

Vermont Department of Health Laboratory
195 Colchester Avenue, P.O. Box 1125
Burlington, VT 05402-1125
(802)863-7336 (800)660-9997 (in-state only)

**Instructions for Reporting, Collecting and Shipping Specimens of Suspected Infection
with Ebola Virus Disease (EVD)**

This document contains detailed information on initial notification, collection and shipment of clinical specimens to the Vermont Department of Health Laboratory (VDHL).

The kit should contain:

- Category A Infectious Substance Shipping Container
 - Outer Box
 - Polypropylene Secondary Container
 - Bubble Wrap
 - Hazard Label
 - Absorbent Strip
 - Refrigerant (e.g. Gel-Pak) - **Freeze Gel-Pak upon kit receipt**
 - Ebola Specimen Collection Instructions (Micro 496)
 - VDHL Shipper's Declaration form (Micro 1044)
 - VDHL Specimen Requisition form (Micro 220)
 - VDHL Chain of Custody form (Micro 1090)
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- Consultation and pre-authorization with Epidemiology **must** be obtained before specimens will be accepted at the VDH Laboratory for referral to a laboratory approved to perform the Ebola Zaire (EZ1) rRT-PCR (TaqMan®) Assay. Please contact the Epidemiology Division at 802-863-7240 or 1-800-640-4374 (VT only). Epidemiologists can be reached at these numbers 24 hours a day, 7 days a week.
 - Prior to calling Epidemiology, collect the following information: Name, date of birth, travel history (including dates, locations, and mode(s) of travel), signs and symptoms, and current patient status.
 - Upon approval for testing by the CDC, guidance will be provided to the submitter by the VDHL, including the location of the Ebola approved testing laboratory and any requirements that laboratory may have for testing (e.g. specimen collection forms).

Acceptable Specimen Types

Specimen collection guidance is available at: <http://www.cdc.gov/vhf/ebola/pdf/ebola-lab-guidance.pdf>

1. A minimum volume of 4mL whole blood in **plastic** collection tubes can be used to submit specimens for testing for Ebola virus. Do not submit specimens in glass containers or in heparinized tubes.
2. Whole blood preserved with EDTA is preferred.
3. Whole blood preserved with sodium polyanethol sulfonate (SPS), citrate, or with clot activator is also acceptable.

Specimen Collection and Shipment

- Ebola virus is detected in blood only after onset of symptoms, most notably fever. It may take up to three days after onset of symptoms for the virus to reach detectable levels. Virus is generally detectable by real-time RT-PCR between 3 to 10 days after onset of symptoms.
- Ideally, specimens should be taken when a symptomatic patient reports to a healthcare facility and is suspected of having an Ebola virus exposure. However, if the onset of symptoms is less than three days after potential exposure, a subsequent specimen will be required to rule out Ebola.

“Triple” (primary receptacle, watertight secondary packing, and durable outer packing) packaging is required for a biological agent of human disease or materials that are known or suspected of containing them.

1. The VDHL Chain of Custody form (Micro 1090) should be completed at the time of specimen collection and for each transfer of the specimen between staff, laboratory locations and storage locations. Refer to Micro 1090 for instructions.
2. Label the primary container (blood tube) with the patient information and date of collection. Collect the blood specimen into the primary container. Do **not** separate and remove serum or plasma from the primary collection container. Specimens should be immediately stored at 2-8°C until ready to transport.
3. When ready to ship, wrap each primary container with bubble wrap. Place the absorbent material at the bottom of the Polypropylene secondary container. Place the primary container(s) into the secondary container. Place extra bubble wrap if necessary into secondary container to fill any voids. Place cold Gel-Pak into the secondary container next to the specimen. Screw the lid onto the secondary container.
4. Place the secondary container into the outer fiberboard shipping box. Fill out the VDHL requisition form (Micro 220) and insert the form in the outer container. Close the fiberboard shipping box and seal with shipping tape.
5. Fill out Micro 1044, VDHL Shipper’s Declaration form (note: this form should only be used to transport specimens between your facility and the VDHL only). Include the following information:
 - Name, address, and phone number of shipper
 - Name, address, and phone number of the consignee
 - Enter the page number and total number of pages
 - UN number, which is **UN2814**
 - Proper Shipping Name which is **“Infectious substance, affecting humans”**, as well as the technical name of the suspected agent(s) in parenthesis which is: “Suspect Category A Infectious Substance”.
 - Class/Division number, which is **6.2**
 - Quantity and Type of Packaging - List the net weight of each package, the number of packages, and the type of packaging
 - Example:** one fiberboard box with a 5 mL sample should be written “5 mL packed in 1 fiberboard box”
 - Emergency Telephone Number: add an emergency telephone number that that is monitored 24 hours per day
 - Name and Title of Signatory: shipper must print or stamp a complete name and title
 - Place and Date: town/city and the date of shipment
 - Signature of person sending package
6. Write the name and address of the shipper and consignee on the box.
7. Affix the Class 6 Infectious Substance diamond label to the outside of the shipping box. Don’t write the technical name of the item being sent (ex. Suspect Category A Infectious Substance) on the box. The technical name should only be written on the Shipper’s Declaration form.
8. Affix **two copies** of the Shippers Declaration form to the top of the box.
9. Call the VDHL at 802-863-7336 or 800-660-9997 to arrange for a courier to pick up the specimen. VDHL business hours are 7:45am – 4:30pm Monday through Friday. If a courier is required after business hours, including weekends and holidays, please contact the Epidemiology Division at 802-863-7240 or 1-800-640-4374 (VT only). Epidemiologists can be reached at these numbers 24 hours a day, 7 days a week and VDHL staff will be contacted to arrange for a courier pick-up.

All packages must comply with current DOT shipping regulations. For hazardous materials regulations please refer to the Department of Transportation Website <http://www.phmsa.dot.gov/>.