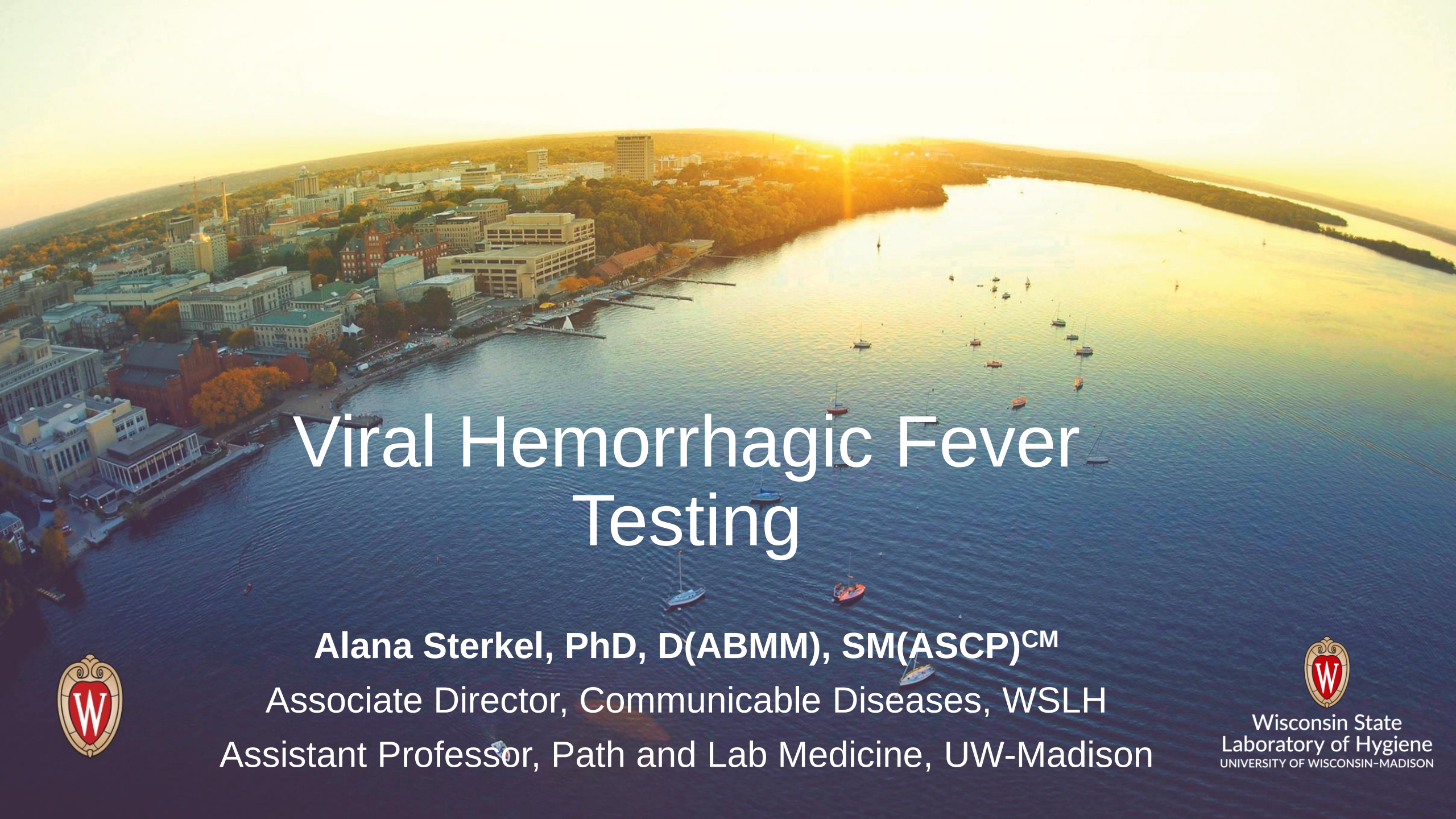

# Viral Hemorrhagic Fever Testing

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Assistant Professor, Path and Lab Medicine, UW-Madison

Wisconsin State Laboratory of Hygiene
UNIVERSITY OF WISCONSIN–MADISON

# Wisconsin State Laboratory of Hygiene

**Mission**: To improve and protect the human condition by providing accurate and precise testing, service, research and education.

