

Your Laboratory Ebola Plan

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Ebola: Laboratory Update

How is WSLH sharing information with labs?

- Routine updates via WI Laboratory Messaging System
- Posting of up-to-date general guidance and links on our website
<http://www.slh.wisc.edu/clinical/diseases/ebola-virus-information-for-lab-professionals/>
- Facilitating information sharing on the **WCLN listserv**
- Planning one or more interactive audio conferences for WCLN members

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Ebola: Laboratory Update

Testing for Ebola

- The WSLH will be offering the Ebola Zaire Real-time RT-PCR provided by the CDC
 - **Timeframe:** Certification likely within 2 weeks
 - Guidance for obtaining testing being developed and will be distributed widely
 - Testing will require CDC/ WDPH approval
- In the meantime, Ebola testing available at **CDC** or the **Minnesota** state public health lab
 - Requires approval of WDPH and CDC
 - Specimens to be submitted directly to these labs

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Ebola: Laboratory Update

Testing for Ebola

- The testing landscape just got more complicated...
 - FDA has issued EUA for two new commercial Ebola tests; more likely to follow
 - Strict requirements for test usage
 - Issues and concerns with these tests
 - Potential impact on clinical and public health response being assessed at national and state levels
 - Guidance likely forthcoming
- **If you are considering using these tests, PLEASE CONTACT THE WSLH!**

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Ebola: Laboratory Update

Addressing other laboratory-related concerns

- Packaging and shipping of suspect Ebola specimens to CDC
- Clinical laboratory testing (non-ebola) of specimens from suspect Ebola case
 - How to carry out **Laboratory Risk Assessment**
- Laboratory infectious waste handling

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Laboratory Risk Assessment

- Thorough **biohazard risk assessment (RA)** should be performed for your facility
 - Partners in performing your **RA**
 - Diagnostic procedures
 - Training and experience of staff
 - Physical facilities
 - Equipment and instruments
- Implement appropriate procedures for risk mitigation
- Determine appropriate **PPE**, **physical containment devices** and **disinfection and decontamination methods** to employ

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Ebola: Laboratory Update

Parting thoughts

- The laboratory needs to be fully engaged in facility Ebola preparedness planning
- The laboratory need to continually monitor relevant guidance
- The WSLH will continue to monitor guidance from CDC and others, share information with WCLN, and forward laboratory-related questions to CDC
- **Learn what your peers are doing!!**

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UW Hospital and Clinics, Madison, WI

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Dyncare Laboratory/ Froedtert Hospital, Milwaukee, WI

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Laboratory Preparedness for Ebola, Managing Expectations in a Academic and Community Environment

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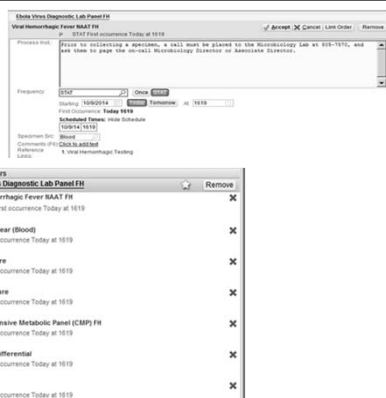
Medical Director, Microbiology and Molecular Pathology
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We Practice What We Teach

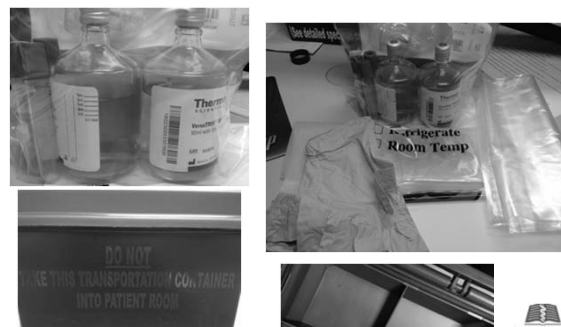


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Specimen Collection Kit



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We Practice What We Teach



Laboratory Collection Kit

- Contains double bags, absorbent material, all necessary collection vessels, etc..
- Dispatched staff member waits for nursing to collect and decontaminate packaging before returning to lab.
 - Specimen accountability log maintained to document any staff member that will need monitoring
 - Specimens are taken directly to negative-pressure lab (BSL-3) for testing and accessioning into the lab

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Laboratory Test Menu

- Ebola Screening Panel
 - PT/INR (Mini-Sysmex)
 - CBC with Differential (Mini-Sysmex)
 - UA (dipstick)
 - Comprehensive Metabolic Panel (Piccolo)
 - Malaria Smears (thick and thin per CDC protocol)
 - Rapid Malaria (BinaxNOW)
 - Ebola PCR (BioFire)
 - Combined with referral of specimen to CDC
 - Respiratory Virus panel (BioFire)
 - Blood Culture (manually incubated)

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We Practice What We Teach

Confirmed Ebola Patient, Management Panel

- Allow testing 24-7, but each day need to disinfect negative-pressure suite and process mycobacterial specimens
 - Alternate locations for mycobacterial processing is mycology or pediatric hospital, if critical patient will not allow shut-down
- Test Menu
 - Type and Cross match
 - PT/INR
 - CBC with Differential
 - UA
 - Comprehensive Metabolic Panel

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Laboratory PPE

- CDC Recommendation
 - Gloves
 - Fluid-resistant gowns
 - Face shield or goggles
 - Masks to cover all of nose and mouth
 - Recommended, class II Biosafety cabinet or Plexiglass splash guard with PPE to protect skin and mucous membranes.

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Dynacare Laboratory PPE

- PAPR with full hood
- Liquid-resistant lab coat
- Liquid-resistant gown
- Double gloves
- Disposable scrubs
- Knee-high, fluid-resistant shoe covers



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Work in BSL-3 Lab



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Questions?



"The patient in the next bed is highly infectious. Thank God for these curtains."

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