

# Guidance for Collection, Transport, and Submission of Specimens for Ebola Virus Testing in the United States

## NOTIFICATION & CONSULTATION

Hospitals should follow their state and/or local health department procedures for notification and consultation for Ebola testing requests.

### WHEN SPECIMENS SHOULD BE COLLECTED FOR EBOLA TESTING



**Ebola virus is detected in blood** only after the onset of symptoms, usually fever. It may take up to 3 days after symptoms appear for the virus to reach detectable levels. Virus is generally detectable by real-time PCR from 3 to 10 days after symptoms appear.

**Ideally, specimens should be taken** when a symptomatic patient reports to a healthcare facility and is suspected of having an exposure to Ebola. However, if the onset of symptoms is <3 days, a later specimen may be needed to completely rule-out Ebola virus, if the first specimen tests negative.



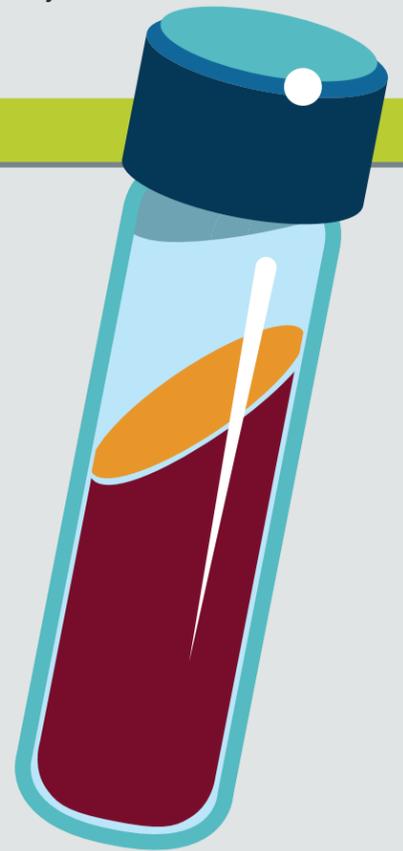
### PREFERRED SPECIMENS FOR EBOLA TESTING

**A minimum volume of 4 mL** of whole blood preserved with EDTA is preferred but whole blood preserved with sodium polyanethol sulfonate, citrate, or clot activator can be submitted for Ebola testing.

**Specimens should be shipped at 2-8°C** or frozen on cold-packs. Do not submit specimens in glass containers to CDC. Do not submit specimens preserved in heparin tubes.



**Specimens other than blood** may be submitted after consult with CDC.



### DIAGNOSTIC TESTING FOR EBOLA VIRUS

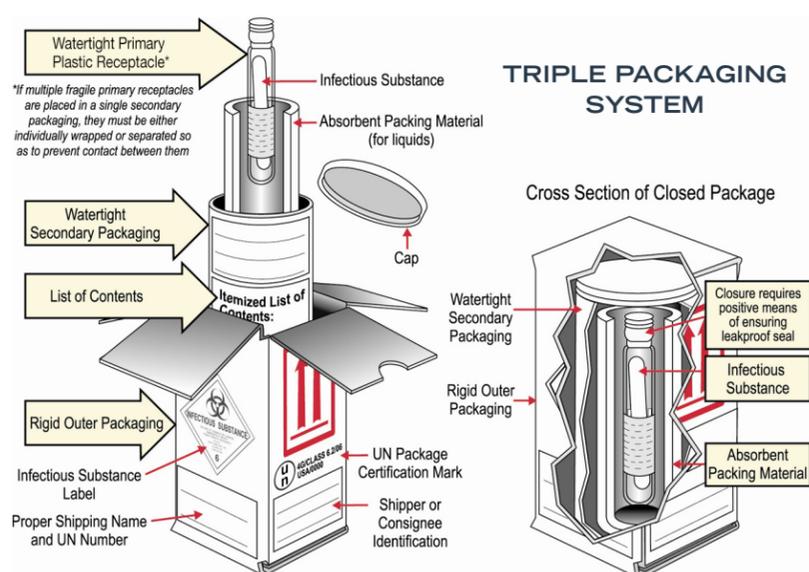
**Real-time PCR testing for Ebola virus** is available at more than 50 Laboratory Response Network (LRN) laboratories located throughout the United States. LRN laboratories are currently using an FDA-approved Emergency Use Authorization assay to detect the Ebola virus (species *Zaire ebolavirus*). Samples that test positive using this assay are considered presumptive positive for Ebola Zaire RNA by real-time PCR and should be submitted to CDC for additional evaluation.

### TRANSPORTING SPECIMENS WITHIN THE HOSPITAL / INSTITUTION



**In compliance with 29 CFR 1910.1030**, specimens should be placed in a durable, leak-proof secondary container for transport within a facility. To reduce the risk of breakage or leaks, do not use any pneumatic tube system for transporting suspected Ebola virus specimens.

### PACKAGING & SHIPPING CLINICAL SPECIMENS



**Specimens collected for Ebola virus testing** should be packaged and shipped without attempting to open collection tubes or aliquot specimens.

**Specimens for shipment** should be packaged following the basic triple packaging system that consists of a primary sealable container wrapped with absorbent material, secondary container (watertight, leak-proof), and an outer shipping package.

**State guidelines may differ and state or local health departments should be consulted before shipping.** Ebola virus is classified as a Category A infectious substance by the Department of Transportation (DOT). Specimens from persons under investigation for Ebola or from patients confirmed to have Ebola virus disease should be packaged and shipped as Category A infectious substances.

**Packing and shipping Category A infectious substances** must be performed by people trained and certified in compliance with DOT or International Air Transport Association requirements. For guidance on packaging and shipping, refer to [Guidance for Collection, Transport and Submission of Specimens for Ebola Virus Testing in the United States](#) and the DOT Hazardous Materials Information Center at 1-800-467-4922.

INFORMATION ON SHIPPING & TRACKING IS AVAILABLE AT

[www.cdc.gov/vhf/ebola/healthcare-us/laboratories/index.html](http://www.cdc.gov/vhf/ebola/healthcare-us/laboratories/index.html)