# LRN-B Structure

The LRN-B was founded in 1999 by CDC, FBI and APHL to coordinate laboratory response to biological, chemical, radiological threats and other high priority public health emergencies, including emerging infectious diseases.

## National Laboratories

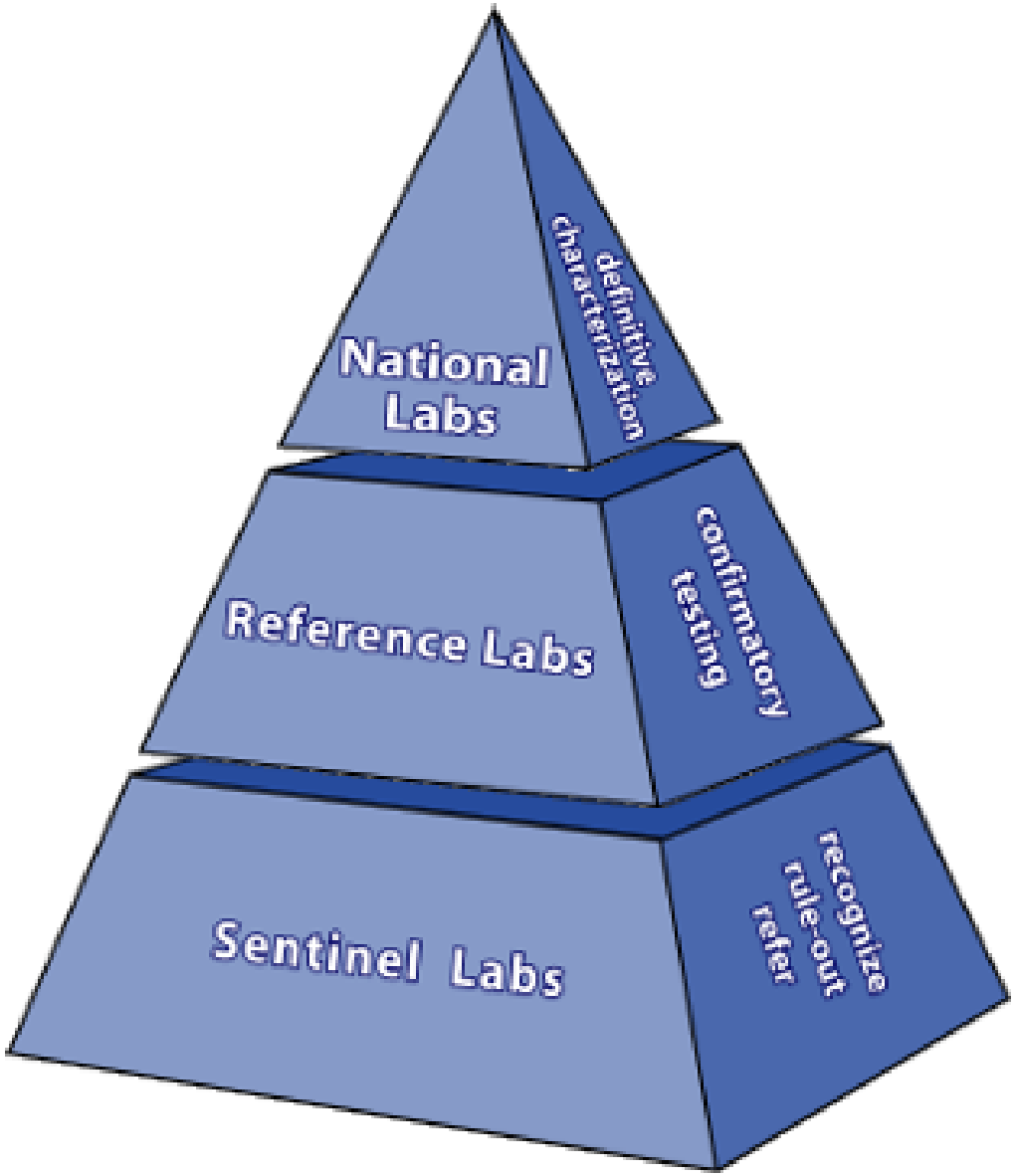
National labs, including the CDC, US Army Medical Research Institute of Infectious Diseases (USAMRIID), and the Naval Medical Research Center (NMRC), are responsible for specialized strain characterization, bioforensics, biothreat agent activity and handling of highly infectious biological agents.

