The Massachusetts Ebola Experience

Ebola was unique because there were few cases, it demonstrates the value of the sentinel lab network.

Michael Pentella, PhD, D(ABMM)
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Director, Massachusetts Bureau of Laboratory Sciences

Emerging Pathogens by Decade

Legionella pneumophila
Norwalk virus
MRSA

Helicobacter pylori
E. Coli O157
Prions
VRE
Cryptosporidium

Chikungunya
MERS
D68
Ebola

HIV
Campylobacter
Toxic Shock Syndrome

Ehrlichia
West Nile virus
SARS
Nipah virus
Novel H1N1
Mumps

Measles

Blue denotes outbreaks in recent past

Boston Globe: 10/13/14

After day of precautions, city patient deemed unlikely to have Ebola virus

Boston Globe: 10/14/14

5 taken from Logan plane in precaution

Boston Globe: 10/17/14

Officials try to allay virus fear

Boston Globe: 10/25/14

Mass. nurses voice concerns on Ebola

Boston Globe: 10/29/14

Boston hospitals balk at call for an Ebola hub

Boston Globe: 10/30/14

State faulted over Ebola

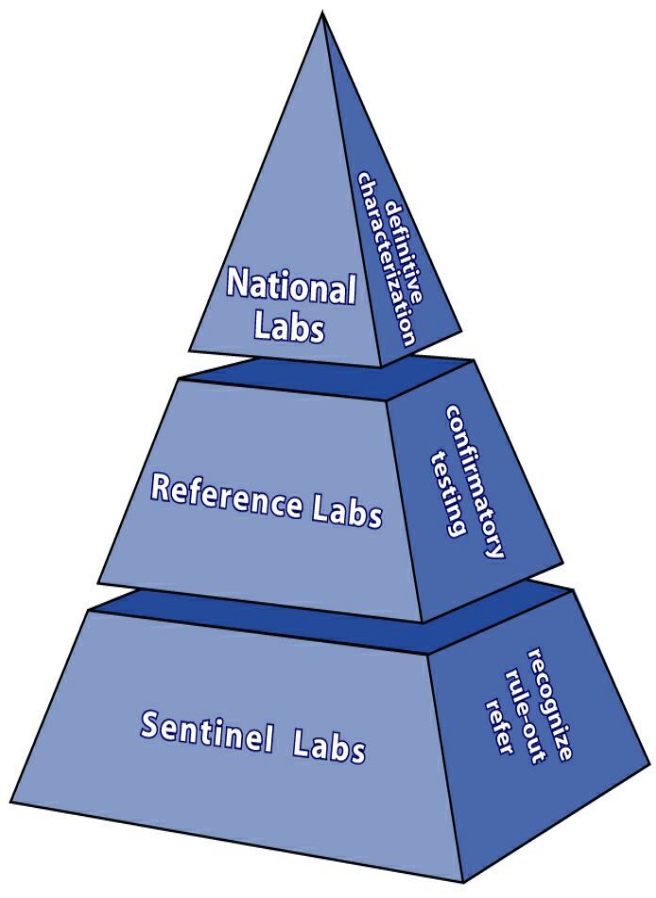
Boston Globe:
More Ebola precautions needed, Mass. officials say

When faced with an outbreak…

- People want answers quickly
  - Have they been exposed, are they infected are their families at risk?
- Interested stakeholders: physicians, public health authorities, general public – the news media
- The clinical lab is on the front line of defense

PHL working with sentinel labs

- Modeled after the successful Laboratory Response Network for preparedness



LRN
LABORATORY RESPONSE NETWORK
PARTNERS IN PREPAREDNESS

Draw backs:

- Staff changeover
- Unable to train everyone
- Labs become less interested with time as news worthiness wanes

Before Ebola: what was in place?

- Sentinel labs connected to MA SPHL by listserv
- Trainings (Biothreat Agents and Packaging and Shipping) regularly offered
- MA SPHL part of the laboratory community and looked to as experts

Massachusetts' Sentinel Lab System

- 46 Sentinel Labs in Massachusetts
  - This has declined from 54
- 6 Ebola Treatment Centers identified
- 30 sentinel labs have 2 people trained and certified in safe packaging/shipping
  - Recommended at least 3 people at each facility
- Importance of communication from someone you trust.

