



REVISED WISCONSIN TRAVEL-RELATED ARBOVIRUS SURVEILLANCE SPECIMEN COLLECTION AND SUBMISSION INSTRUCTIONS

Specimen Collection - Zika, dengue and chikungunya viruses share common mosquito vectors, and are actively transmitted in overlapping geographic areas. Diagnostic testing for these viral infections can be complicated by cross-reactivity, and requires ample quantity of the specimen(s) to perform confirmatory testing and accurately interpret test results.

For Arboviral antibody testing (IgM, PRNT)

- Collect 5-10 ml of blood in a tube with NO anticoagulant or preservative. **Promptly separate (centrifuge) serum from cells.** Use of serum separator tubes is encouraged. Store the SST tube refrigerated. Submit 2-5 ml of serum transported with a cool pack.
- Collect blood no earlier than 4 days after symptom onset for acute serum testing.
 - Detectable IgM may not be present until 7 days post onset, and typically persists for up to 12 weeks.
- Collect blood from asymptomatic pregnant patients 2-12 weeks after returning from travel to area of Zika virus activity.

For virus detection (PCR, IHC)

- Collect 5-10 ml of blood in a tube with NO anticoagulant or preservative. **Promptly separate (centrifuge) serum from cells.** Use of serum separator tubes is encouraged. Store the SST tube refrigerated. Submit 2-5 ml of serum transported with a cool pack. Collect blood for PCR testing no later than 7 days after symptom onset (day 1-4 is optimal).
- PCR testing for Zika virus can now be performed on urine and amniotic fluid. Collect 10 ml of urine no later than 21 days after symptom onset. Note that the ability of PCR to detect Zika RNA in urine declines on specimens collected >14 days after onset, but a positive result on such a specimen is still possible. Submit a minimum of 1 ml amniotic fluid. Transport to WSLH with cool pack. **A serum specimen must be submitted along with the urine or amniotic fluid specimens.**
- If CSF is obtained, collect ≥ 1 ml of CSF in a tube with NO anticoagulant or preservative. Transport with a cool pack. **A serum specimen must be submitted along with the CSF.**
- Collect formalin fixed and frozen fetal or infant tissues according to CDC guidelines at: www.cdc.gov/zika/hc-providers/tissue-collection-submission.html (Submit to WSLH as described below.)
- Collection of other specimen types can be discussed as needed.

Specimen Submission

Specimens submitted to the WSLH for fee-exempt travel-related arbovirus testing must be pre-approved by a Wisconsin Division of Public Health communicable disease epidemiologist and include the **WSLH Enhanced Wisconsin Travel-Related Arbovirus Surveillance** specimen submission form provided at time of approval. Complete all information on form above *Reason for Testing* section.

- Serum, urine, and CSF specimens should be submitted in sterile screw-capped vials on cold packs using a WSLH kit #22 or equivalent. Specimens should be triple packaged as a Category B Biological Substance (include UN3373 label).
- Transport – Specimens approved for testing by WDHS may be transported to the WSLH by calling Statmedex (763-233-0099) for pick-up.
- Ship specimen(s) and form to: **Wisconsin State Laboratory of Hygiene
465 Henry Mall, Madison, WI 53706**