

Zika and Dengue Specimen Collection and Laboratory Testing Guidance

Please note: As of November 2019, no countries or U.S. territories are reporting an outbreak of Zika, however, dengue virus is currently causing large outbreaks in many areas of the world.

Process Overview

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

Testing Recommended

- Symptomatic* pregnant women with possible Zika virus exposure**
- Symptomatic pregnant women with recent travel to [areas with active dengue transmission](#) and [a risk of Zika](#)
- 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 exposure to Zika virus is **not** routinely recommended, but may be considered by providers on a case-by-case basis.

Testing Not Recommended

- For symptomatic non-pregnant patients, refer to [testing guidance for dengue](#). Zika testing is **not** currently recommended for this group.
- Non-pregnant asymptomatic individuals
- Preconception screening

* Symptoms consistent with Zika or dengue viruses include fever, rash, arthralgia, myalgia or conjunctivitis starting within two weeks of last possible exposure.

** Possible Zika virus exposure includes living in, traveling to, or having unprotected vaginal, anal, or oral sex with someone who lives in or traveled – within the past three months for males; two months for females – to an [area with active risk of Zika transmission \(purple countries\)](#) outside of the U.S. and its territories.

2. Collect the Appropriate Specimens

Person to be Tested	When to Collect	Type of Test	What to Collect
Symptomatic pregnant women, with possible Zika exposure	As soon as possible (≤12 weeks) after symptom onset	rRT-PCR assay*	1-2 mL of urine and 1-2 mL of serum
Symptomatic pregnant women, with recent travel to areas with active dengue transmission and risk of Zika	As soon as possible (≤12 weeks) after symptom onset	rRT-PCR assay* and dengue IgM only	1-2 mL of urine and 1 mL of serum
Pregnant women with possible Zika virus exposure and fetal prenatal ultrasound findings consistent with congenital Zika virus infection	As soon as congenital Zika virus infection is suspected	rRT-PCR assay* and Zika IgM	1-2 mL of maternal urine and 1 mL of maternal serum Optional: amniocentesis specimen(s)

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.

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

- Complete the [Clinical Test Request Form](#).
 - Under the “Molecular Virology” section on page 2, check “Arbovirus PCR.” Provide any relevant information in the “Comments” section(s).
- Testing will be performed at no charge.
- Send to the Vermont Department of Health Laboratory:

359 South Park Drive

* The rRT-PCR assay tests for Dengue, Chikungunya, and Zika.

Colchester, VT 05446
Phone: (800) 660-9997 or (802) 338-4724
Fax: (802) 338-4706

4. Patient Counseling

Health care 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 two months** after the date of last possible Zika virus exposure or two 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 three months** after the date of last possible Zika virus exposure or three 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.