MA SPHL Ebola response to ongoing Ebola outbreak: internal, statewide & national

Massachusetts Department of Public Health Boston Public Health Commission

UPDATE - October 22, 2014

Boston Public Health Commission
Massachusetts Department of Public Health

Clinical Advisory

Management of Suspected Ebola Virus Cases or

EVD was first described in 1976, and since that time outbreaks hav
rural areas of Africa. The virus is transmitted through direct contac
body fluids from infected patients, including saliva, sweat, breast m
There is no evidence that infection is transmitted prior to symptom
2014, there have been thousands of cases reported in areas of Guin
Liberia. Currently, there is no evidence of Ebola virus circulation i
Africa, or elsewhere other than in the three countries listed. There

MA Public Health Laboratory Frequently Asked Questions

William A. Hinton State Laboratory Institute, 305 South Street, Jamaic

Note: All information in this fact sheet is subject to update at any time. Updates will b

Introduction

To provide clinical laboratory support in the event of a case of hemorrhagic feve
Massachusetts, guidance for sample types, testing by the MA State Public Healt
Laboratory Institute, specimen submission forms and packaging & shipping of s
case of EVD or individual identified as having potential contact with a case of E
first be immediately reported to the local board of health or health department, a
Health (MDPH).

What criteria are currently used for a patient under investi Disease (EVD)?

Clinical criteria: includes fever of >100.4 °F, and additional symptoms such a
diarrhea, abdominal pain, or unexplained hemorrhage, AND
Epidemiologic risk factors: within the past 3 weeks before the onset of sympto
fluids of a patient known to have or suspected to have EVD; residence in–or trav
participation in funeral and burial rituals, or direct handling of bats, rodents, or p
CDC website for current info: http://www.cdc.gov/vhf/ebola/hcp/case-definitio

What types of specimens should I collect for Ebola diagnos

Specimen type(s) approved for FDA Experimental Use Approval (EUA) Eb
blood (≥ 4mL) preserved with EDTA (purple top) or plasma (≥ 4mL) preserved with EDTA (white top). Courier to MA-PHL at

DEVAL L. PATRICK
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JOHN W. POLANOWICZ
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CHERYL BARTLETT, RN
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ALL specimens sent for El

Laboratory Risk Assessment
For a Suspect Patient with a High Possibility of Ebola Virus Disease (EVD)
Revised: August 25, 2014

Standard precautions have been highly effective in preventing transmission of bloodborne infection in the course of handling blood and other potentially infectious material in the clinical laboratory. Standard precautions should be effective in preventing the transmission of Ebola virus and other viral hemorrhagic fever agents in the clinical laboratory. However, Ebola virus is a high consequence pathogen, and there has been limited experience handling specimens potentially contaminated with such a high consequence pathogen in a clinical laboratory using current specimen handling procedures and automated instrumentation. Therefore, this risk assessment is provided for enhanced precautions in handling specimens from patients who may be at risk of having Ebola virus infection. This risk assessment represents reasonable precautions for this level of risk, but given the lack of experience and data, laboratories may want to elevate precautions even further based on their individual assessments and resources. If more information becomes available on the risk of transmission, this risk assessment may change.

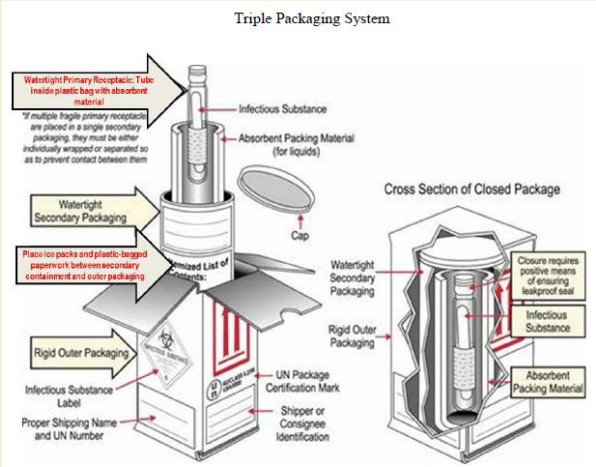
Checklist for Collection/ Handling/ Packaging of Suspect Ebola Samples
October 23, 2014

Sample Collection and Transport to the facility clinical laboratory:

- ☐ Notify your facility's clinical laboratory director/ supervisor prior to sample collection.
- ☐ Assemble collection and transport supplies and review PPE procedures prior to room entry. http://www.cdc.gov/vhf/ebola/hcp/procedures-for-ppe.html
- ☐ Wearing appropriate PPE, draw two (> 4 mL) purple top (EDTA) plastic tubes of blood with safety needles. Assure they are labeled.
- ☐ Disinfect tube with the approved hospital disinfectant.
- ☐ Place both tubes in ziplock plastic bag at bedside; disinfect outside of bag with hospital disinfectant.
- ☐ Place the ziplock bag in a durable, leak-proof secondary container.
- ☐ Disinfect outside of the secondary container with hospital disinfectant.
- ☐ Hand-carry secondary container to the facility laboratory and physically handoff to the laboratory. **Do NOT use the pneumatic tube or other automated transport system.**

Sample Packaging for Transport to the MA Public Health Laboratory (MA PHL):
Samples must be packaged and shipped by staff trained and certified in packaging and shipping.

