

ZIKA TESTING GUIDANCE

Last Updated: 11/4/2016

WHO TO TEST:

- See CDC Guidance on page 2 for when to test for Zika virus
- See ODH Zika Virus Testing Recommendations page 3 for a detailed algorithm
- Guidance for testing of infants and children with possible congenital or perinatal *Zika virus* infection at <http://www.cdc.gov/zika/hc-providers/qa-pediatrician.html>.



For a current list of Zika-affected countries visit www.cdc.gov/zika/geo/active-countries.html.

HOW TO TEST:

1. See page 4 for details on specimen collection
2. See page 5 for details on specimen shipping and reporting to IDRS

For more information about testing and the forms above, go to www.IDRSinfo.org.



ADVISING PATIENTS REGARDING PREVENTION:

- **Women who are pregnant or trying to get pregnant should avoid travel to Zika-affected areas.**
- **Zika can be transmitted through semen. All men who have been in a Zika-affected area should use condoms correctly every time for all vaginal, anal and oral sex or abstain from sex.**
- **Prevent mosquito bites while traveling and for three weeks after you return:**
 - Use EPA-registered insect repellents according to the product label.
 - Wear long-sleeved shirts and pants when weather permits.
 - Use air conditioning when possible.
 - Check and repair window or door screens around your home.
 - Empty or get rid of standing water around your home.



