



Ebola Testing @ DSHS BioThreat Team

Lab Director's

October 21, 2014

Overview

- Procedure: FDA EUA Assay
- Timeline
 - Setup and EQA Panel
 - Coordination with EPIs, submission process
 - Results to date
 - Surge capacity
- Packaging and Shipping

Procedure

- FDA EUA Assay
 - Blood or plasma acceptable
 - Blood preferred, EDTA tube, 4 C
 - QIAagen Qiamp Viral RNA Extraction Kit
 - rRT-PCR on ABI 7500 Fast Dx

- Presumptive positive or negative result
 - Patient Fact Sheet
 - Physician Fact Sheet
 - Confirmed at CDC

BioThreat Lab @ DSHS

- Biosafety Level 3 (BSL3) Laboratory
- Special considerations
 - Isolated zone with limited access
 - Double door entry with multiple barriers
 - Filtered unidirectional single pass air
 - Work performed within biosafety cabinet
 - Personal Protective Equipment worn
 - PAPR, double gloves, Tyvek suit, booties
 - All materials autoclaved before removal
 - Security clearance required



BSL3 Lab Pics



Emerging diseases: Ebola Testing

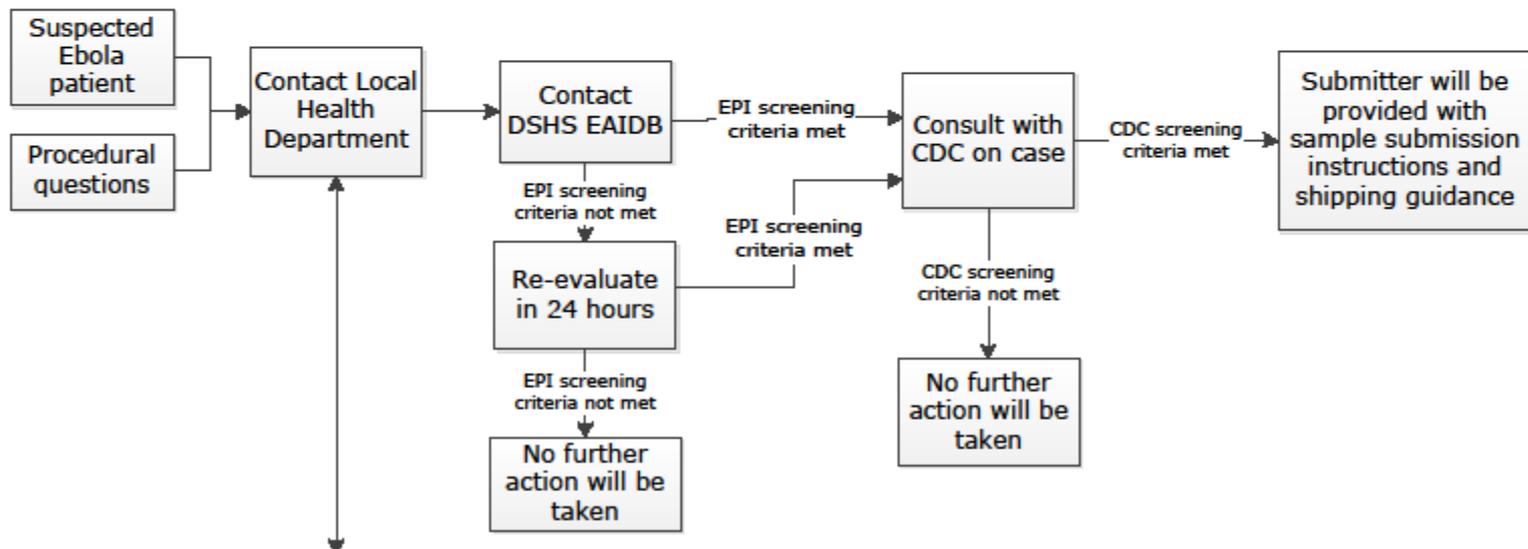


- August 5 – FDA granted Emergency Use Authorization status for assay
- August 7 – DSHS given Request to Accept Ebola Virus Testing Assay
- August 12- received testing kit
- August 19 – tested EQA panel (5 samples)
- August 22 – received EQA pass
- August 26 – go live date

