Frequently Asked Questions regarding Ebola Virus Testing

1. Where can I find North Carolina’s latest guidance?


2. What is the process for submitting specimens to NCSLPH?

   Refer to the latest guidance at https://epi.dph.ncdhhs.gov/cd/diseases/hemorrhagic.html and contact the Communicable Disease Branch 24/7 number at 919-733-3419 to determine if testing is warranted, then to discuss laboratory testing and control measures.

3. What are the testing times for which Ebola is conducted at the NCSLPH? Is there a cut off on Fridays for weekend testing?

   Testing for Ebola Virus at the NCSLPH is conducted on an emergency response basis 24/7 when accepted after consultation.

4. How many and what type of samples do I collect and send?

   The preferred specimen is whole blood preserved with EDTA. For adults, collect two (2) plastic EDTA (purple-top) tubes with 4 ml of whole blood in each, labeled with patient name/ID#, date of birth and collection date. NCSLPH may send the 2nd tube to CDC. Glass tubes will not be accepted. (For pediatric samples, collect two (2) pediatric-sized collection tubes with 1 ml each.) Acceptable specimens also include serum, plasma and urine. Do not separate and remove serum or plasma from the primary collection container. If collecting urine, it will only be tested if submitted alongside a blood specimen from the patient. Urine should be collected in a sterile specimen cup with minimum volume of 3ml. If the Person Under Investigation’s (PUI) symptoms have been present for less than 3 days, a second sample collected 72 hours after onset of symptoms is required to definitively rule out Ebola.

5. What is the Packaging and Shipping requirement for Ebola Virus test samples?

   Packaging of specimens should follow packing instruction 620, IATA guidelines for Category A, which utilizes a triple packaging system (https://www.cdc.gov/vhf/ebola/laboratory-personnel/shipping-specimens.html).
a. **Primary container** must be leak-proof and sealed, surrounded by absorbent material and cushioned. Example: purple top tube (glass tubes prohibited), sealed with parafilm and wrapped by absorbent material, placed inside sealed biohazard zip lock bag and surrounded by bubble wrap.

b. **Secondary container** must also be leak-proof and can be rigid or flexible, also contain absorbent material, and labeled with a Biohazard label. **NOTE:** Specimens for Ebola testing require transport on cold packs. We recommend using a small cold pack sealed inside a leak-proof zip lock baggie inside the secondary container. There should be room in the Category A shippers for this small cold pack as well as the bubble wrap provided.

c. **Outer package** must be rigid and have the UN certification stamp on the box. Ensure the secondary container will not be moving around inside the outer box. Must have itemized list of contents between secondary and outer packaging such as our testing requisition form.

d. Outside of package **must** be labeled with the following: UN Certification stamp (printed on box), infectious substance hazard label, UN 2814 “Infectious Substance, Affecting Humans” (printed on box), Shipper name and address of where sample originated, Responsible Person (Shipper) and 24/7 phone, Consignee name and address of where sample is going, Orientation arrows (printed on box).

e. Must include a properly filled out Shippers Declaration form for transport of **ALL** Category A samples, as well as a BTEP test requisition form, CDC DASH form, and Viral Special Pathogens Branch Diagnostic Specimen Submission form (placed between secondary and outer package).

6. **How would Ebola specimens be transported to the NCSLPH?**

   First, the NC State Courier system will **NOT** be used to transport potential Ebola specimens. The most rapid method must be used. If you have an immediately available courier certified to transport Category A agents, use it. Otherwise, the NC SLPH-BTEP unit will coordinate with a certified commercial courier.

7. **What is the expected Turnaround Time from receipt of an Ebola Virus specimen to completion of results?**

   From receipt of specimens, the estimated turnaround time for presumptive results is 6 hours for a single specimen and up to 24 hours for multiple specimens. Specimens tested at NCSLPH may be forwarded to CDC for more extensive laboratory testing.

8. **What type of personal protective equipment (PPE) do laboratorians working with clinical specimens from patients suspected of having Ebola need to wear?**

   Clinical laboratories should employ regular use of PPE following Universal Standard Precautions where all patient samples are treated as infectious. At a minimum, this should include gloves, impervious gowns, mask and goggles or face shield. NCSLPH recommends conducting a site-specific risk assessment.
Remember, a biological safety cabinet (BSC) offers the first line of defense against any aerosolization or spill. If one is not available, a splash guard/shield should be used. For further information, please see: http://www.cdc.gov/vhf/ebola/healthcare-us/laboratories/specimens.html and https://www.cdc.gov/vhf/ebola/laboratory-personnel/safe-specimen-management.html.

9. How do I obtain the CDC 50.34 DASH form? I am having trouble opening it.

Here is the link to the DASH form and instructions: https://slph.ncpublichealth.com/forms.asp. If you choose “Test order name” (Ebola identification), the “Test order code” will self-populate.

Please note the CDC 50.34 DASH form MUST be filled out electronically for CDC submission. Print completed form and submit with samples.