## Reference Laboratories

Reference labs, including state and local public health, military, veterinary, agriculture, food and water testing laboratories, are responsible for investigation and confirmatory testing. Facilities located in Australia, Canada, the United Kingdom, Mexico and South Korea serve as international reference laboratories.

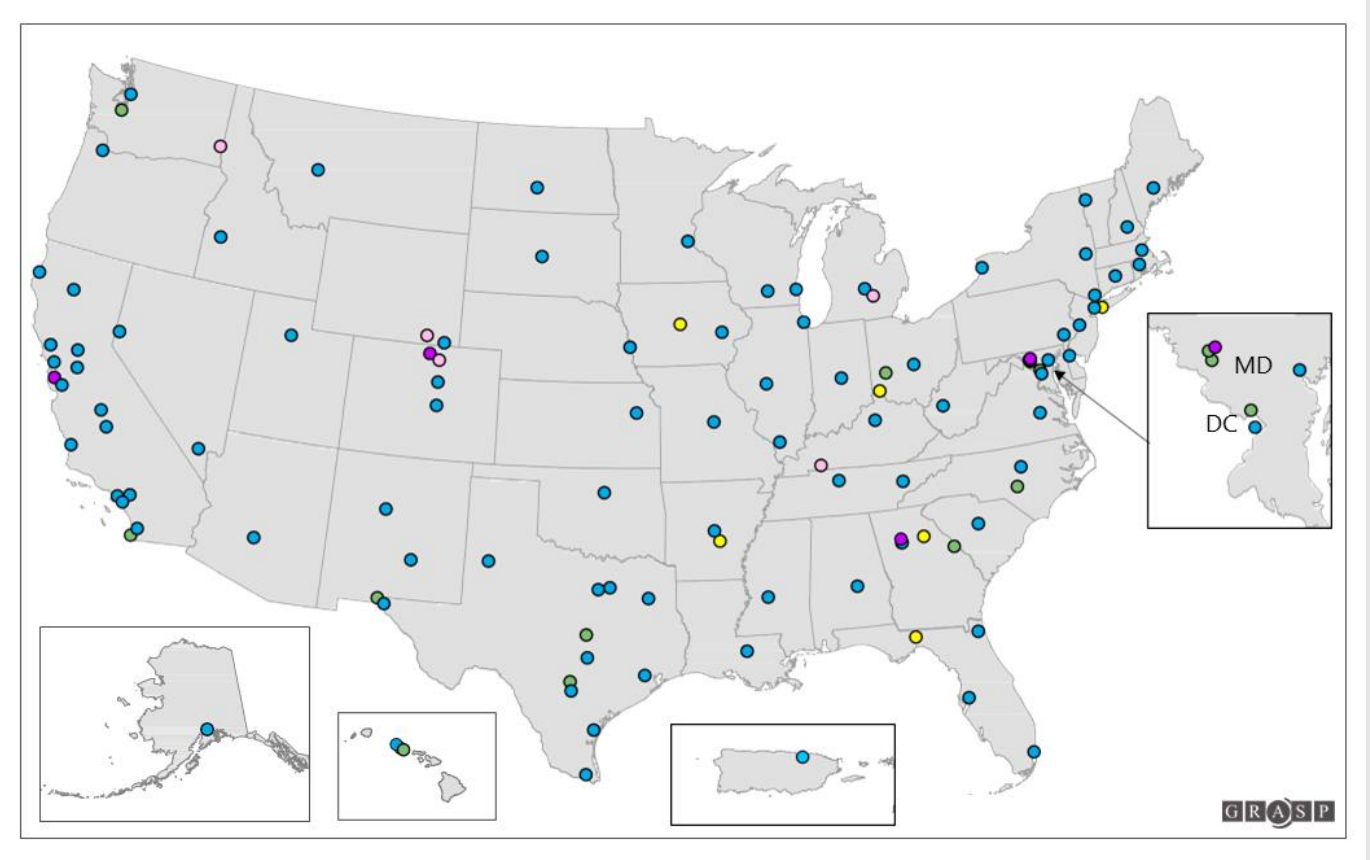
## Sentinel Laboratories

Sentinel labs, comprised of hospital-based and commercial laboratories, are responsible for the early detection and the rule-out or referral of potential biothreat agents.



# LRN-B Labs Across the US

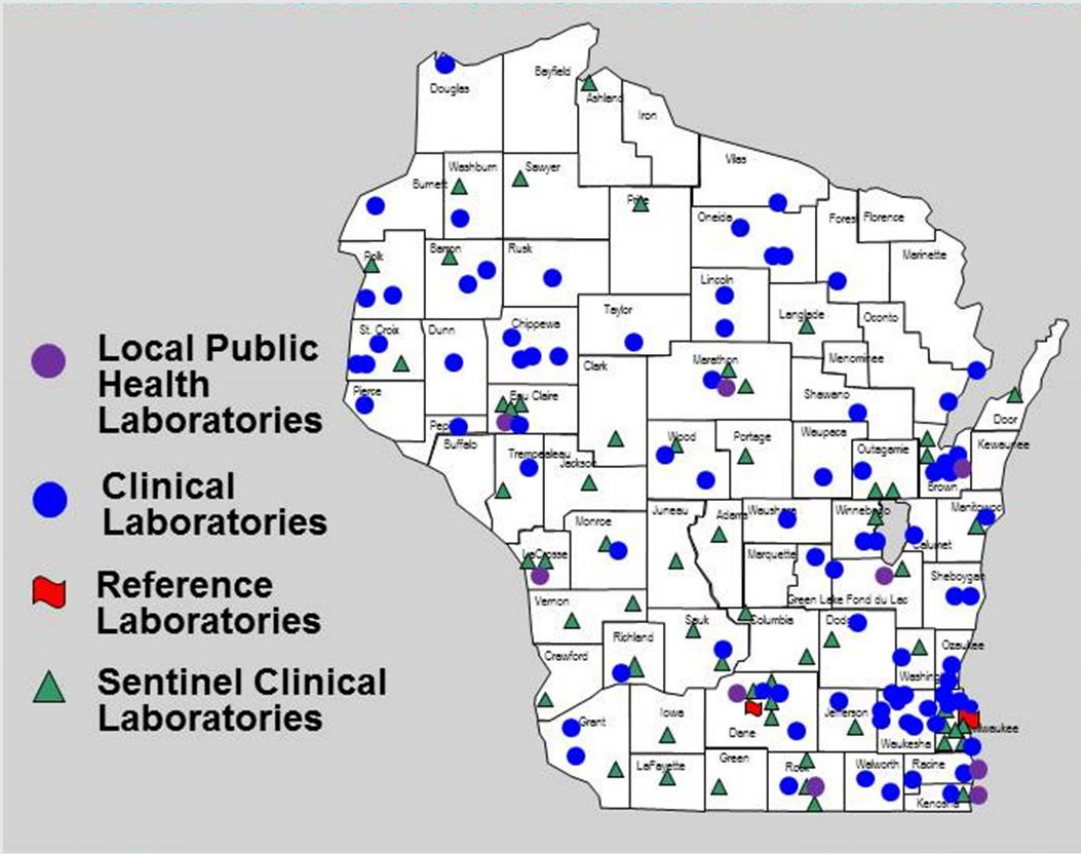
- 120+ Member Labs
- 46 currently capable of testing for Ebola




