## How to safely ship human blood samples from Lassa cases within a country by road, rail and sea

Interim Guidance February 2018

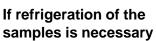


### Step 1: Before handling the sample, prepare all shipping equipment

#### Step 1a: Manage logistics ☐ Identify the name and telephone number and/or e-mail of 1) responsible person /emergency contact at the National Reference Laboratory (this person should be available 24 hours a day until shipment arrives), and 2) lead epidemiologist /medical officer at the Ministry of Health ☐ Notify National Reference Laboratory and the lead epidemiologist / medical officer that the sample shipment will be coming ☐ Verify schedule / timetable for the company transporting the sample Step 1b: Assemble equipment for packing samples Packing **Shipping / Transporting** □ Absorbent material in ☐ Receiver's name, address and sufficient quantity to absorb telephone number the entire liquid content, ☐ Epidemiological questionnaire or lineshould the primary list which includes patient name, sex, container(s) leak ■ Inner lining age (birthdate), clinical information, ■ Leak-proof secondary symptoms, date of onset, date container specimen collected, type of sample □ Rigid shipping box ☐ Laboratory form or letter describing the main epidemiological and clinical

- Cushioning material, e.g. bubble wrap
- ☐ Tape to seal the outer package (if required)





required

■ Waterproof marker

- □ Styrofoam container
- ☐ Frozen ice pads



findings and the lab tests that are





#### **Step 1c: Locate the sample**

Quick Tips for Category A shipments (infectious substances that can cause permanent disability, life-threatening or fatal disease when exposed to healthy people or animals)

- ✓ Ensure the primary and secondary containers are leak-proof
- ✓ Blood collection tubes in a sealed plastic bag or a screw-capped rigid tube can constitute a leak-proof primary container
- ✓ Do not place any sharps in your package: no needles, no cutters, no blades
- ✓ Shipping packages can be reused; but the packaging needs to be appropriately disinfected
- √ The minimal dimensions to ship a Category A package is 10cm x 10cm x 10cm
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- ✓ Remember that training to ship Category A samples is a legal requirement and must be renewed every 2 years

### Step 2: Prepare the sample

- ☐ If the sample is in a plastic leak-proof primary container proceed to Step 3
- ☐ If sample is not in a plastic leak-proof primary container follow steps 2a – 2h



## Step 2a: Put on a gown, face protection and gloves (over cuffs)

✓ See WHO document "How to safely collect blood samples from persons suspected to be infected with highly infectious blood-borne pathogens"



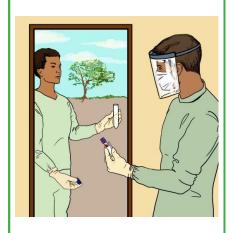
# Step 2b: Protect the sample from breaking during transport by wrapping the tube of blood in a paper towel or cushioning material.

✓ Do not wipe sample collection tubes with disinfectant. Use disposable paper towel only.



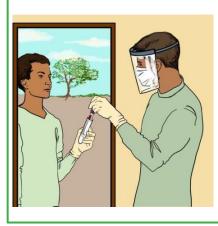
# Step 2c: Ask a designated assistant to approach you with the unscrewed plastic leak-proof primary packaging container

✓ This person should have gloves on



## Step 2d: Place the wrapped tube of blood into the plastic leak-proof primary packaging container

✓ Be careful not to touch the outside of the plastic leakproof primary packaging container tube with contaminated gloves



# Step 2e: Have the designated, gloved assistant tightly close the plastic leak-proof primary packaging container

✓ Disinfect with a disinfectant the outer side of the plastic leak-proof packaging



## Step 2f: Both persons should remove their personal protective equipment

✓ See WHO document "How to safely collect blood samples from persons suspected to be infected with highly infectious blood-borne pathogens"

Step 2g: Put contaminated items into an infectious waste bag for destruction

### Step 2h: Both persons should perform hand hygiene

✓ Duration of the entire procedure: 40-60 sec



### Step 3: Package the sample

## Step 3a: Prepare the rigid shipping box by inserting the inner lining into it



### Step 3b: Open the secondary leak-proof container

✓ Choose the size of the container to match the number of samples being shipped



### Step 3c: Insert the absorbent material

✓ There should be enough material to absorb all contents in primary container



## Step 3d: Wrap the primary container with cushioning material

✓ If packaging more than one sample, wrap each primary container individually with the bubble wrap to prevent breakage



Step 3e: Place the primary container(s) into the secondary container



Step 3f: Close the secondary container



### Step 3: Package the sample

Step 3g: If refrigeration is not necessary, place the secondary container into the lined rigid shipping box and proceed to step 3j.



### If refrigeration is necessary

3h. Place the secondary leak-proof container into a styrofoam container and surround with ice packs



3i. Place styrofoam container into the rigid shipping box



Step 3j: Put laboratory form / letter and epidemiological questionnaire into an envelope

Step 3k: Put laboratory form / letter and epidemiological questionnaire into the rigid shipping box

- ✓ If no refrigeration is needed, place the laboratory form/letter and epidemiological questionnaire inside the box
- ✓ If refrigeration is needed, place the form/letter on the outside of the styrofoam container so that moisture will not destroy

Step 3I: Close the top of the box





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