



Guidance for Zika Virus Specimen Collection, Shipping, and Testing



Recommended Diagnostic Testing for Zika Virus

- CDC is recommending that for any suspect cases of Zika virus infection, testing should be considered for chikungunya and dengue.
- Please caution your patient against NSAID use including aspirin until dengue is ruled out.
- The Zika Consultation Form should be submitted on all patients being tested for Zika virus infection, regardless of the laboratory conducting the testing.
- Providers should call ADPH at **1-800-338-8374**, available 24/7, prior to submission of the Zika Consultation Form **ONLY** for specimens to be obtained at birth and upon fetal loss when associated or suspected to be associated with Zika virus infection in the mother. This will ensure collection of the appropriate specimens, and coordination of shipping and testing.
- RT-PCR is the preferred method for confirming an acute case within 7 days of illness onset.
- Serology (IgM and PRNT) assays detect antibodies in asymptomatic and acute cases 4 days after illness onset.
- BCL can provide diagnostic testing (PCR) for dengue virus.
- CDC will perform diagnostic testing for Chikungunya and Zika virus.

Specimen Collection & Storage

- To request that specimens be tested for Zika, chikungunya, and dengue virus, follow the instructions below to properly collect. **For ALL pregnant patients** –Collect and submit both serum and urine specimens.
 - Serum-
 - Collect blood specimen in a tiger top (serum separator) tube, centrifuge, and extract serum and place in a sterile tube. Approximately 2-3 mL of serum is needed to test for Zika, dengue, and chikungunya. Serum should be kept refrigerated (2 – 8°C) until ready to be shipped.
 - Urine-
 - Collect 2-3 ml of urine (within 14 days of illness onset) in a sterile container and seal with parafilm. Urine should be kept refrigerated (2 – 8°C) until ready to be shipped.

For all other specimens (CSF, amniotic fluid, and other tissues, consult with ADPH before submission.

Test Results

- Allow 4-14 days after receipt of specimen test results to be available. Additional days should be considered for specimens that are sent to CDC for testing.

Test Results (cont'd)

- Serum collected for serology testing within 7 days of illness onset can be falsely negative. If the acute IgM is negative and Zika is highly suspected or this is a high risk patient, a convalescent serum should be collected 2 weeks after initial specimen. .
- IgM antibodies for Zika, Dengue, and other flaviviruses have serological cross-reactivity that makes it difficult to reliably distinguish the viral infections. Therefore, all IgM positive specimens will need PRNT for confirmation.
- All negative serology test obtained 2-12 weeks after travel cannot definitely rule out Zika virus infection.

Specimen Shipping

- The urine and serum specimen can be shipped together.
 - Must complete one (1) BCL Requisition Form for each specimen (one for urine and one for serum) and **submit with the specimens to BCL**. Select Arboviral testing and indicate Zika, dengue, and chikungunya as the agents suspected. Include specimen collection date, date of symptom onset, as well as dates and locations of recent travel, and relevant vaccine history.
 - If you are a Webportal user please use Analyte Type: Virology, Arbovirus and order ARBO PCR and ZIKA ELISA for serum and just ARBO PCR for urine. You must submit a separate request for each specimen. Please complete the information under the Auxiliary tab.
 - The specimen should be kept cold **NOT** frozen.
 - The specimen should be placed in an insulated container with **FROZEN ICE PACKS** for shipping.
 - The specimen may be taken to your local county health department to be couriered to BCL overnight (at no cost). ***Please contact your local county health department to coordinate courier pick up time. DO NOT leave specimen at your county health department without notifying them that you have a ZIKA specimen. This can result in the specimen being unsatisfactory, and prolong the results***
- OR**
- Ship specimen directly to BCL-EID at 8140 AUM Drive, Montgomery, AL 36117 (**at your expense**).
 - If you have a question about specimen collection and shipping, call BCL at 334-260-3400 or email clab@adph.state.al.us

Resources

- ✓ For more information about Zika virus testing and interpretation of results, <http://www.cdc.gov/zika/hc-providers/testing-for-zikavirus.html>

Alabama Department of Public Health (ADPH)
Bureau of Clinical Laboratories (BCL)
Requisition Form for Laboratory Testing



As of 1/1/14, all specimens (except newborn screening) require the patient's demographic and insurance information.
Complete a separate form for each test requested.