- ☐ Remove ziplock bag from the secondary container and disinfect the exterior surface.
- ☐ Add absorbent material to the ziplock bag, reseal and place in the inner shipping container.
- ☐ Place the inner shipping container inside the box; add frozen ice packs and ziplock- bagged HSLI



It starts with an internal response

- Recognize that there is something happening that may impact the lab
- An early start is essential to preparedness
- What are the resources the lab will need
- Asked MA SPHL staff if they felt comfortable in taking on the test responsibilities

MA SPHL Internal Communications

- At first, responsible to ship ebola tests to CDC
- Other staff working in the building
- Met with staff who were about to validate the ebola test

Internal Communications

- July 2014 spoke with Emergency Response Coordinator and the Molecular Lab Supervisor:
  - Safety issues evaluated
  - Considered packaging and shipping of specimens
  - Discussed potential testing needs
  - Evaluated post test reporting results and waste management

Internal Preparation

- Determined testing needs
- Performed internal risk assessment
- Trained 12 staff and confirmed competency (for both test performance and biosafety)
- Oct 8 Completed validation of DOD test
- Performed 7 tests to date
  - Mostly on weekends and nights

Incident Command Structure

- Implemented Incident Command Structure on Oct 14 through November 10, 2014

Statewide: connected with clinical labs for Ebola Response

- July 31 emailed ebola clinical advisory regarding
- Aug 8 Risk Assessment guidance tool issued for clinical labs (national model)
- Aug 18 Lab FAQ issued
- Aug 25 Risk Assessment guidance v 2
- Sep 29 Advised clinical labs of packaging and shipping requirements
- Oct 21 Surveyed labs for malaria testing capability

First Notification July 31, 2014

Boston Public Health Commission
Massachusetts Department of Public Health

Clinical Advisory

Management of Suspected Ebola Virus Cases or Contacts

The likelihood of the arrival of someone into Massachusetts with hemorrhagic fever due Ebola virus disease (EVD) is very low, and the potential for transmission in the United States is even lower. However, in light of the ongoing, unprecedented outbreak of Ebola virus infection in areas of Guinea, Sierra Leone and Liberia (including in urban areas), cases occurring in healthcare workers working in those countries (including two U.S. citizens), and the introduction of a case into Nigeria as a result of air travel, it would be prudent to assess capacity and preparedness for the management of suspect cases and of individuals potentially exposed to EVD.

5. When collecting patient specimens for laboratory testing, care should be taken to avoid contamination of the external surfaces of the container. Specimens should be hand delivered in a clearly labeled, durable, leak-proof container directly to the specimen handling area of the laboratory, avoiding the use of automated systems. The laboratory director and supervisor should be alerted immediately to the suspected diagnosis so that they can prepare for specimen receipt and processing using enhanced precautions. Specimens should be processed, including decanting, preparation of slides for microscopic examination and heat inactivation if used, in a class II biological safety cabinet following biosafety level 3 practices. The laboratory should consult the MDPH Hinton State Laboratory Institute for further specimen handling advice.
6. Diagnostic testing is available at the CDC. Serum specimens can be tested for virus nucleic acid and for antibody to Ebola virus. The MDPH Hinton State Laboratory Institute should be consulted on the collection, handling and transport of specimens for this testing. MDPH will expedite shipment of the specimen(s) to CDC and the report of results to the healthcare provider and local health department.

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Laboratory Risk Assessment
For a Suspect Patient with a High Possibility of Ebola Virus Disease (EVD)
Revised: August 25, 2014

First Sent on August 8, 2014

Standard precautions have been highly effective in preventing transmission of bloodborne infection in the course of handling blood and other potentially infectious material in the clinical laboratory. Standard precautions should be effective in preventing the transmission of Ebola virus and other viral hemorrhagic fever agents in the clinical laboratory. However, Ebola virus is a high consequence pathogen, and there has been limited experience handling specimens potentially contaminated with such a high consequence pathogen in a clinical laboratory using current specimen handling procedures and automated instrumentation. Therefore, this risk assessment is provided for enhanced precautions in handling specimens from patients who may be at risk of having Ebola virus infection. This risk assessment represents reasonable precautions for this level of risk, but given the lack of experience and data, laboratories may want to elevate precautions even further based on their individual assessments and resources. If more information becomes available on the risk of transmission, this risk assessment may change.