WHEN TO TEST FOR ZIKA VIRUS

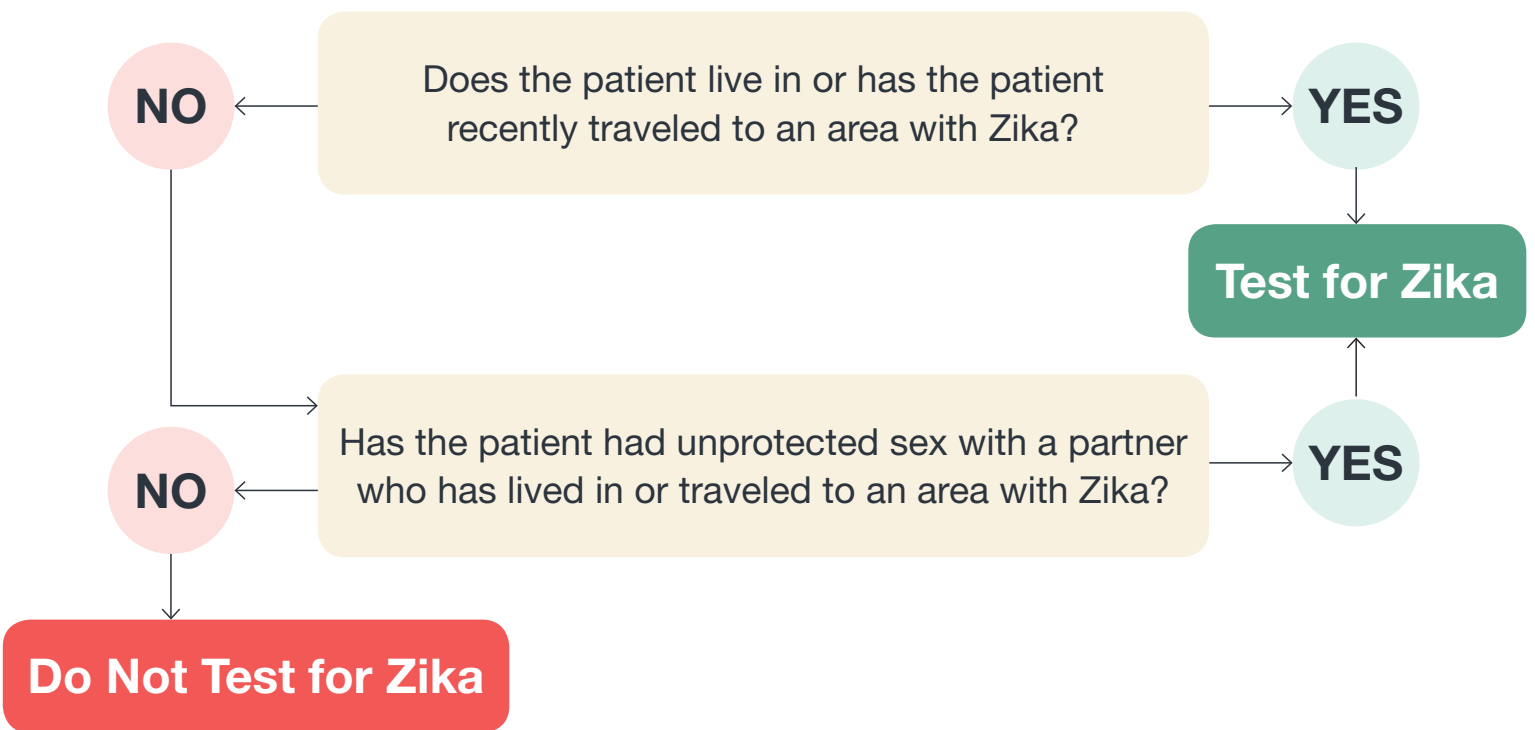


As a healthcare provider, you decide if a patient should be tested for Zika virus infection. The algorithm below will help you determine whether or not to test your patient for Zika virus infection. For information on which test to use, see [CDC's interim guidance](#).

If your patient is

- Experiencing or has recently experienced symptoms of Zika*
- An asymptomatic pregnant woman

Ask the following questions



*Healthcare providers should review their local and state health jurisdiction guidelines regarding testing of patients with clinically compatible illness without known travel or sexual exposures.

