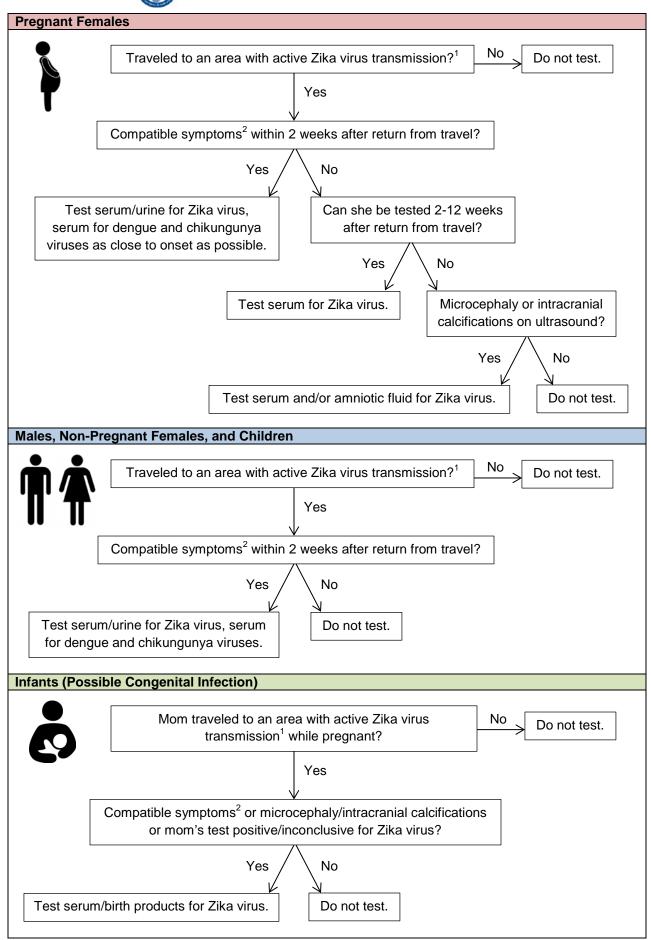


ZIKA VIRUS TESTING RECOMMENDATIONS



¹ Areas with active Zika virus transmission: www.cdc.gov/zika/geo/.

² Compatible symptoms: Onset of one or more of fever, rash, conjunctivitis, arthralgia.

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 0.5 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.
 - o Collect 1.0 mL of cerebrospinal fluid into a tube.
 - o 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.
 - o 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 <u>CDC's Zika website</u>.
 - 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 0.5 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.
 - o 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:

- Complete the CDC's Specimen Submission Form to accompany the specimen(s).
 - o Select "Arbovirus Serology" from the drop-down menu for Test Order Name.
 - Include the date of illness onset and the specimen collect date. Leave the illness onset date blank if the patient was asymptomatic.
 - The healthcare provider can fill his/her information in the Original Submitter section to receive a copy of the results.
 - o If the specimen is being drawn by a different facility, the lab can fill its information in the Intermediate Submitter section to receive a copy of the results.
 - The Travel History section on the second page needs to be filled out with country(ies) traveled to and dates of travel.
 - The Brief Clinical Summary section on the second page needs to be completed with the
 patient's signs and symptoms. If the patient is pregnant and asymptomatic, please note
 that in this section.
 - o In the Comments section at the bottom of the second page, "Zika, chikungunya, and dengue testing requested" can be filled in. Previous arboviral test results for the patient should be noted here as well, including both positive and negative results.
 - The form should be filled out electronically and then printed. If the form cannot be accessed online, it can be printed and filled in by hand.
- Complete ODH Lab's Microbiology Submission Form to accompany the specimen(s).
 - o Enter "Zika virus" in the Agent Suspected field.
 - o Fill in the bubble appropriately in the Specimen Type & Site section.
- Ship serum, cerebrospinal fluid, amniotic fluid, urine, 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 ATTN: Microbiology Labs 8995 E. Main St. Building 22 Reynoldsburg, OH 43068

Contact Information:

ODH Zoonotic Disease Program

o Phone: (614) 995-5599

E-mail: Zoonoses@odh.ohio.gov

ODH Laboratory

o Phone: (888) ODH-LABS

o E-mail: ODHLabs@odh.ohio.gov