

TEXAS DEPARTMENT OF STATE HEALTH SERVICES (DSHS)
ENTEROVIRUS 68 (EV-D68) SPECIMEN COLLECTION AND SUBMISSION
INTERIM GUIDANCE
SEPTEMBER 9, 2014

Enterovirus 68 (EV-D68) specimen submission key points:

1. **Specimens may be submitted for EV-D68 testing from patients who meet established criteria (see below).**
2. **Nasopharyngeal (NP) / oropharyngeal (OP) swabs are preferred for EV-D68 testing, but any respiratory specimen may be submitted.**
3. **Each specimen submitted to the DSHS Austin Laboratory for enterovirus testing must have an accompanying G-2V form. Please contact DSHS Laboratory Reporting at (512) 776-7578 if you do not have a G-2V form.**
 - The name and date of birth on the form must match the name and date of birth on the specimen tube.
4. **All specimens must arrive at the DSHS laboratory within 48 hours of collection if refrigerated at 2–8 °C. If specimens will arrive more than 48 hours after collection, the specimens must be frozen at -20 °C.**
 - Include date and time of collection on the G-2V laboratory submission form. Time of collection will be assumed as 12:01am if this field is left blank on the laboratory submission form.
5. **EV-D68 testing is for surveillance purposes only and is not intended for diagnostic use.**

OTHER IMPORTANT INFORMATION

1. Common reasons for specimen rejection include:
 - Unfrozen specimens received at the laboratory more than 48 hours after specimen collection
 - Specimens arriving at ambient temperature
 - Specimens collected with calcium alginate or wooden shaft swabs
 - Specimens submitted in expired medium
 - Broken or leaking specimen tubes
 - Absence of patient identifiers on the specimen and/or the laboratory submission form
 - Mismatch of patient identifiers between the specimen and the laboratory submission form
2. You must correctly complete the Payor Source section of the G-2V laboratory submission form to avoid being billed for specimen handling and testing (see page 2 for detailed information).

SPECIMEN COLLECTION

1. **Specimens may be submitted for enterovirus testing and typing from the following patients:**
 - **Pediatric patients (<18 years of age) admitted to an intensive care unit with severe respiratory illness with symptom onset no earlier than August 1, 2014, who have tested positive for enterovirus or enterovirus/rhinovirus if such testing has been completed**
2. Nasopharyngeal (NP) / oropharyngeal (OP) swabs are preferred for EV-D68 testing, although any respiratory specimen may be submitted.
3. In general, collecting specimens from patients as close as possible to their illness onset maximizes the likelihood of virus recovery/detection.
4. Viral transport medium approved for the transport of enteroviruses should be used for specimen collection.

5. Use sterile, polyester-tipped, plastic shaft swabs and viral transport medium for specimen collection. Dacron or rayon-tipped swabs with a plastic shaft or any other commercially available sterile collection system intended for virus isolation also may be used.

Note: Calcium alginate swabs or swabs with wooden shafts are not acceptable for specimen collection as they may inhibit recovery of the virus.

6. After specimen collection, please tighten the cap on the specimen tube and refrigerate or freeze the specimen immediately.

SPECIMEN STORAGE

1. Refrigerate (2–8 °C) or freeze (-20 °C) specimen vials immediately after collection.
2. Specimens should be stored in an upright position with caps tightened.
3. If collected specimens will arrive at the DSHS laboratory within 48 hours of collection, store at 2–8 °C. If collected specimens will arrive more than 48 hours after collection, freeze at -20 °C. Specimens received by the DSHS laboratory more than 48 hours after collection (including those received cold) will be rejected as unsatisfactory for testing unless those specimens are frozen after collection (recommended at -20 °C), shipped on dry ice, and received frozen by the DSHS laboratory.
4. Ship specimens to the DSHS laboratory as soon as possible after collection. Timely transport to the laboratory will increase the likelihood of recovering the virus from specimens.