*At least one in every state, 120+ total labs

# Wisconsin Clinical Laboratory Network (WCLN)

- Comprised of 152+ laboratories
- Facilitated by the Wisconsin State Laboratory of Hygiene
- Coordinator: Nick Zumwalde, PhD



# WSLH Webpage

https://www.slh.wisc.edu/clinical/diseases/ebola-virus-information-for-lab-professionals/

- **Clinical Testing**
  - Communicable Disease
    - About Us
    - Webinars & Training Events
    - Contacts
    - Customer Service
    - Forms
    - Rabies
    - Clinical Supplies
    - Testing
    - Wisconsin Clinical Laboratory Network
    - AR Lab Network
    - Ebola Virus Information for Lab Professionals
    - COVID-19
    - H5N1 Highly Pathogenic Avian Influenza Update
    - Packaging and Shipping
  - Newborn Screening (NBS)
  - UW Cytogenetics
  - Cytology Laboratory
  - Clinical Metals
  - Regulatory Compliance Definitions
  - Out-of-state Requests

## Ebola Virus Information for Lab Professionals

*(NOTE: Updated June 12, 2026)*

**Inquiries regarding suspect Ebola virus cases should be directed to the Wisconsin Division of Public Health. Testing for Ebola virus infection MUST be pre-approved by the Wisconsin Division of Public Health, the CDC, and WSLH.** Please contact DPH at 608-267-9003 during office hours (M-F, 7:45 a.m. – 4:30 p.m.) and 608-258-0099 after hours and weekends.

**The Wisconsin State Laboratory of Hygiene (WSLH) can perform PCR testing for Ebola and other hemorrhagic fever viruses.**

**Specimens MUST be accompanied by the following forms:**

- **WSLH requisition form: CDD General Requisition Form**
  - NOTE: Hospital/clinical laboratories should already have this form. Contact Customer Service if a new form is needed. (800-862-1013)
- **Chain of custody form**

### Ebola guidance and further information:

**2026 Updates**

CDCHAN-00530 Ebola Disease Outbreak in the Democratic Republic of the Congo and Uganda – Issued May 19, 2026

# Collection and Shipping Supplies

- EDTA tubes
- Category A shippers
- Packing supplies
- Shipping labels
- Declaration templates
- Hazard labeling stickers

Available at no cost
for VHF testing

## Clinical Orders/Supplies

- **Phone:** 800-862-1088
- **Fax:** 844-390-6233

Category A Infectious Substance Shipper contents

# Packaging Instructions

Step-by-step instructions with pictures on how to package and ship specimens for testing

**Linked on our Website:**

https://www.slh.wisc.edu/wp-content/uploads/2018/10/181024_Packaging-and-Shipping-a-Suspect-Category-A-Infectious-Substance-Pictoral-Aid.pdf

# Transportation Assistance

- Delivery is eligible for emergency courier service
  - Primary courier is Purple Mountain
  - In some cases, this could include transport in a state vehicle like a police sheriff.
  - Transport out of state is usually through World Courier

- Transportation to the Lab is fee-exempt

# 24/7 Lab Support

- Staff on-call 24/7 to take emergency calls and to come to the lab for testing

## Emergency Response

24/7 Emergency Contact Phone Number: **608-263-3280**

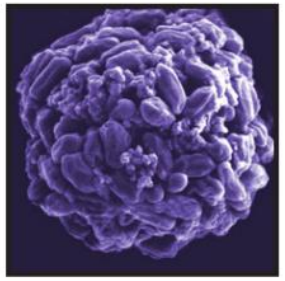
# New Method- Global Fever Special Pathogen Panel