Texas DSHS Ebola Testing Algorithm

- General Ebola Information
- Patient Evaluation
- Case Definition
- Infection Prevention Guidance
- Laboratory Information
- Sample collection and transport
- Shipping
- Symptoms
 - Fever (greater than 38.6°C or 101.5°F)
 - Severe headache
 - Muscle pain
 - Weakness
 - Diarrhea
 - Vomiting
 - Abdominal (stomach) pain
 - Unexplained hemorrhage (bleeding or bruising)

CDC Website <http://www.cdc.gov/vhf/ebola/>



Find your Local Health Department:
<http://www.dshs.state.tx.us/idcu/investigation/conditions/contacts/>



Ebola Testing

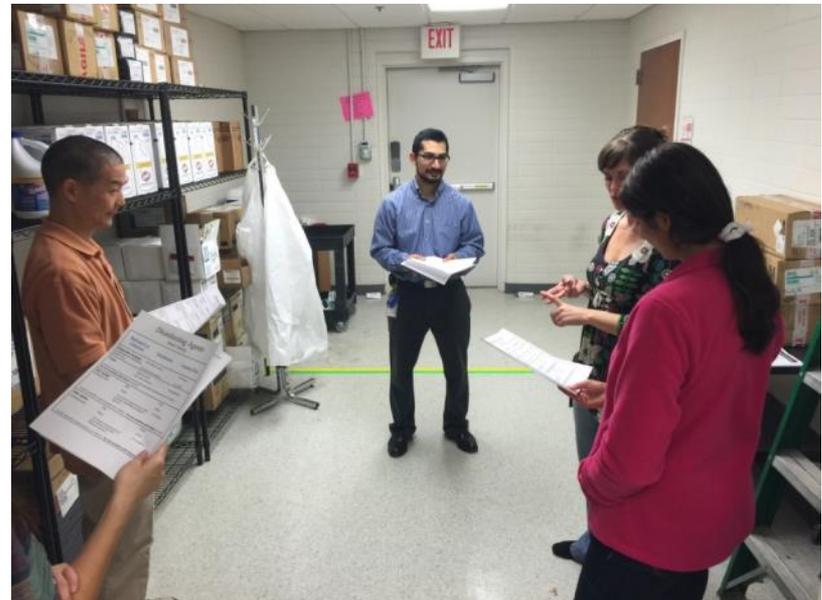


- September 30 – first specimen received
 - Presumptive positive by rRT-PCR for Ebola Zaire**

Sunday	Monday	Tuesday	Tuesday	Thursday	Friday	Saturday
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		+		—		
5	6	7	8	9	10	11
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19	20	21	22	23	24	25
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26	27	28	29	30	31	

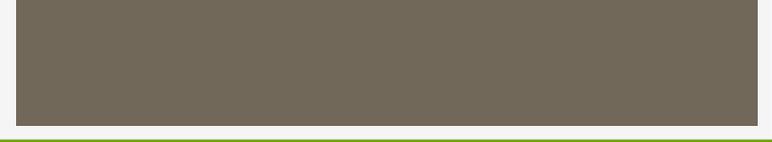
Surge Capacity

- 5 Staff 10.16.14
- Refresher BSL3
- Ebola Safety



Packaging and Shipping

- Category A, shipped cold (4 C)
- Available methods:
 - FedEx
 - “Suspected Category A” Shippers Declaration
 - Will not accept if marked “Ebola”
 - World Courier
 - “Suspected Category A” Shippers Declaration
- Alternative methods:
 - Coast Guard helicopter
 - DOT plane
 - DSHS employees



Thank you!

- Questions?
- Erin Swaney
 - Microbiologist, Biothreat Team Leader
 - erin.swaney@dshs.state.tx.us
 - 512-776-7185