SPECIMEN LABELING AND G-2V LABORATORY SUBMISSION FORM COMPLETION

1. Each submitter should have a “master” DSHS G-2V Specimen Submission Form that includes their unique submitter number, name, and address. This master G-2V form should be reserved to make copies for future specimen submissions. If submitters have not yet established a unique submitter number with the DSHS laboratory, they must contact Laboratory Reporting at (512) 776-7578. Laboratory Reporting can also provide current copies of submission forms—including a copy of the new G-2V form—to existing submitters.
2. Ensure that the patient name and date of collection are written on each specimen vial. A corresponding DSHS G-2V laboratory submission form must accompany **each** specimen vial. *The patient name and date of collection on the specimen vial must match the name and date on the corresponding laboratory form.*
3. Fill out the G-2V laboratory form as thoroughly as possible. The following items are required:
 - Section 1, Submitter Information:
 - Submitter/TPI Number
 - NPI Number
 - Submitter name, address, and contact information
 - Section 2, Patient Information:
 - Patient name, date of birth, sex, and full address
 - Date and **time** of specimen collection
 - ICD diagnosis code(s)
 - Section 3, Specimen Source or Type (please check appropriate box or boxes)
 - Section 4, Virology
 - **Check the box labeled “Other” and write “enterovirus 68” or “EV-D68” in the blank space next to “Other”**
 - Section 5, Ordering Physician Information
 - Ordering Physician’s Name and NPI Number
 - Section 6, Payor Source
 - Check the box labeled “IDEAS”.
 - **Note: Submitters who do not complete the form correctly and are billed will not be reimbursed.**

PACKAGING SPECIMENS FOR SHIPMENT

1. **If the specimens will arrive at the DSHS laboratory within 48 hours of the time of collection, specimens can be shipped on cold or freezer packs.** Specimens that arrive at room temperature will be rejected as unsatisfactory for testing. No exceptions will be made for specimens that are unexpectedly delayed in transit.
2. **If the specimens will arrive at the DSHS laboratory more than 48 hours after the time of collection, ship specimens frozen on dry ice. If dry ice is used, a dry ice label should be placed on the outer cardboard box.** Specimens that are shipped on dry ice but are not received frozen by the DSHS Laboratory will be rejected as unsatisfactory for testing.
3. Pack enough coolant (i.e., cold/freezer packs or dry ice) in the shipping box to ensure that the specimens remain at the appropriate temperature until they arrive at DSHS.
4. Follow triple containment rules for specimen shipments (i.e., tightly-closed specimen tube, inside of a leak-proof container typically labeled with a biohazard symbol, inside of a shipping box with Styrofoam liner).
5. Ensure that the tertiary shipping container (i.e., the outer cardboard shipping box) is properly labeled for "Biological Substance, Category B" shipments. The required labels include:
 - UN 3373/Category B Biological Substances label
 - Directional arrows label
 - Submitter's address and contact person's information
 - Shipping address and contact person's information
 - Dry ice label (if applicable)
6. Be sure that the specimen vial (primary container) and the secondary leak-proof container are sealed.
7. Place the primary container (the specimen in the VTM vial) into the secondary container with enough absorbent material to absorb the entire contents if leakage/breakage occurs. Place the secondary container inside the Styrofoam container, which is located inside the shipping box. Place a completed G-2V laboratory form for **each** specimen in the shipment on top of the lid of the Styrofoam box, inside the outer cardboard box. Tape the cardboard shipping box to close it.

SHIPPING SPECIMENS TO DSHS

1. Ship specimens to the DSHS laboratory on Monday through Thursday. **Do not ship specimens to arrive on a weekend or state holiday.**
2. **Ship specimens using overnight mail.**
3. Send specimens to:

Texas Department of State Health Services
Walter Douglass (512) 776-7569
Laboratory – MC 1947
1100 West 49th Street
Austin, TX 78756-3194

QUESTIONS

Please direct questions about specimen collection, shipping, and testing for enterovirus to your local health department.