CDC does not recommend Zika virus testing for asymptomatic

- Men
- Children
- Women who are not pregnant

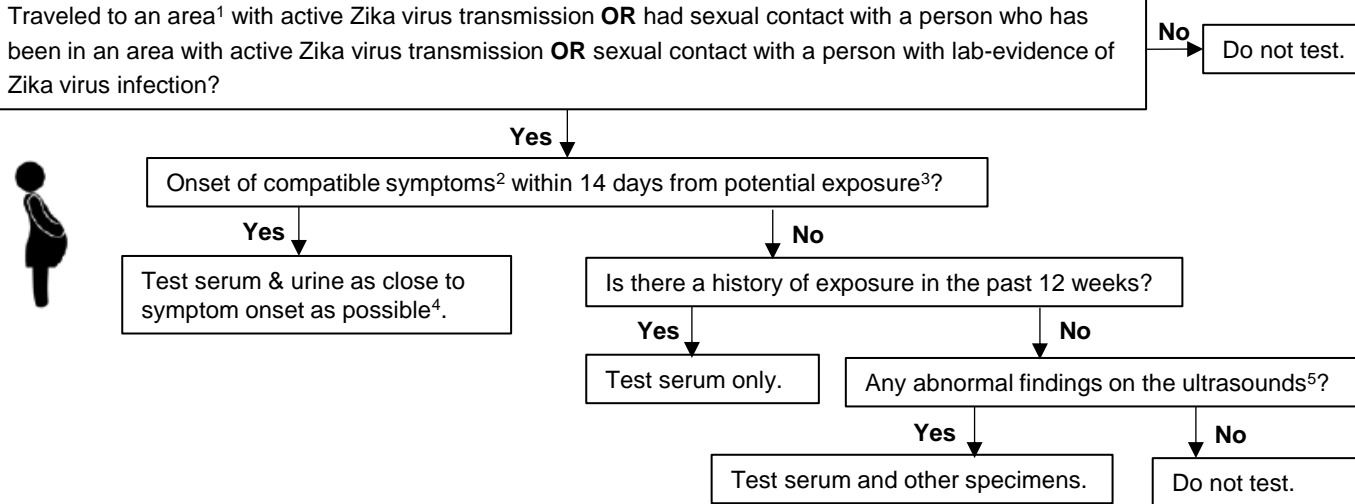


U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

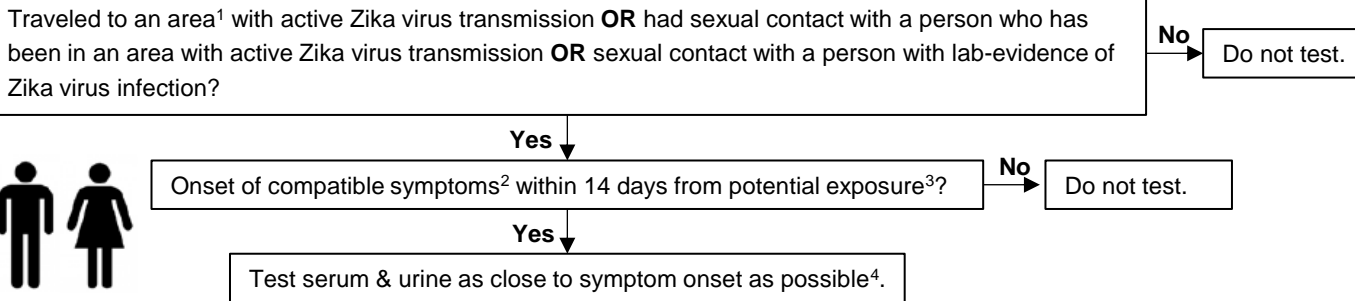


ZIKA VIRUS TESTING RECOMMENDATIONS

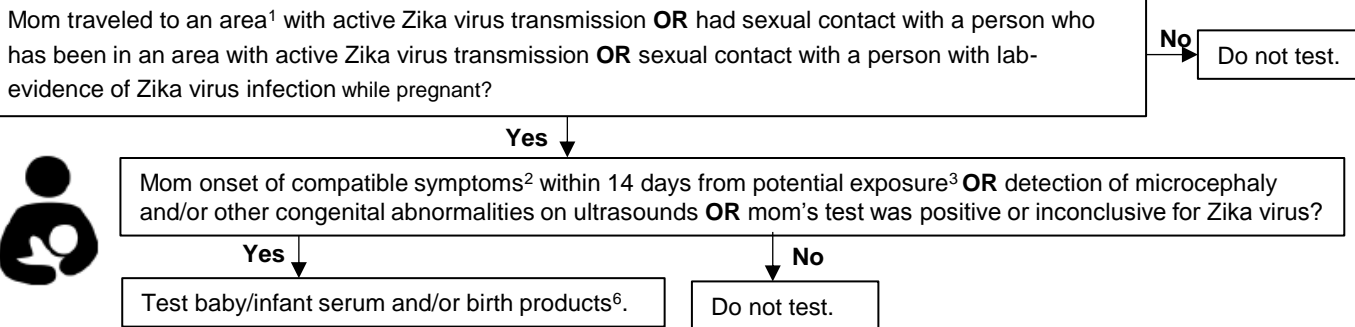
Pregnant Females



Males, Non-Pregnant Females, and Children



Babies and Infants (Possible Congenital Infection)



1. Areas with active Zika virus transmission are listed in the CDC's website: <http://www.cdc.gov/zika/geo/index.html>
2. Fever, conjunctivitis, rash, arthralgia (joint pain), myalgia (muscle pain), and/or headache.
3. Exposures include: Traveled to an area with active Zika virus transmission OR had sexual contact with a person who has been in an area with active Zika virus transmission OR sexual contact with a person with lab-evidence of Zika virus infection.
4. A convalescent sample (collected 14 days after onset) may be requested if negative or equivocal findings are found.
5. Do not collect specimens at this time. Patient should continue routine prenatal care until abnormal findings on ultrasounds are detected, suggesting microcephaly and/or other birth defects/congenital abnormalities.
6. Birth products can include umbilical cord tissue, cord blood, placental tissue, fetal tissue, and others. Please consult ODH at 614-995-5599 for additional guidance.

Contact the Ohio Department of Health at (614) 995-5599 for any questions related to Zika virus disease testing.