The CDC has released Interim Guidance for Specimen Collection, Transport, Testing, and Submission of specimens from patients with suspected infection with Ebola Virus Disease. This laboratory risk assessment is based on these guidelines. Please see the link below: http://www.cdc.gov/vhf/ebola/hcp/interim-guidance-specimen-collection-submission-patients-suspected-infection-ebola.html

For questions please contact:

Dr. Michael Pentella, Laboratory Director at 617-983-4362 or 617-276-7289
Cheryl Gauthier, Bioterrorism Response Coordinator at 617-983-6266
Dr. Sandy Smole, Division Director at 617-983-6966 or 617-839-3220
Mary DeMartino, Quality Assurance Director at 617-983-6236

Procedure	Potential Hazard(s)	Control	Comment
A. Collection of Specimen in the Isolation Room	• Percutaneous Injuries/Needlesticks • Breakage of the Specimen Container • Care Should be Taken to Avoid Contamination of the External Surfaces of the Container	• Alert laboratory that potentially hazardous specimens are being collected. • Patient is in contact and droplet precautions. • PPE for phlebotomy: full face shield or goggles and mask to cover all of nose and mouth, gloves, fluid resistant or impermeable back-closing gowns. Additional PPE may be required in certain situations. • Do not collect specimens in glass containers. • Limit the use of sharps. • Before packaging specimen for transport to the lab, wipe down all containers with hospital disinfectant. • Place specimens in sealed plastic bags. • Wipe the outside of the plastic bags with hospital disinfectant. • Place plastic bags into a durable, leak proof secondary container for transport within the hospital. • Wipe the outside of the container with hospital disinfectant before it leaves the room.	• Establish a communication protocol between the lab, providers, and clinical units. Include relevant leadership e.g., lab, infection control, infectious diseases, emergency department, & nursing. The laboratory must be alerted so that special precautions are in place. • Wiping down the surfaces requires all surfaces be wet and that the contact time is sufficient to kill the virus. Use, for example a bucket of 10% bleach, or a spray bottle (minimum contact time = 10 minutes) and use disinfectant saturated pad(s).
B. Transport of Specimens	• Breakage of the Specimen Container.	• Specimens should be transported in a clearly labeled, durable, leak-proof secondary container directly to the specimen handling area of the laboratory. • Hand carry all specimens to the laboratory.	• Do not use pneumatic tubes or other automated transport systems. • If signs of breakage or leakage – **do not open bag**. Consult with the Laboratory Director.
C. Preparation of Specimens for Testing	• Aerosolization/Splash/Splatter	• Minimize the number of workers handling the specimens • The following PPE must be used: fluid resistant back-closing gown, double	• No exposed skin inside the BSC. • Immediately change gloves if contamination is visible or

Procedure	Potential Hazard(s)	Control	Comment
		gloves, N95 respirator and goggles, or full face shield, (eyes and mucous membranes covered). • Limit the traffic around the BSC. • Work inside a certified class II Biosafety Cabinet (BSC) with the sash at the appropriate level. Alternately, work behind a plexiglass splash guard. • In the BSC, work over a disinfectant moistened paper towel. • Use only pipette tips with barrier filters. • Have a dedicated sharps container in the BSC to which you have added disinfectant. • Smear preparation: Wipe underside of slide with disinfectant before removing from BSC. Fix smears inside the BSC. • Aliquot tubes: If possible do not open and aliquot specimens. If aliquoting is necessary, wipe outside of primary and aliquot tubes before removing from BSC. • Inoculation of sample to cartridges: Perform all steps in BSC as above. Wipe outside of cartridge before removing from BSC.	suspected. • Bring all necessary material into the BSC before starting to work. Do not enter and re-enter BSC once specimen processing begins. A co-worker in full PPE should bring additional materials to the BSC if necessary. • 10% bleach should always be freshly prepared every 24 hours • Minimize use of sharps. Dispose of all pipette tips and sharps in the dedicated container in the BSC. • Specimens and materials must be decontaminated before removing from BSC. • DO NOT set up any viral cultures • By using the PPE listed and working in the BSC, BSL-3 practices in a BSL-2 environment are followed.
D. Centrifugation	• Breakage and Aerosolization	• If possible, do not centrifuge specimens. • If centrifugation is necessary, load centrifugation buckets inside the BSC. • Centrifuge specimens using aerosol safe containers with O-ring sealable tops. • After centrifugation, bring sealed buckets back to the BSC and open the buckets inside the BSC.	• Look for alternatives to centrifugation when possible. • Centrifuge these specimens separately (no other patients in the centrifuge run). • Be alert to any potential malfunction during the centrifugation run.
E. After Specimen Processing is Completed and	• Accidental Transfer of Contaminated Material from the BSC.	• Remove and replace gloves after specimen handling.	• Disinfectant for containers and work surfaces:

