



Memo

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To: North Dakota Clinical Laboratories
From: Christie Massen (clmassen@nd.gov)
Assistant Director, Division of Laboratory Services - Microbiology
Date: Feb. 24, 2016
Re: Zika virus Testing

The North Dakota Department of Health Laboratory has validated Zika virus RT-PCR to assist in the current Zika virus response. However, our laboratory does not yet have the capabilities to perform IgM serology testing for Zika virus.

All samples that are received for Zika virus testing will be analyzed based on the patient’s travel history, symptom onset (if symptomatic), symptoms and pregnancy status.

- Samples collected from days 1-4, of symptom onset, will be tested at the NDDoH lab with the RT-PCR assay.
- Samples collected from days 5-7, of symptom onset, will be initially tested at the NDDoH with the RT-PCR assay, and if negative, will be forwarded on to CDC for IgM serology testing.
- Samples collected >7 days of symptom onset will be forwarded to CDC for IgM serology testing.

Per CDC’s guidelines, samples that fall into the serology-only category and need to be tested at CDC will need to meet the following case definition to be forwarded for testing:

- Onset of symptoms, regardless of pregnancy status, during travel or within 14 days of returning from an area with Zika virus transmission and who report **two or more** of the following symptoms: fever, rash, arthralgia, conjunctivitis, myalgia, and headache.
- Asymptomatic pregnant women (women who do not report clinical illness consistent with Zika virus disease) who have traveled to areas with ongoing Zika virus transmission. Testing can be offered **2 to 12 weeks** after pregnant women return from travel.
- If samples are received that do not meet these testing criteria, the North Dakota Disease Control Division may follow-up with the providers, and the samples may ultimately be rejected.

Test	Sample Type	Charge	CPT Code	Expected Turnaround Time
Zika virus RT-PCR	1 mL Serum*	\$51.00	87798	2-3 days
Zika virus IgM Serology	2-3 mL Serum	No charge at this time	None	2-4 weeks

*If additional samples are available (urine [3-5 mL], saliva, amniotic fluid, etc.), please submit these samples so parallel studies can be performed on them for researcher purposes only. A report will not be issued at this time for these sample types as they are not validated specimen types and there will be no charge for testing on sample types other than serum at this point.

If a health care provider suspects sexual transmission of Zika virus has occurred, please contact the Division of Disease Control for further guidance on testing and reporting.

The case report form for Zika virus testing is attached. Please complete the form, along with the laboratory's standard test request form (simply write in "Zika virus testing" on the bottom right hand corner), when submitting samples.

- A list of areas where Zika virus is being transmitted can be found at www.cdc.gov/zika/geo/index.html
- Further information on Zika virus can be found at www.ndhealth.gov/disease/zika/

Please do not hesitate to contact either Laura Cronquist (lcronquist@nd.gov, 701-328-2694 / 701-328-2378) or Maggie Kuklok (mrkuklok@nd.gov, 701-328-6272) with any questions regarding Zika virus testing.

Do not send specimens directly to CDC!

Samples must be sent to the North Dakota Department of Health Laboratory first.
The CDC will only issue reports to the North Dakota Department of Health.

Zika Testing Data Sheet

Date: _____ Name of person filling out form: _____

Health care facility: _____

Name of provider or physician: _____

Phone number of provider: _____

Name of patient: _____

Patient DOB: _____

Patient address: _____

Patient sex: M or F

Pregnancy status: Y* or N

If yes, current weeks of gestation: _____

Travel history: Y or N

Country/territory: _____

Dates of travel: _____

Symptoms (Please circle; patients who are not pregnant must have at least two):**

- | | |
|------------------------|------------|
| • Acute onset of fever | • Myalgia |
| • Arthralgia | • Rash |
| • Conjunctivitis | • Headache |

Symptom onset date**: _____

Patient presented with Guillain-Barré syndrome: Y or N

Patient is a neonate with microcephaly or intracranial calcifications: Y or N

**All pregnant women with appropriate travel history can be tested for Zika virus, regardless of whether they are/were symptomatic. Testing of asymptomatic pregnant women can be offered 2-12 weeks after they return from travel. Testing of symptomatic pregnant women can be offered immediately.*

*** Non-pregnant patients must have onset of symptoms during or within 2 weeks of travel to an area with active Zika virus transmission.*