

## ADPH Bureau of Clinical Laboratories: Who We Are and What We Do

Integration for Hazardous Response  
Teams Conference  
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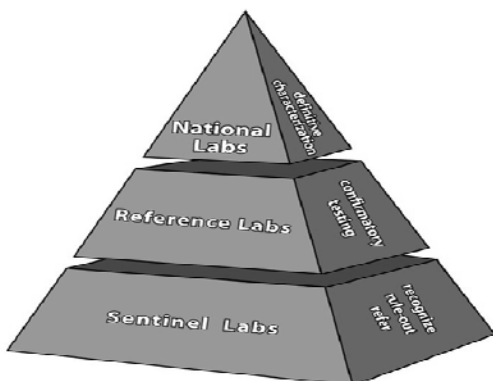


## Bureau of Clinical Laboratories

- Alabama Department of Public Health
  - Disease Control and Prevention
  - Bureau of Clinical Laboratories
  - Located on the campus of AUM
  - Affectionately called the “State Health Lab”

## BCL and Emergency Preparedness

- Since 1999, only official Laboratory Response Network (LRN) designated Reference Laboratory in our jurisdiction
- LRN-Biological and LRN-Chemical capabilities



## Capabilities

- Unknown powders
  - Receive, process, and test all suspect powders coming from an event deemed credible by the FBI
  - Must be pre-screened for explosive, radiation, and chemical hazards

### Capabilities

- Maintain Chain of Custody for all evidence received
- Guidelines for receipt of suspect materials

### Testing Performed

- Conventional Microbiology
  - Culture
  - Gram stain
- Molecular Microbiology
  - Multiple agent panel by PCR
  - Agent specific PCR

### Testing Performed

- Chemical Event Testing
  - FTIR Spectroscopy
  - DART Mass Spectrometry

### Packaging and Shipping

- Bagged at the scene
  - One specimen per bag
  - Second bag decontaminated with 5% bleach solution
  - Outer container decontaminated
  - Seal with evidence tape

### Packaging and Shipping

- Labeled properly
  - Location of specimen collection: where?
  - Description of specimen: what?
  - Identifier: which one?
  - Date and time of collection: when?

### Packing and Shipping

- Specimen cannot be greater than 14" x 14" x 14"
- NO cotton swabs: only Dacron or Rayon
- Include entire specimen
  - Letter and envelope
  - Container

### Packing and Shipping

- Do not include trash used at the scene in the same bag as specimen
  - Bag it as above, separate from specimens

### Chain of Custody Form

The form is titled "ALABAMA DEPARTMENT OF PUBLIC HEALTH" and "CHAIN OF CUSTODY". It contains several sections for recording information:
 

- Customer Information:** Fields for Customer Name, Address, City, State, Zip, and Telephone.
- Specimen Information:** Fields for Specimen Description, Date, Time, and Location.
- Chain of Custody:** A table with columns for Name, Title, Date, and Signature, with rows for "Received by", "Transported by", and "Delivered to".
- Remarks:** A section for additional notes.

### BCL Environmental Form

The form is titled "ALABAMA DEPARTMENT OF PUBLIC HEALTH" and "BCL Environmental". It includes the following sections:
 

- Header:** Fields for Block Number, Environmental Project, and Date.
- Site Information:** Fields for Site Name, Address, City, State, Zip, and Telephone.
- Sampling Information:** Fields for Sampling Method, Date, Time, and Location.
- Results:** A section for recording test results.
- Remarks:** A section for additional notes.

### Standard Practices

- ASTM
  - Formerly American Society for Testing and Materials
- E2770-10
  - Standard Guide for Initial Response to a Suspected Biothreat Agent

### Standard Practices

- E2458
  - Standard Practices for Bulk Sample Collection and Swab Sample Collection of Visible Powders Suspected of Being Biothreat Agents from Non-Porous Surfaces

### Supplies/Materials Needed

- A Plan and Risk Assessment by the Incident Commander
- Trained personnel
- PPE
- Clean drop cloth
- Non-powdered gloves

### Supplies/Materials Needed

- Polypropylene screw-capped containers
  - No glass
- Fresh bleach solution 5%
- Tape and markers
- Sterile swabs, Dacron, Rayon, or Polyester

### Supplies/Materials Needed

- Sealable plastic bags
- Bucket/sealable bags for waste
- Paperwork

### Procedure

- Two man team
  - Sampler and Assistant Sampler
- Pre-label containers, bags
- Enter the hot zone
- Perform pre-screening for explosives, radiation, etc.

### Procedure

- Assistant
  - Communication
  - Photography
  - Complete sample collection sheet
  - Help sampler with containers, swabs, etc.

### Procedure

- Sampler
  - Collects sample
  - Only person who comes in contact with the sample
  - Signs final Chain of Custody Form

### Procedure

- Reminders
  - Change your gloves after each collection
  - Label it properly
    - Location
    - Unique identifier
    - Date and time

### **Procedure**

- Use a sterile scoop or laminated card to push powder into collection container
- Decontaminate each bag before placing into next bag

### **Notification**

- Call the Laboratory before sample is in route
- 334-260-3400, during and after hours
  - ADPH Duty Officer will notify Lab personnel of delivery
  - FBI will determine when testing is to be performed

### **And Finally!**

- Standard Laboratory Protocols will be followed for testing
  - Cultures take up to 5-7 days
  - PCR results take 3-6 hours
  - PCR results are NOT confirmatory
  - Results will be called to the FBI