Procedure	Potential Hazard(s)	Control	Comment
Before Removal of Specimen from the BSC		• All waste must be discarded and contained inside the BSC. • Wipe all tubes with disinfectant before removing from BSC. • Place specimens in sealed plastic bags (new bags). Wipe the outside of the bags with disinfectant. Place specimen bags into a rigid leak proof container. Wipe outside of container with disinfectant. • Remove gloves and dispose inside trash container in the BSC. • Don new gloves. • Wipe all trash with disinfectant. • Remove decontaminated items from the BSC including specimens in sealed bags and waste materials in their containers or bags	○ Any hospital-approved disinfectant such as quaternary ammonia, 10% bleach or phenolic. Ensure the minimum contact time per vendor instructions. ○ Waste containers and sharps container with disinfectant. ○ Dedicated waste bag for gloves and other waste.
F. BSC Decontamination	• Contamination of BSC Surfaces	• Wipe the inside of the BSC with disinfectant. • Remove all PPE and discard into medical waste stream.	• If bleach disinfectant is used: contact time = 10 minutes followed by wiping down all surfaces in the BSC with 70% alcohol and allow to air dry. • Other hospital-approved disinfectant such as quaternary ammonia or phenolic: Ensure the minimum contact time per vendor instructions.
G. Malaria Testing	• Aerosolization/Splash/Splatter	• Collect in a lavender top (EDTA) blood tube. • Prepare slides inside a BSC. • Only thin blood smears should be prepared (no thick smears). • Remove stopper of blood tubes with a gauze wipe soaked in hospital approved disinfectant to prevent aerosol formation. • Prepare a thin blood film, fix in	• Blood smears for malaria are not infectious after fixation and dry heat treatment.

Procedure	Potential Hazard(s)	Control	Comment
		methanol for 30 minutes, and then place in dry heat at 95 degrees Celsius for 1 hour to inactivate the specimen. • Wipe underside of slide with disinfectant before removing from BSC. • Stain with Giemsa and read as usual.	
H. Blood Cultures	• Aerosolization/Splash/Splatter/Contact with Blood	• Once received in the laboratory, all specimens should be opened inside a BSC. • Wipe the outside of the bottles with hospital approved disinfectant and inspect for any signs of breakage. Place the bottles into a rigid leak proof container and carry the container to the blood culture instrument. • Load into the blood culture instrument. • If the blood culture bottles are flagged as positive or show visible signs of positivity, unload the bottles from the instrument into a rigid leak proof container. Carry the container to the BSC to prepare the smear for Gram staining. • Prepare slides for Gram stain examination and allow to dry. • Fix the slide in methanol for 30 minutes, followed by dry heat at 95 degrees Celsius for 1 hour to inactivate the specimen. • Perform testing of the Gram stain QC smear in the same manner as described above. • Wipe underside of slide with disinfectant before removing from BSC. • The smears can be carefully taken out of the BSC, processed and read as usual. • Inside the BSC, inoculate plates as per protocol based on Gram stain result. • Seal the sub-cultured plates with	• Use plastic bottles if available. • Do NOT perform direct testing on positive blood cultures. Perform testing on positive blood cultures only after two subcultures, thereby minimizing the risk of contact with blood from the patient.

Procedure	Potential Hazard(s)	Control	Comment
		parafilm or shrink seals and place plates in a biohazard bag for incubation. • Wipe the outside of the plastic bags with hospital disinfectant. • Place plates in incubator and observe for growth. • When growth appears, perform a subculture of the organism while working inside the BSC, onto fresh plates and incubate these plates overnight. • Proceed with identification of growth from subcultured plates.	
I. Testing Specimens on Automated Instruments	• Aerosolization/Splash/Splatter • Contamination of Equipment	• The use of automated instruments, the lab environment where they are located, the risk for aerosolization, and the ease of decontaminating the instrument and work space are all issues that need to be carefully considered and dealt with before utilizing automated instruments. • Consider the use of PPE: fluid resistant back-closing gown, gloves, N95 respirator, goggles or full face shield, (eyes and mucous membranes covered). Work behind plexiglass splash guard when possible. Consider decontamination of automated instruments after the test run. • Microscopes: Use approved disinfectant to wipe all surfaces of the scope and work area. Dispose of slides in sharps container.	• Point of care testing is advisable to avoid running chemistry and hematology tests in the core lab, increasing potential exposures. • The manufacturer recommendations should be followed regarding decontamination of instruments and waste.
J. Storage of Specimens	• Breakage and Aerosolization	• For short term storage, all specimen containers should be wiped with hospital disinfectant and placed into double-bags that contain absorbent pads soaked with disinfectant, then	• This is to reduce the risk of contamination after the specimens leave the lab.