Patient Information			Healthcare Provider Information		
Patient ID Number/MRN		Specimen Collection Date / /	Facility Name		
Patient Name (Last and First)		Date of Birth (mm/dd/yyyy) / /	Physician/Requestor Name (Last and First)		NPI#
Specimen Source	Race (mark all that apply)	Ethnicity	Street Address		
Date of Onset / /	<input type="checkbox"/> American Indian/ Alaska Native <input type="checkbox"/> Asian <input type="checkbox"/> Black/African- American <input type="checkbox"/> Native Hawaiian/Pacific Islander <input type="checkbox"/> White/Caucasian <input type="checkbox"/> Unknown	<input type="checkbox"/> Hispanic or Latino <input type="checkbox"/> Non-Hispanic or Latino <input type="checkbox"/> Unknown	City		
Hospitalized <input type="checkbox"/> Yes <input type="checkbox"/> No		Sex <input type="checkbox"/> Male <input type="checkbox"/> Female	State		Zip
Patient Street Address		Pregnant <input type="checkbox"/> Yes <input type="checkbox"/> No	Phone Number		Fax Number
City			Laboratory Use Only		
State					
Zip					
Patient SSN		Patient Phone Number			

Insurance Information (Please include copy of insurance card)					
Bill To	<input type="checkbox"/> Patient's Insurance	<input type="checkbox"/> Patient	<input type="checkbox"/> Ordering Facility	<input type="checkbox"/> ADPH Program	
Insurance Carrier	Policy Holder's Name (Last, First, MI)		ID Number	Group Number	
<input type="checkbox"/> BC/BS <input type="checkbox"/> United Healthcare <input type="checkbox"/> Medicaid <input type="checkbox"/> Medicare <input type="checkbox"/> No Insurance <input type="checkbox"/> Other (Specify) _____	Policy Holder's DOB (mm/dd/yyyy)		Policy Holder's Mailing Address		Patient's Relationship to Policy Holder (Self, Child, Spouse, Unknown)
	Diagnosis Code(s)	Code 1	Code 2	Code 3	

Test Requested	
Frequently Ordered Recent Travel? Yes/No When and where? _____ Recent Vaccine? Yes/No When and what type? _____ <input type="checkbox"/> CT/GC/TV <input type="checkbox"/> Syphilis History of treatment? Yes / No <input type="checkbox"/> HIV EIA HIV EIA Form # _____ <input type="checkbox"/> Blood Lead <input type="checkbox"/> Capillary <input type="checkbox"/> Venous Follow-up? Yes/No <input type="checkbox"/> HIV Viral Load <input type="checkbox"/> HIV Genotyping <input type="checkbox"/> Lymphocyte Subset (CD4) <input type="checkbox"/> Hepatitis B Surface Antibody <input type="checkbox"/> Hepatitis B Surface Antigen Post Vaccine Employee? Yes/No Needle Stick? Yes/No <input type="checkbox"/> CBC without differential Chemistry Panel (Only one form required per Chemistry Request) <input type="checkbox"/> Comprehensive Metabolic <input type="checkbox"/> Lipid <input type="checkbox"/> Basic Metabolic <input type="checkbox"/> Thyroid <input type="checkbox"/> Renal Function <input type="checkbox"/> TB <input type="checkbox"/> Hepatic Function <input type="checkbox"/> Electrolytes <input type="checkbox"/> Chemistry Analyte (s) _____ <input type="checkbox"/> Influenza Rapid test result: _____ <input type="checkbox"/> Urine Culture Symptomatic / Post Treatment / Other: _____ <input type="checkbox"/> Arboviral Testing Agent suspected: _____ <input type="checkbox"/> Other Test _____	AFB/Mycology/Microbiology <input type="checkbox"/> AFB <input type="checkbox"/> Mycology <input type="checkbox"/> Microbiology – Reference/Gram Stain _____ <input type="checkbox"/> Microbiology – <i>Salmonella/Shigella</i> _____ <input type="checkbox"/> Microbiology – PCR Test _____ <input type="checkbox"/> Other _____ Agent suspected: _____ Special Instructions: _____ _____ _____ _____ _____ _____



Guidance for Labeling Zika Specimens for Shipment to Bureau of Clinical Laboratories (BCL-EID)

The insulated container that the specimens and frozen ice packs have been placed in must be labeled appropriately using a Biological Substance Category B label. The label below should be affixed to two sides of the outer package (cooler or box). Please copy the label picture below to place on the outer package. You can contact your local area investigator to make arrangements to coordinate courier pick up times at your local health department or ship specimen directly to BCL-EID, 8140 AUM Drive, Montgomery, AL 36117 **(at your own expense)**.

If you have additional questions about specimen collection and shipping, call BCL at 334-260-3400 or email clab@adph.state.al.us.