ZIKA VIRUS TESTING RECOMMENDATIONS

Specimen Collection:

- **Serum:** Single serum specimens are acceptable for Zika virus real-time Reverse Transcriptase Polymerase Chain Reaction (rRT-PCR) and antibody testing. A convalescent serum specimen may be requested depending on results of acute specimen testing.
 - Collect 1.0 mL of blood into a serum separator tube.
 - Keep the serum refrigerated until ready to ship.
- **Cerebrospinal fluid:** Cerebrospinal fluid specimens are acceptable for Zika virus rRT-PCR and antibody testing, although they should only be submitted if collected for other purposes
 - Collect 1.0 mL of cerebrospinal fluid into a tube.
 - Keep the specimen refrigerated until ready to ship.
- **Amniotic fluid:** rRT-PCR and virus isolation can be performed on amniotic fluid, although the performance of rRT-PCR testing of amniotic fluid for Zika virus infection is currently unknown.
 - Collect 1.0 mL of amniotic fluid in a sterile container.
 - Keep the specimen refrigerated until ready to ship.
- **Urine:** rRT-PCR can be performed on urine collected less than 14 days after illness onset. If urine is collected, a serum specimen for the patient should be collected as well for testing. [Further information is available on CDC's Zika website.](#)
 - Collect 1.0 mL of urine in a sterile container. Urine should be collected before semen if both are being submitted for the same person.
 - Keep the specimen(s) refrigerated until ready to ship.
- **Other body fluid:** rRT-PCR and virus isolation can be performed on other body fluids, such as semen and saliva. However, the performance of RT-PCR testing of other body fluids for Zika virus infection is currently unknown. [Further information is available on CDC's Zika website](#)
 - Collect 1.0 mL of semen in a sterile container. Urine should be collected before semen if both are being submitted for the same person.
 - Collect saliva with a dry cotton swab and place in a tube with 1.0 mL of viral transport media.
 - Keep the specimen(s) refrigerated until ready to ship.
- **Fetal tissues:** Tissues may be submitted for infants or fetuses with suspected congenital infection for rRT-PCR, antibody testing, histopathology, or immunohistochemical staining. Fetal tissues may include cord blood, placental tissue, brain tissue, or autopsy tissues. Further information is available on [CDC's Zika website.](#)
 - Collect 1.0 mL of cord blood into a serum separator tube.
 - Provide both formalin-fixed (preferred) and frozen tissues for each type of tissue submitted; if it's not possible to submit both, prioritize formalin-fixed tissues.
 - Collect brain tissue, maintaining the structure of the brain architecture for evaluation of viral neuropathology.
 - Sample placental tissue extensively, including full thickness pieces, section of the placental disk, membranes, umbilical cord, and pathologic lesions when possible.
 - Provide 0.5-1.0 cm of autopsy samples of each major organ (heart, lungs, liver, kidneys, skeletal muscle, bone marrow). Sampling of the eyes is highly recommended.
 - Place tissues into sterile containers containing adequate formalin.
 - Store frozen tissues at -70°C until ready to ship.
 - Keep fixed tissues at room temperature until ready to ship.

Serum is the preferred specimen for Zika virus testing. If submitting a specimen other than serum, it is recommended to also collect and submit a serum specimen for the patient.



ZIKA VIRUS TESTING RECOMMENDATIONS

Specimen Shipping:

- Notify the local health department about the suspected case.
- Complete [ODH Lab's Microbiology Submission Form](#) to accompany the specimen(s).
 - Enter "Zika virus" in the Agent Suspected field.
 - Fill in the bubble appropriately in the Specimen Type & Site section.
- Ship serum, cerebrospinal fluid, amniotic fluid, and other body fluids on frozen freeze packs.
- Ship frozen tissues on dry ice.
- Ship fixed tissues at room temperature and separate from specimens requiring freeze packs or dry ice.
- Do not ship specimens for weekend delivery unless otherwise instructed by ODH Laboratory.
- Ship specimens to: Ohio Department of Health Laboratory
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ATTN: Microbiology Labs
8995 E. Main St.
Building 22
Reynoldsburg, OH 43068

- Complete the [Mosquito-borne Illness Case Investigation Form](#) and fax it to IDRS at (614) 525-8890.

Contact Information:

- IDRS
Phone: (614) 525-8888
E-mail: ids@franklincountyohio.gov
- ODH Zoonotic Disease Program
 - Phone: (614) 995-5599
 - E-mail: Zoonoses@odh.ohio.gov
- ODH Laboratory
 - Phone: (888) ODH-LABS
 - E-mail: ODHLabs@odh.ohio.gov