Title	Varicella zoster virus (VZV) Specimen Collection and Transport
Short Name	VZV
Specimen Requirements	1. Vesicle fluid/scrapings are preferred, but CSF is also acceptable for PCR and virus isolation (with the exception of CSF for PCR). 2. If collected within 3 days of the rash, suspected lesion swabs are also acceptable for both PCR and virus isolation.
Sampling Materials	1. Viral Transport Media (VTM)-available commercially. Some require refrigeration, others do not — check package insert. 2. Swab - Swab material should be synthetic, i.e., rayon, polyester, or Dacron. Calcium alginate or charcoal-impregnated swabs should not be used, nor should wood-shaft swabs. 3. For collection of vesicle fluid, a 26 or 27-gauge needle attached to a tuberculin syringe is necessary. 4. Sterile containers and collection materials for CSF specimens. 5. Serum/blood collection materials, including red top or SST (serum separator) tubes. 6. Cold packs or dry ice. 7. Shipping boxes/containers with appropriate shipping labels.
Procedural Notes	1. Be sure to properly label the specimen tube with at least the patient's name and date of collection. 2. Check the expiration date on the VTM tube to ensure product is acceptable and will continue to be acceptable once received at the ISDH laboratory. 3. After collection, all specimens should be stored at refrigerator temperature (2-8°C) until shipped. If longer storage is required, place specimens (not serum/blood) in a -70°C freezer (NEVER store, even temporarily, in a regular, -20°C freezer — this temperature will kill virus). Additionally, avoid freeze-thaw cycles, which is also lethal to viruses. 4. Complete a request form for each specimen with the following information: a. Name, birth date, race, and sex of patient. b. Specimen type and date of specimen collection. c. Date of symptom onset. d. Suspected disease agent. e. Complete patient history, travel history, and other relevant information. f. Submitting clinic information-clinic name, address, phone number, fax number, contact name and email address (if available). 5. Special Instructions for Specimen Collection a. Vesicle Fluid: Wipe area with sterile saline. Aspirate fluid from suspected vesicle using a 26-or 27-gauge needle attached to a tuberculin syringe. Rinse syringe immediately with 1-2mL VTM. Place VTM/fluid mixture into the VTM tube. b. Acute serum sample should be collected. c. CSF: Collect at least 2 ml, if possible. d. Lesion Swab: a vesicle or pustule should be unroofed using a sterile beveled hypodermic needle. Using a swab moistened with VTM, scrub the base of the opened lesion with sufficient vigor to ensure that the cells are collected on the swab. Place the swab into the VTM tube. 6. Specimens can be submitted by LimsNet, an online system that will make results available as PDF files the minute they are released at the lab. 7. To get a free LimsNet account established at your facility for electronic submission and results reporting, call the help desk at (888) 535-0011 or email to LimsAppSupport@isdh.in.gov. 8. Alternatively, a totally completed submission form must accompany each specimen. The form to use is: a. Virology (found in the Forms menu) http://www.in.gov/icpr/webfile/formsdiv/35212.pdf
Shipping Instructions	1. Wrap the labeled specimen container with absorbent material and place in a biohazard specimen bag. Be sure to package each patient's specimens individually to avoid cross-contamination. 2. Place the requisition form in the side pocket of the biohazard bag. Never place the requisition form in with the specimen in case the specimen leaks during transit. If the specimen bag does not have 2 compartments, place the paperwork in a separate ziploc bag. 3. Place the specimen(s) in a styrofoam container with sufficient cold packs to maintain 4°C during shipment. For swabs and CSF, if needed, dry ice can also be used if the specimen is frozen and/or transport time may be longer than 24

	hours. If dry ice is used, do not form an airtight seal on the styrofoam container because dry ice releases carbon dioxide gas. a. Note: Serum and whole blood are best transported to the lab at 4°C but can be sent at ambient temperature for same or next day delivery. 4. Place the styrofoam container into a cardboard shipping box, close lid, and seal. 5. Ship or transport by courier, the box compliant with DOT and IATA regulations. a. Ship to: Indiana State Department of Health Laboratories Virology Laboratory 550 W. 16th Street, Suite B Indianapolis, IN 46202
Reporting and TAT	2 - 14 business days. Test Referral. Isolates may be forwarded to the CDC for additional testing.