

MA Public Health Laboratory Frequently Asked Questions

Ebola virus
November 25, 2015

William A. Hinton State Laboratory Institute, 305 South Street, Jamaica Plain, MA 02130

Note: All information in this fact sheet is subject to update at any time. Updates will be posted as new information warrants.

Introduction

To provide clinical laboratory support and guidance for diagnostic testing of a suspect case of hemorrhagic fever due to Ebola virus disease (EVD), the MA State Public Health Laboratory (MA-PHL) at the Hinton State Laboratory Institute includes guidance herein for sample types, specimen submission forms, and packaging & shipping of specimens. Any suspect case of EVD or individual identified as having potential contact with a case of EVD must first be immediately reported to the local board of health or health department, as well as, MA DPH. Consult current [CDC travel advisories](#).

What criteria are currently used for a patient under investigation (PUI) for Ebola Virus Disease (EVD)?

Clinical criteria: includes fever of $>100.4^{\circ}\text{F}$, and additional symptoms such as severe headache, muscle pain, vomiting, diarrhea, abdominal pain, or unexplained hemorrhage, **AND**

Epidemiologic risk factors: within the past 3 weeks before the onset of symptoms, such as contact with blood or other body fluids of a patient known to have or suspected to have EVD; residence in—or travel to—an area where EVD transmission is active; participation in funeral and burial rituals, or direct handling of bats, rodents, or primates from disease-endemic areas. Refer to the [CDC website](#) for current travel-related info.

What types of specimens should I collect for Ebola diagnostic testing at the MA-PHL?

Specimen type(s) approved for FDA Experimental Use Approval (EUA) Ebola PCR: Draw two plastic tubes of whole blood ($\geq 4\text{mL}$) preserved with EDTA (purple top) or plasma ($\geq 4\text{mL}$) preserved with EDTA (white top). Triple package at 4°C for courier pickup by MA-PHL.

Specimen type(s) for Ebola serology: Specimens other than blood may be submitted following a CDC consult (770-488-7100). Do not centrifuge, open collection tubes, aliquot specimens, or submit specimens in glass containers or heparin (green) tubes. Triple package at 4°C for courier pickup by MA-PHL.

What is the test turnaround time for the MA-PHL Ebola PCR test?

A presumptive PCR result indicating the presence or absence of Ebola Zaire RNA will be reported in < 4 hours from specimen receipt. A duplicate sample may be simultaneously shipped to the CDC for other comprehensive testing. CDC typically reports results within 24 hours of receipt.

What specimen submission forms should I use to submit a specimen to the MA-PHL?

Standard labeling should be applied for each specimen (i.e., two identifiers). Use the [MA-PHL specimen submission form](#) and fill in “Ebola PCR” as the test request.

Should routine testing of specimens be disrupted or discontinued?

No. Consistent with CDC guidelines, DPH recommends that clinical facilities continue to provide routine testing of patient samples as long as strict adherence to proper PPE usage is followed. Following MA-PHL’s presumptive Ebola results, CDC and state health officials will consult with the healthcare personnel to answer specimen handling /testing specific to the patient’s needs and facility capabilities. The [CDC website](#) has detailed information on how US clinical laboratories can safely manage routine testing of specimens from patient under investigation (PUI) for Ebola virus disease.

How should the sample be packaged for courier to the MA-PHL?

Specimens from a suspect patient must be packaged as a Category A agent. The submitter must contact MA-PHL staff directly for a packaging consultation (24/7) at 617-590-6390 prior to submission of samples for Ebola diagnostic testing. Specimens collected for EVD testing should be packaged and shipped without attempting to open collection tubes or aliquot specimens. [Click here](#) for details for packaging. **Note:** clinical labs should maintain the capability for at least one laboratory staff member to be certified to package and ship Category A agents.