**BioFire Torch**

**FilmArray**-
Microfluidic, array based, multiplexed PCR

# Simultaneous Detection of Multiple Pathogens

- Results report as “Presumptive Positive” but are actionable
- Positives will go to CDC for confirmation



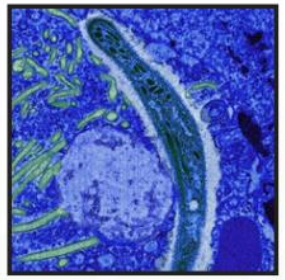
## Bacteria

*Bacillus anthracis*
*Francisella tularensis*
*Leptospira* spp.
*Yersinia pestis*

## Viruses

Chikungunya virus
Crimean-Congo hemorrhagic fever virus
Dengue virus (serotypes 1, 2, 3 and 4)
*Ebolavirus* spp. (Bundibugyo, Reston, Sudan, Taï Forest, Zaire)
Lassa virus
*Marburgvirus*
West Nile virus
Yellow fever virus

16 pathogens



## Protozoa

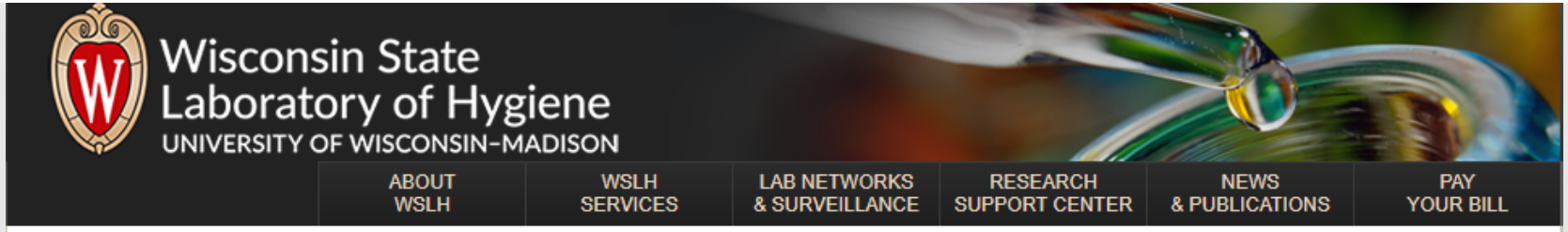
*Leishmania* spp.
*Plasmodium* spp.
*Plasmodium falciparum*
*Plasmodium vivax/ovale*

Intended for use in suspect VHF patients only

*FDA approved

# Test Directory

# Test Directory




## Test Directory

Search

A B C
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V W X
Y Z

## Quick Links

Communicable Disease

## Viral Hemorrhagic Fever Panel

Print

Test Overview | Specimen and Transport | Interpretation | Test Method | Billing and Coding

| | |
|---|---|
| WSLH Department: | CDD - Communicable Disease Division |
| WSLH Test Code: | SA00100 |
| Day(s) Performed: | Daily, STAT |
| Turn-around Time: | 1 - 3 days |
| Recommended Uses: | Testing for patients with signs and/or symptoms of acute febrile illness and known or suspected exposure to viral hemorrhagic fever causing viruses.<br><br>Evaluation for more common acute febrile illnesses should be considered and should include travel history, exposure risk, and consultation of the CDC yellow book prior to use of this panel. |
| | Required prior to submission |

# Key Test Details

- 2 tubes of EDTA whole blood (do not spin)
- Category A packaging with frozen cold packs
- Pre-approval from DHS, CDC, and WSLH required for testing
- Fee exempt for all patients
- STAT testing available 24/7

From receipt in the lab to results is 4-8 hours

**Biosafety level 3**

# Summary

- As Wisconsin's only in-state testing laboratory for Ebola and other high-consequence pathogens, the State Lab enables rapid, coordinated response when it matters most.

- New instrumentation has improved in-state resources
  - Broader test menu
  - Faster turnaround times
  - Safer, simpler workflows for laboratory staff

- Faster results give health departments the time they need to act—supporting prompt treatment, limiting spread, and accelerating response.

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