Procedure	Potential Hazard(s)	Control	Comment
		placed in a rigid plastic, leak-proof container and kept isolated until they can be disposed of in an appropriate manner. • Long term storage of specimens is not permitted for any suspect Hemorrhagic Fever virus patient.	
K. Disposal of Specimens	• Breakage and Aerosolization	• All specimens must be autoclaved prior to disposal.	• If an autoclave is not available on site, call the BT 24/7 phone at 617-590-6390 for assistance.
L. Packaging & Shipping of Specimens to HSLI or CDC	• Breakage and Aerosolization	• Call the BT 24/7 phone directly for packaging and shipping guidance. • Specimens should be packaged and shipped without attempting to open collection tubes or aliquot specimens. • Specimens must be packaged based on the triple packaging system which consists of a tube in a sealable specimen bag with absorbent material (primary receptacle) placed in a watertight, leak-proof container (secondary receptacle). • Place submission forms in a plastic bag between the secondary receptacle and the outer cardboard box. • Use ice packs, <u>not</u> wet ice and place it between the secondary receptacle and the outer cardboard box. • Specify on the outside of the box whether the specimen is refrigerated or frozen.	• Specimens will be shipped as a Category A or Category B based on a risk assessment performed by a DPH Epidemiologist. • Packaging and shipping of Infectious Substances or Biological Substances should only be performed by laboratory personnel who are trained and certified to do so. • Specimens should be sent to the Hinton State Laboratory for shipping to CDC unless otherwise directed in consultation with DPH staff to send directly to CDC.

Risk Assessment Pro's and Con's

- Previewed by microbiology thought leaders in the community
- Right approach and helped the thought process
- Aligned with CDC and later served as foundation for APHL

- There were too many approaches out there
- It only considered the microbiology lab
- Could not account for every lab situation

FAQ sent 8/15, 10/20, and 11/20

MA Public Health Laboratory Frequently Asked Questions

Ebola virus

August 15, 2014

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

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 in the low likelihood event of a case of hemorrhagic fever due to Ebola virus disease (EVD) in Massachusetts, guidance for sample types, testing, specimen submission forms and packaging & shipping of specimens is provided in this FAQ. Any case of suspected EVD (suspect case) or individual identified as having potential exposure to a case of EVD (contact) in West Africa should be immediately reported to the local board of health or health department, and the Massachusetts Department of Public Health (MDPH). Suspect cases in the City of Boston should be reported directly to the Boston Public Health Commission (BPHC).

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

Clinical criteria: includes fever of >101.5 °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 info: http://www.cdc.gov/vhf/ebola/hcp/case-definition.html

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www.mass.gov/dph

ALL specimens sent for Ebola testing must be pre-approved by health officials.

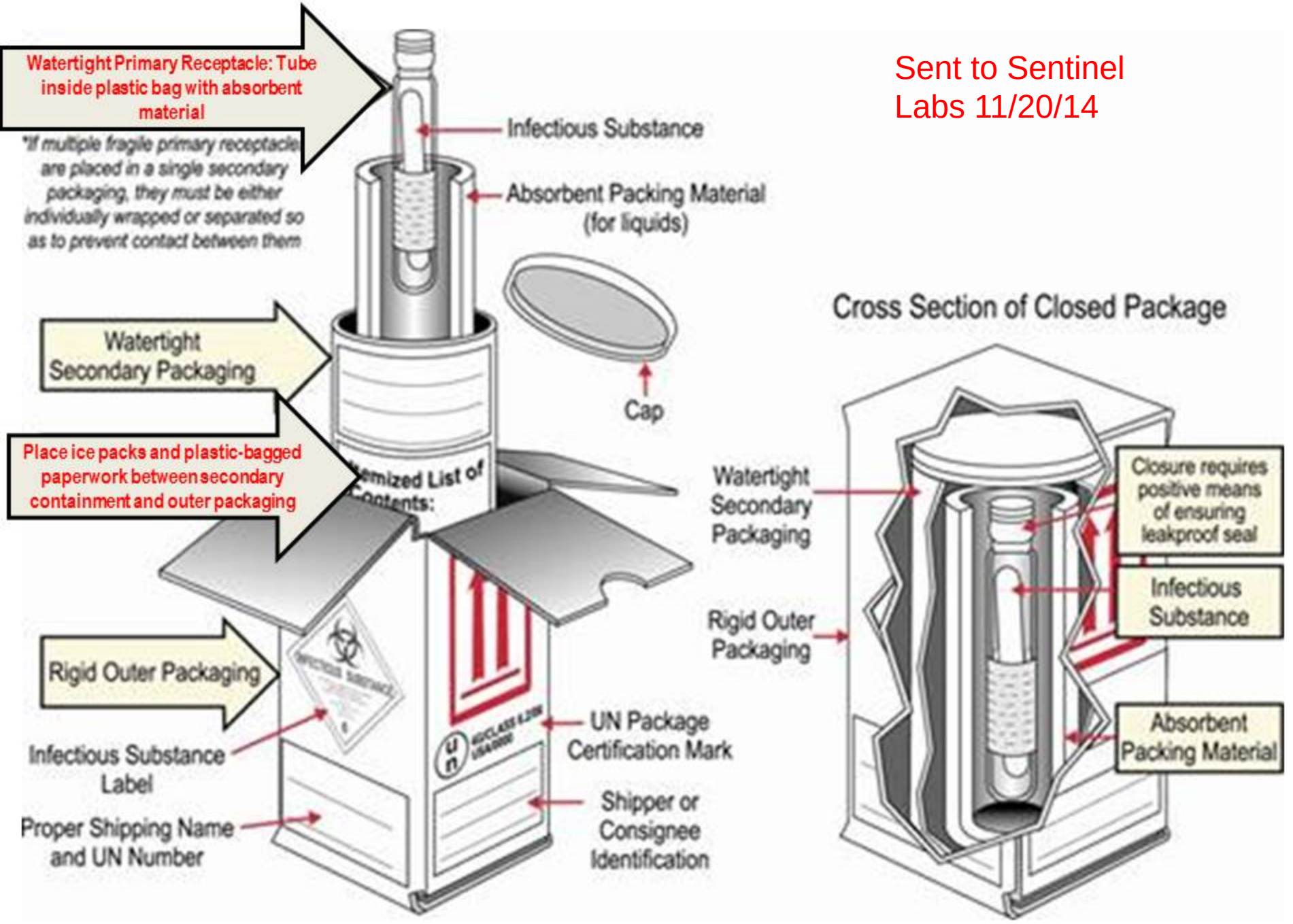
Checklist for Collection/ Handling/ Packaging of Suspect Ebola Samples

