



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 7 days after symptom onset. 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: <http://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 for pick-up.
- Ship specimen(s) and form to: **Wisconsin State Laboratory of Hygiene
465 Henry Mall, Madison, WI 53706**