

# MDHHS Zika Virus Specimen Collection and Transport Guidelines

## Specimens to Collect from Patients Meeting MDHHS Criteria for Zika Testing†

Submit at least 3-4 mL of serum and urine\*, appropriate for both PCR and serology. Whole blood collected in a red top tube should be utilized (serum separators can adversely impact PCR sensitivity). Separate serum from the cells within 4 hours of collection. Label the specimen tube with: 1) the patient’s name (first and last), 2) date of birth, 3) specimen type, and 4) date of collection.

\*Urine should be collected on all pregnant women regardless of symptoms for up to 12 weeks since their potential exposure (travel or sex without barrier protection with a partner with potential exposure) AND all patients with travel history or history of sex without barrier protection with a partner with possible Zika exposure and symptoms consistent with Zika virus disease within 2 weeks of their illness onset. Testing is also available for CSF, amniotic fluid, tissues and other specimens, but these specimens MUST also be accompanied by a serum specimen. For instructions on submitting other specimen types, contact MDHHS Bureau of Laboratories Virology at 517-335-8067.

### Storage:

Once collected, place the specimen at 2-8°C (refrigerated temperatures) until ready to ship. Specimens should be shipped to MDHHS Bureau of Laboratories on cold packs within 24-48 hours from the time of collection. Use Specimen Collection kit 8A which can be obtained by contacting the Laboratory Support Unit:

[http://www.michigan.gov/mdhhs/0,5885,7-339-71551\\_2945\\_5103\\_5278-14799--,00.html](http://www.michigan.gov/mdhhs/0,5885,7-339-71551_2945_5103_5278-14799--,00.html).

### Required Documents to Accompany Specimens:

Michigan healthcare providers no longer need pre-approval from the local health department to request Zika virus testing at MDHHS. However, patients must meet the testing criteria† and samples must be accompanied by the required MDHHS.

**\*SAMPLES RECEIVED AT MDHHS BOL WITH INCOMPLETE OR MISSING FORMS WILL NOT BE TESTED\***

- 1) [Zika Virus Supplemental Questionnaire](#) must be completed for each patient
- 2) **MDHHS Microbiology/Virology Test Request Form** (DCH-0583)

([http://www.michigan.gov/documents/DCH-0583TEST\\_REQUEST\\_7587\\_7.pdf](http://www.michigan.gov/documents/DCH-0583TEST_REQUEST_7587_7.pdf))

Complete the top of the form with the **Submitter** information. At the bottom of the form:

Indicate “Specimen Source” and under “Tests that Require MDHHS Approval”, check “Emerging Arbovirus Panel”. Check the “PCR” and/or “IgM” boxes depending on time since symptom onset (see below).

All submitted specimens will be tested for Zika virus, Dengue virus, and Chikungunya virus.

Date of specimen collection is <b>within 3 days</b> of symptom onset (or for pregnant patient, potential exposure through travel or sex)	Date of specimen collection is <b>4-14 days</b> after symptom onset (or for pregnant patient, potential exposure through travel or sex)	Date of specimen collection is <b>2-12 weeks</b> after symptom onset (or for pregnant patient, potential exposure through travel or sex)
↓	↓	↓
Tests Requested: <ul style="list-style-type: none"> <li>● Zika PCR (serum &amp; urine)</li> <li>● Dengue PCR (serum)</li> <li>● Chikungunya PCR (serum)</li> </ul>	Tests Requested: <ul style="list-style-type: none"> <li>● Zika PCR (serum &amp; urine)</li> <li>● Zika IgM (serum)</li> <li>● Dengue IgM (serum)</li> <li>● Chikungunya IgM (serum)</li> </ul>	Tests Requested: <ul style="list-style-type: none"> <li>● Zika IgM (serum)</li> <li>● Dengue IgM (serum)</li> <li>● Chikungunya IgM (serum)</li> </ul>

## Shipping:

Specimens should be shipped Category B (UN3373 Biological Substances) on cold packs. For detailed instructions on packaging serum samples: [http://www.michigan.gov/documents/DCH-0811\\_7495\\_7.pdf](http://www.michigan.gov/documents/DCH-0811_7495_7.pdf).

Specimens should be shipped to arrive at MDHHS BOL Monday through Saturday. Ship to:

Michigan Department of Health and Human Services  
Bureau of Laboratories  
3350 North Martin Luther King Jr. Blvd.  
Building 44 Room 155  
P.O. Box 30035  
Lansing, Michigan 48909

For additional questions about shipping specimens to MDHHS, contact the DASH unit at 517-335-8059.

†**MDHHS Testing Criteria:** Zika virus testing is indicated when any of the following criteria are met:

- **Pregnant women** who have:
  - History of travel to an area with ongoing Zika virus transmission\*
    - And have clinical illness consistent with Zika virus infection (**one** or more of the following: fever, rash, joint pain, red irritated eyes) within two weeks of travel
    - Or have no symptoms, and are **within 12 weeks after their return from travel**
  - Had sex without barrier protection with a partner with possible Zika virus exposure\* (neither partner need to be symptomatic)
- A person who has a clinical illness consistent with Zika virus infection (**one** or more of the following: fever, rash, joint pain, red irritated eyes) and within two weeks of illness onset:
  - Has a history of travel to an area with ongoing Zika virus transmission\* OR
  - May have been exposed to Zika virus through sex without barrier protection with a person who has a history of travel to an area with ongoing Zika virus transmission\*
- A fetus or infant with suspected or confirmed microcephaly or intracranial calcifications (diagnosed prenatally or at birth) whose mother:
  - Spent time in an area with ongoing Zika virus transmission\*
  - During pregnancy, had sex without barrier protection with a partner who spent time in an area with active Zika virus transmission\*
- A person who developed Guillain-Barre syndrome (GBS) after spending time in an area with active Zika virus transmission\*

\*See the CDC website for the current list of areas with active Zika virus transmission:

<http://www.cdc.gov/zika/geo/index.html>

**At this time, MDHHS is not performing testing for the purposes of pre-conception planning/screening.** For additional information, see the CDC guidance “Women and Men with Possible Zika Virus Exposure Who Desire Pregnancy”: <https://www.cdc.gov/zika/hc-providers/reproductive-age/desire-pregnancy.html>]

Additionally, **MDHHS is not performing testing on non-pregnant individuals who do NOT have fever, rash, joint pain, or red irritated eyes.**