

TO: Local Health Departments, Regional Offices of the Illinois Department of Public Health (IDPH), Infection Control Professionals, Infectious Disease Physicians, Hospital Laboratories, Laboratory Directors, Sentinel Laboratories

FROM: Bernard T. Johnson
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SUBJECT: Updated Guidance for Clinical Labs Managing Specimens from Patients Under Investigation (PUI) for Ebola Virus Disease (EVD)

The Illinois Department of Public Health (IDPH) Division of Laboratories is issuing updated guidance related to authorization and submission of laboratory specimens from Patients Under Investigation (PUI) for Ebola Virus Disease (EVD). IDPH has recently implemented the Ebola Zaire (Target 1) Real-Time – Polymerase Chain Reaction (RT-PCR) CDC Assay. This test is now available in the IDPH Laboratory located in Chicago. The following provides an overview of EVD PCR testing, the process to request a test, how to submit specimens for testing and how results will be provided.

Overview of RT-PCR testing for Ebola Virus Disease:

- PCR testing for EVD is available at the IDPH laboratory.
- Testing will **not** be performed without CDC and IDPH consultation and authorization.
- Testing reagents are limited and CDC must be consulted on every request to use the test.
- Ebola virus can be detected in blood only after onset of symptoms, most notably fever; however, it may take up to 3 days post-onset of symptoms for the virus to reach detectable levels. The assay is not considered useful for asymptomatic patients.
- If EVD is suspected and a blood specimen is collected **≤3** days post-onset of symptoms, a subsequent specimen may be required for testing to completely rule out Ebola virus infection.
- Collect two lavender top blood tubes containing whole blood preserved with EDTA (minimum volume of 4mL each). Collect blood in plastic tubes only. Do not collect in glass tubes. Do not centrifuge specimens. Store specimens at 4C.

To request PCR testing for Ebola Virus Disease:

- Hospitals and health care providers should contact their local health department to discuss testing. If the local health department can not be reached, submitters should contact the IDPH Division of Infectious Diseases. (217-782-2016)
- Local health departments (LHD) should contact the IDPH Division of Infectious Diseases for a consultation. Contact the after-hours duty officer through the Illinois Emergency Management Agency, if necessary. (800 782-7860)
- If the consultation between the LHD and IDPH warrants additional follow-up, Infectious Diseases will contact the CDC Emergency Operations Center to discuss test authorization.
- If testing at CDC is authorized, IDPH Division of Infectious Diseases and Division of Laboratories will work with the submitter on submission of specimens.

Submitting specimens for testing:

- **Do not** ship specimens to IDPH without prior authorization.
- When considering shipment for EVD testing to the IDPH laboratory, please call IDPH laboratory staff to discuss the submission process.
- IDPH laboratory staff will provide specimen transport instructions and submission form completion information to the submitter at the time testing is authorized. The phone number for the IDPH Laboratory in Chicago is 312-793-4760.
- All shipments to the IDPH laboratory must meet Category A Substances shipping requirements.
- The IDPH Division of Laboratories offers web-based Infectious substances shipping training at <https://i.train.org>. The training is free and accessible on-line.
- The IDPH Division of Laboratories does not supply Category A shipping supplies. These shipping supplies are readily available through commercial sources. (Safe-T-Pak, Fisher Scientific, etc)
- The Division of Laboratories strongly encourages hospitals and laboratories to review the Category A shipping requirements as part of their preparedness efforts.
- Additional information regarding guidelines for shipping infectious substances is available at this IDPH website: http://www.idph.state.il.us/about/laboratories/manual/Instructions/Infectious_Category-A.pdf

Results from Ebola Virus Disease testing:

- All results from IDPH, either presumptive positive or negative, will require additional consultation with CDC and confirmation testing by CDC. CDC will provide guidance to IDPH regarding how presumptive results should be used clinically, epidemiologically and for infection control purposes.
- Results will be provided to submitters by FAX as soon as they are available.
- Supplemental testing may be performed on specimens referred to CDC at their discretion.
- Viral culture is considered the confirmatory test and is only available at CDC. This testing is performed in highly controlled laboratory environments.
- IDPH Division of Laboratories will provide CDC confirmatory test results to the submitter, local health department and the Communicable Disease Control Section by FAX as they are available.

Contact Information for IDPH

The IDPH Division of Laboratories can be contacted during business hours at the following numbers:

- Chicago: 312-793-4760
- Springfield: 217-782-6562
- Carbondale: 618-457-5131

The IDPH Division of Infectious Diseases can be contacted during business hours at 217-782-2016. **To reach IDPH personnel during Holidays and non-business hours, please contact the Illinois Emergency Management Agency at 800-782-7860. Ask for the IDPH duty officer.**