



Standard Operating Procedure for Collecting and Transporting Blood Samples from Suspect or Confirmed Ebola Patient

1. Drawing blood from a suspected or confirmed Ebola patient

a. Person drawing blood must be:

- i. Trained in safe blood sampling
- ii. Wearing full Personal Protective Equipment with double gloves
- iii. Do **NOT** recap needles under any circumstances!
- iv. Ensure sample is appropriately labeled with unique patient identifiers: name, address, contact telephone number, Facility, LGA, State, date of collection
- v. Follow instructions on packaging and decontamination
- vi. Ensure that all materials is prepared, including a biohazard box for discarding needles and other contaminated items
- vii. Have someone to supervise the procedure and help handling the tubes

2. Transport of Biological Samples to Laboratory in triple packaging system

- a. All blood and other samples should be considered highly infectious and should be triple packed with decontamination at each step.
 - i. Triple package consists of inner watertight container containing the sample, a second watertight box containing enough absorptive material surrounding the first box in order to absorb all the fluids of the sample in case of linkage of first box and finally an outer package that protects the first and second box from physical damage and water.
 - ii. Specimen data forms and other specimen information should be attached to the outside of the second box.
- b. This applies for transport of all samples collected.

3. Procedure of drawing blood from suspected or confirmed Ebola patient

- a. Anchor the vein by holding the patient's arm and placing a thumb **BELOW** the place where you want to place the needle.

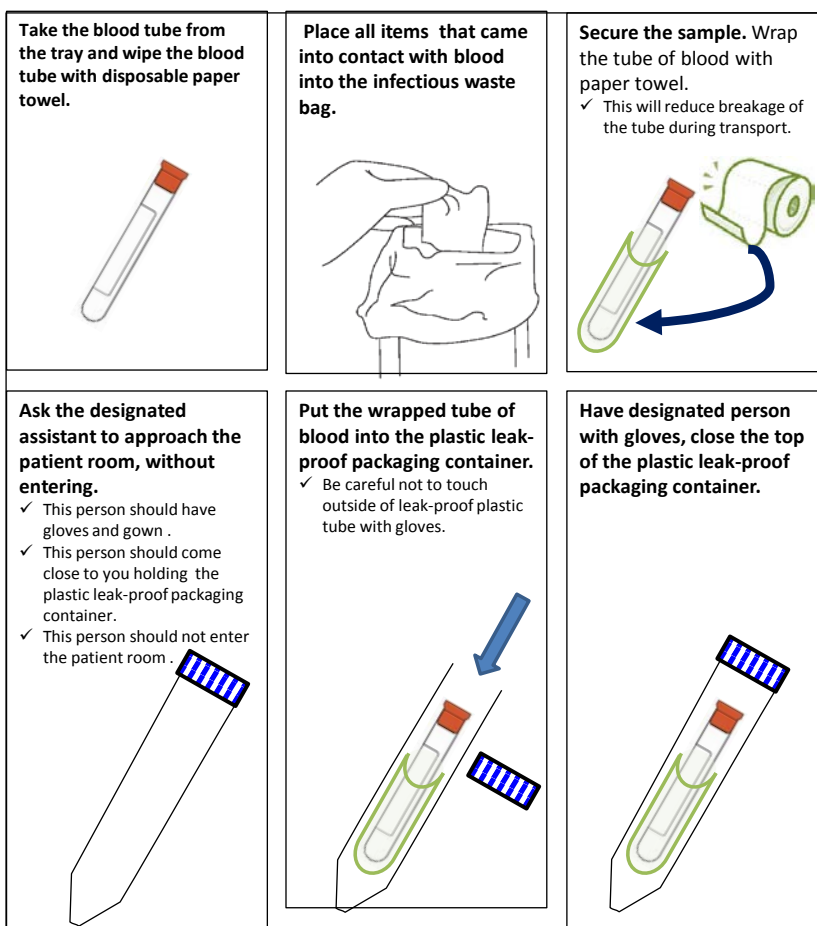


- b. **DO NOT** touch the cleaned site.
- c. **DO NOT** place a finger over the vein to guide the needle
- d. A minimum of 5 ml of blood should be collected for each patient.
- e. After removing the blood collection tube from holder, immediately put holder with needle into sharps container (do NOT recap)
- f. Put items that drip blood or have body fluid on them into the infectious waste bag.
- g. The blood holder tray and rack will need to be disinfected after use.

