symptoms consistent with Zika virus infection.
- Providers who request rRT-PCR testing for Zika virus infection from a commercial testing laboratory are advised to retain and store in a refrigerator (2-8°C) an aliquot of the patient's serum for subsequent Zika IgM ELISA testing if the rRT-PCR is negative.
- For specimens that are rRT-PCR negative from the commercial laboratory and no stored serum specimen is available, another serum specimen should be collected for Zika IgM ELISA testing (if patient is still within 12 weeks of symptom onset).