October 23, 2014

Sample Collection and Transport to the facility clinical laboratory:

- ☐ Notify your facility's clinical laboratory director/ supervisor prior to sample collection.
- ☐ Assemble collection and transport supplies and review PPE procedures prior to room entry. http://www.cdc.gov/vhf/ebola/hcp/procedures-for-ppe.html
- ☐ Wearing appropriate PPE, draw **two** (> 4 mL) purple top (EDTA) plastic tubes of blood with safety needles. Assure they are labeled.
- ☐ Disinfect tube with the approved hospital disinfectant.
- ☐ Place both tubes in ziplock plastic bag at bedside; disinfect outside of bag with hospital disinfectant.

Sent to Sentinel Labs 11/20/14

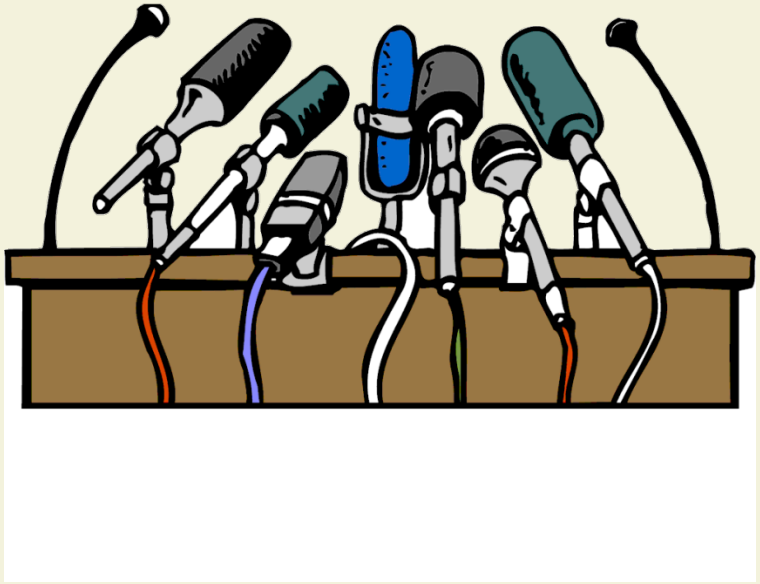


Packaging and Shipping

- Asked that each facility have at minimum 3 people certified
- Offered two additional training sessions
- Provided link for online training
- Included donning and doffing of PPE in training
- In the end we went to pick up the samples in the lab – it sped up the process and was appreciated.

Statewide Conference Calls

- Participated in all Statewide conference calls and fielded questions from laboratorians
- Also responded to emails from laboratorians



Communications with Sentinel Labs

- Conference calls
- Emails
- List serv
- Phone calls

- Types of questions
  - How long to do the test
  - How to get specimens to us
  - Availability of tests for malaria
  - Medical waste transport
  - Disinfection in the lab
  - PPE donning and doffing

Surveyed Labs about Malaria Testing

1. Please enter your facility name and address

Facility - [redacted]

Address: - [redacted]

City/Town: [redacted]

State: - [redacted]

ZIP: [redacted]

Phone Number: - [redacted]

2. Please provide contact information for the person completing this survey.

Name and Title: - [redacted]

Email Address: - [redacted]

Phone Number: - [redacted]

3. Do you perform malaria testing in your laboratory?

Yes

Show this Page Only

4. If yes, what method do you use?

We use wrights geimsa stain and acridine orange on peripheral blood smears.

