

Guidelines for collection, storage and transportation of samples from suspected cases of Ebola Virus Disease (EBVD)

From whom the samples are to be collected?

The samples should be collected from any person ill or deceased who has or had fever with acute clinical symptoms and signs of hemorrhage, such as bleeding of the gums, nose-bleeds, conjunctival injection, red spots on the body, bloody stools and/or melaena (black liquid stools), or vomiting blood (haematemesis) with the history of travel to the affected area.

OR

Any person (living or dead) having had contact with a clinical case of EBVD and with a history of acute fever.

Collection, packaging and transportation of samples

As Ebola virus is classified as risk group 4 virus and hence the clinical samples should be collected using all universal precautions and handled in specially-equipped, high biosafety level laboratories (BSL 3 plus or 4).

What sample/s is to be collected?

- Ante-mortem: Blood sample: 4ml :Serum/Plasma
- Postmortem: Tissue sample (liver, spleen, bone marrow, kidney, lung and brain)

How to collect the samples?

Samples should be collected with all biosafety precautions (wearing gloves, gown, eye-shield) and should be accompanied with detailed history of patient on the performa which can be obtained from the testing laboratory. Before dispatching the sample disinfect the outer surface of container using 1:100 dilution of bleach or 5% Lysol solution.

Bold labeling of “**Suspect Ebola**” on all vials

How to pack and transport the sample?

Sample Packaging and Transportation

Sample should be safely packed in “Triple container” packing and should be transported under cold chain to the reference laboratory with prior intimation. However, in the areas where obtaining such container is difficult the samples can be sent as follows:

- The case sheets with complete information about the samples should be completely filled in proforma (separate sheet), available at NCDC/NIV and provided along with the samples.
- The blood sample [Serum or plasma or blood in EDTA] should be kept in screw cap plastic vials, with proper label. Label should have name, Hosp number/ID number, age

and date of collection. Samples vials should be labeled with bold letters “Suspect Ebola” so that they are handled carefully and appropriately after receiving in the lab.

- The sample containing vials should be kept in good quality plastic bags which should either be sealed by heat or tied with rubber bands so that inside material, if leaks, should not come out of the bag.
- This plastic bag should be placed in another plastic container which should be sealed with adhesive tape. This carrier should then be placed in another plastic bag sealed with rubber bands and be placed in a thermocol or vaccine carrier containing ice.
- If plastic container is not available then good quality of double plastic bags can be used.
- The case sheets with complete information should be placed in a plastic bag or envelop and be pasted outside of the thermocol or vaccine container.
- Person handling the sample should wear gloves and a gown to avoid direct contact with the infectious material. After completing the packing of samples, person should thoroughly wash hand with soap and water.
- Before dispatching the container, Bleach can be used for disinfection. A 1:100 dilution of bleach or 5% Lysol solution should be used to clean the outer surfaces of the container.

Where the samples should be transported?

Samples should be sent to the following laboratories under cold chain with prior intimation:

- National Institute of Virology, Pune
- National Centre for Disease Control, Delhi