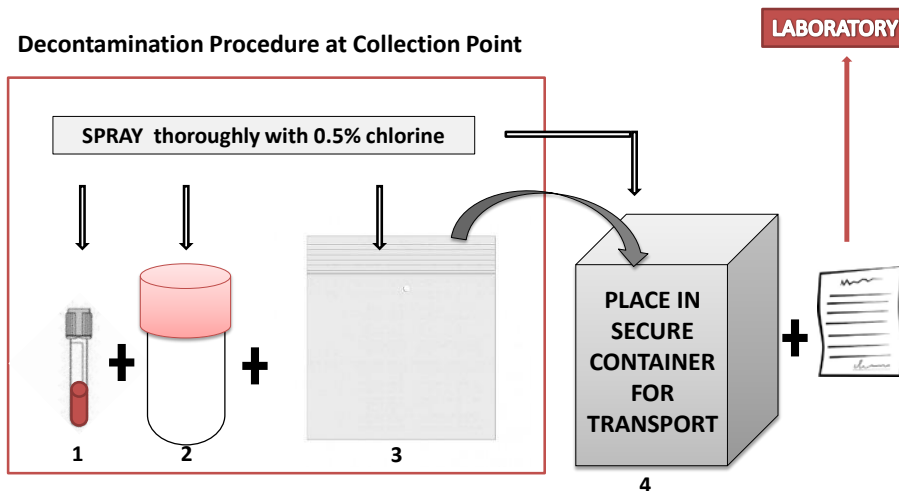
4. Triple packaging

- a. Collect the blood safely in the blood collection tube (5 – 10 mls of blood). No blood separation is required. Only 1 blood sample is required
- b. Place tube inside a labeled leak-proof container with absorbent material
- c. Place this container into a zip lock bag
- d. At each step, spray throughout with 0.5% chlorine solution
- e. Put the zip lock bag inside a sturdy secure container with absorbent material (i.e. made of plastic or styro foam, but not glass).
- f. Decontaminate the secure container and place it in a ice or cool box (at 4⁰C) and transport to the laboratory with accompanying documents. Do not freeze.
- g. The staff should be made aware that they are handling infected samples.

5. Illustrations



Example of triple packaging



Standard precautions must be adhered to by personnel collecting samples from a suspected or confirmed case of Ebola virus disease, Lassa fever and other VHF. The laboratory must be contacted by the clinician before samples are collected from the patient to ensure that appropriate and adequate samples are collected in appropriate containers, packaged and transported under appropriate conditions to the laboratory.

The designated laboratories include

- a. Virology Laboratory, Lagos University Teaching Hospital, Idi-araba, Lagos Nigeria – Prof S.A. Omilabu Tel 08066331053; 08023119431. omilabusa@yahoo.com
- b. National Lassa Fever Research and Control Institute, Irrua, Edo State, Nigeria. - Dr. Tobin
Email: asogun2001@yahoo.com Tel: 08034869948

The designated laboratories must be informed before collection and transportation of samples to the laboratory. The transportation to the laboratory must be in compliance with the Transport of Dangerous Goods regulations. Advice should be sought from the laboratory before shipment of samples and shipment must be planned and coordinated by the State Rapid Response Team, in close consultation with the Chief Consultant Epidemiologist. The State Ministry of Health (SMoH) in collaboration with the NCDC-FMoH, shall be responsible for the shipment of samples to the designated laboratory.