5. Would you be willing to receive and test malaria specimens from other laboratories?

Yes

6. Do you have any other comments, questions, or concerns?

No Response

Nationally

- Participated in conference calls (October and November 2014)

Nationally: connected with Neighboring States

- Oct 22 reached out to neighboring states (NH, CT, RI, VT, and ME) to perform testing when needed
- Oct 28 Met with New England Clinical Lab Directors to discuss biosafety
- Oct 29 Met with NEEPHLD
- Developed a checklist for States to prepare to send specimens to MA SPHL
  - 24/7 Contact Information
  - Arrangements for courier service
  - Notification of CDC regarding testing
  - Result reporting

Nationally: offered to trained other SPHLs to perform the test

- New Hampshire (trained)
- Rhode Island (planned)

Perceptions post-ebola

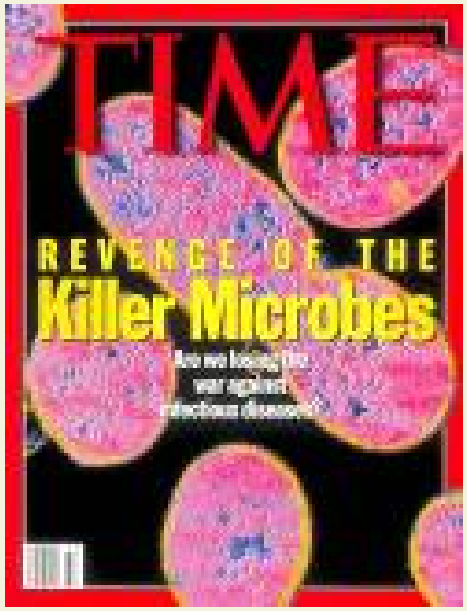
- There is a lack of fundamental knowledge about biosafety in the lab community
- The culture of biosafety is weak
- Most clinical labs have never performed a risk assessment
- Labs are very short staffed and working on biosafety issues is a low priority
- It is difficult to provide expert opinion because of the different equipment in use

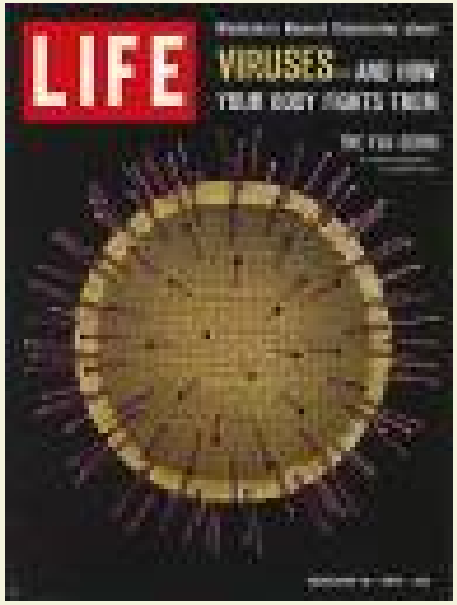
The interest of the elected officials?

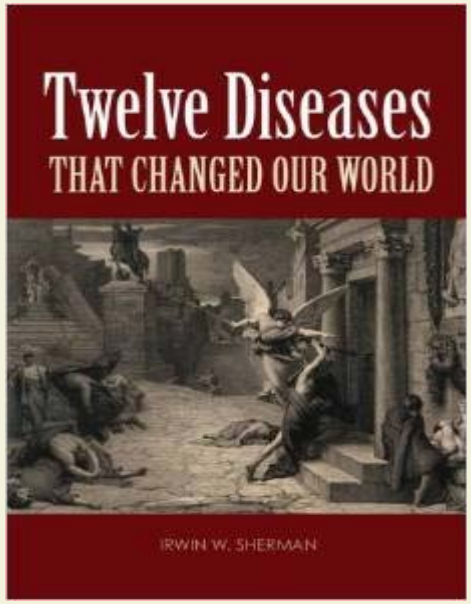
- Driven by public concern
- Value to the recognition that the lab brings important information in a timely fashion
- Interest will wane but a positive impression will linger
- Importance of the leadership role that PHL can take

The impact of the media

- Common for people to fear microbes
- Recognize that there are other pathogens to fear rather than ebola in the U.S.







The Next Big Thing

Thank you.
Share your state’s experience with ebola.