Zika Specimen Collection and Laboratory Testing Guidance

Process Overview:

1. Identify the patient who needs testing based on the criteria for testing below, and direct questions to Vermont Department of Health Infectious Disease Epidemiology at 802-863-7240 (24/7).
2. Provide patient counseling on the prevention of sexual transmission of Zika virus.
3. Collect and properly store appropriate specimens (serum and urine).
4. Complete the Vermont Department of Health Laboratory Clinical Test Request Form and submit with specimen(s).

1. Criteria for Testing

Testing Recommended:

- Any symptomatic* person with a possible exposure** within 12 weeks after symptom onset
- Any symptomatic pregnant women with possible Zika virus exposure
- Any asymptomatic pregnant women with ongoing*** possible Zika virus exposure
- Any pregnant women with possible Zika virus exposure who have a fetus with prenatal ultrasound findings consistent with congenital Zika virus infection

Testing Possibly Recommended:

- Testing asymptomatic pregnant women with recent possible but no ongoing exposure to Zika virus (i.e. travelers) is not routinely recommended but may be considered by providers on a case-by-case basis.

Testing Not Recommended:

- Non-pregnant asymptomatic individuals
- Preconception screening

* Symptoms consistent with Zika virus include acute febrile illness, rash, arthralgia, conjunctivitis, myalgia or headache starting within 2 weeks of last possible exposure.
** Possible exposure includes living in, traveling to, or having unprotected vaginal, anal, or oral sex with someone who lives in or traveled – within the past 3 months for males; 2 months for females – to an area with active risk of Zika transmission.
*** Daily or weekly travel to an area with active risk of Zika transmission.
2. Patient Counseling

Healthcare providers should counsel women and men on the health risks and potential consequences of Zika virus infection around the time of conception and during pregnancy.

**Before trying to conceive:**

- Women traveling to an area with risk of Zika should wait at least 2 months after the date of last possible Zika virus exposure or 2 months after the start of symptoms of Zika virus disease (if symptomatic).
- Men traveling to an area with risk of Zika should wait at least 3 months after the date of last possible Zika virus exposure or 3 months after the start of symptoms of Zika virus disease (if symptomatic).

In addition to a discussion about waiting to conceive, couples should also be counseled about abstaining from sex or correctly and consistently using condoms to prevent the sexual spread of Zika virus during the waiting period. Condoms should be used during vaginal, anal, and oral sex, and the sharing of sex toys.

**When a woman is already pregnant**, and her male partner traveled to an area with risk of Zika, precautions (either correct use of condoms or abstinence) should remain in place for the entire pregnancy.

Testing should not be done for non-pregnant asymptomatic individuals or for preconception screening.
3. Collect the Appropriate Specimens

<table>
<thead>
<tr>
<th>Person to be Tested</th>
<th>When to Collect</th>
<th>Type of Test</th>
<th>What to Collect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptomatic, with possible Zika exposure</td>
<td>As soon as possible within 12 weeks after symptom onset</td>
<td>rRT-PCR assay* and Zika IgM MAC ELISA</td>
<td>1-2 mL of urine and 1-2 mL of serum</td>
</tr>
<tr>
<td>Pregnant, asymptomatic, with ongoing ** possible exposure</td>
<td>Three times during pregnancy – first at initial prenatal care, second and third at non-consecutive prenatal visits</td>
<td>rRT-PCR assay</td>
<td>1-2 mL of urine and 1 mL of serum</td>
</tr>
</tbody>
</table>

**Specimen Collection and Storage Instructions**

- Collect serum in serum separator tube and centrifuge prior to shipment.
- Collect urine in a sterile screw top container.
- Ship specimens cold (2–6°C) or frozen (-70°C) by courier to the Health Department Laboratory.

4. Complete the Vermont Department of Health Laboratory Clinical Test Request Form

- Under the “Virology” section on page 2 beside “Other,” write in “Zika.” Provide required information in the “Comment” section(s).
- Testing will be performed at no charge.
- Send to the Vermont Department of Health Laboratory:
  359 South Park Drive
  Colchester, VT 05446
  Phone: (800) 660-9997 or (802) 338-4724
  Fax: (802) 338-4706

* The rRT-PCR assay tests for Dengue, Chikungunya, and Zika.
** Testing asymptomatic pregnant women with recent possible but no ongoing exposure to Zika virus (i.e. travelers) is not routinely recommended but may be considered. See CDC’s guidance (https://www.cdc.gov/pregnancy/zika/testing-follow-up/documents/ZikaPreg_ScreeningTool.pdf) for screening pregnant women for Zika testing. If testing is requested, the symptomatic testing protocol will be followed.