

## UNC McLendon Clinical Laboratories guidance for obtaining Zika virus testing

1. Fill out DHHS 3445 form <http://slph.ncpublichealth.com/Forms/3445-SpecialSerology-20170829.pdf>. Under Single Agent Diagnostic Tests: check Chikungunya, Other (write in “Zika and Dengue testing”), Prior approval/consultation received from (write in “CDB”), and Forward specimen to CDC. Note: CDC 50.34 DASH form is also required, but the laboratory will fill out this form.  
REQUIRED information for testing: travel history, onset date, specimen collection date (acute vs. convalescent), specimen type and submitter contact information  
RECOMMENDED information: description of clinical illness, vaccination history (Yellow Fever or Japanese Encephalitis due to Flavivirus cross-reactivity)
2. Place the order in EPIC as a “Referral lab test, other” (LAB5744) and type in the comment section “2 SST for Zika, Dengue, Chikungunya”.
3. Submit two serum separator tubes for Zika, Dengue and Chikungunya testing along with DHHS 3445 form to the Microbiology Lab (Tube Station #82). Guidance on additional specimen types is in the tables below and can be found at the CDC website (<http://www.cdc.gov/zika/hc-providers/diagnostic.html>). Test results are normally available 4 to 14 days after CDC receives the specimen, but may be longer with increased testing demand.

**Table 1. Tests used based on when the specimen is collected after symptom onset.**

Specimen Type	Days Post-onset	Test(s) Performed
<b>Serum</b>	≤4	RT-PCR
	4-7*	RT-PCR, IgM, Flavivirus PRNT
	>7	IgM, Flavivirus PRNT
<b>Urine, Saliva, Amniotic fluid</b>	Currently being evaluated	Zika RT-PCR

\*IgM negative specimens collected ≤7 days should be repeated ≥21 days post-onset.

RT-PCR: reverse transcription-PCR

PRNT: plaque reduction neutralization test

**Table 2. Specimen collection, testing and required volume.**

Specimen	Test performed	Specimen Volume
<b>Serum and CSF</b>	Chikungunya RT-PCR and IgM Zika and Dengue RT-PCR and virus-specific IgM Flavivirus PRNT	2-5 mL
<b>Urine, Saliva, Amniotic Fluid</b>	Zika RT-PCR	1-3 mL
<b>Cord Blood</b>	Zika RT-PCR and IgM Flavivirus PRNT	0.5-3mL
<b>Placental Tissue, fresh</b>	Zika RT-PCR Viral Culture	2-5 grams
<b>Placental tissue/umbilical cord, paraffin-embedded formalin fixed</b>	Immunohistochemical staining Zika RT-PCR	2-5 grams or paraffin blocks

Last Revision Date: 9/28/17