# **PHL Competencies**

The Management Tool in a Learning Based Organization



#### **Faculty**



#### Leah D. Gillis, MS, PhD, HCLD(ABB)

Laboratory Director

Bureau of Public Health Laboratories – Miami, Division of Disease Control and Health Protection, Florida Department of Health



Catherine M Johnson, MA, MT(ASCP) Manager, Training and Education Association of Public Health Laboratories



# Polling Question 1: Who are you?

Q1. What is your position?

- a. Biosafety Official (BSO)
- b. Training Coordinator
- c. Laboratory Manager or Supervisor
- d. Laboratory Director (LD)
- e. Clinical Laboratory Professional
- f. Human Resource Professional
- g. Other



## **Polling Question 2: Competencies**

Q2: How familiar are you with "competencies"?

- a. Very familiar
- b. Somewhat familiar
- c. Not familiar
- d. What are "competencies"?



#### Agenda

#### Competencies

- Definition of competencies
- Uses of competencies in a learning-based organization
- Users of competencies
- Ways to apply competencies
- Pathway to PHL Competencies Guidelines

#### **Biosafety Official (BSO) Competencies**

- Background of BSO competencies
- Practical application of BSO competencies
- Biosafety Official (BSO) competencies in action
- BSO Tools



#### **Session Objectives**

- At the end of this session, you will be able to:
  - Describe how competency statements and behavioral anchors are used to define the work of the biosafety official
  - Identify three major competencies that apply to the work of the biosafety official









Competencies outline the behaviors (the knowledge, skills and abilities) necessary for public health laboratory professionals to efficiently and effectively deliver the core services of Public Health Laboratories (PHL).

#### **Competencies: Definition**

Competencies are action-oriented statements that delineate the essential behaviors (knowledge, skills and abilities) that are critical to the effective and efficient performance of work.

Competencies should be observable and measurable.





#### **Competencies: Definition**

- Statements that outline the behaviors (*knowledge, skills, and abilities*) needed to successfully perform work functions.
- Statements that answer the question, "What should an individual with particular job responsibilities be able to do?"
- Each competency provides a detailed description of the behaviors needed to successfully perform a role at a certain level.



#### **Competency Framework**

The goal of the competency framework is to help the team member develop the competencies they need to perform their role to a higher standard or to gain promotion.

An organization's competency framework is made up of both functional and behavioral components.

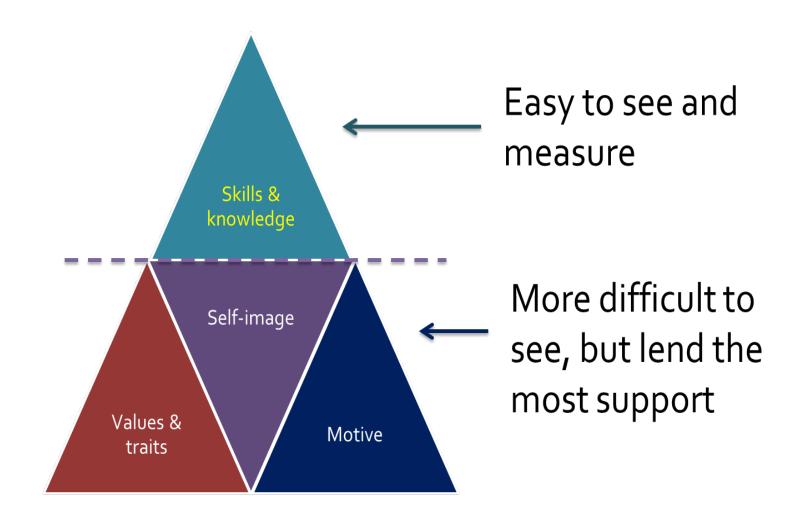
Developing team members' competencies increases their value to the organization and helps them to prepare for future promotion.

The competency development cycle can be incorporated into your appraisal and review meetings.



Resource: <u>http://www.free-management-ebooks.com/faqap/devcomp-06.htm</u> retrieved 03.15.2016

#### **Competencies – What Are They?**





## **Polling Question 3: Uses of Competencies**

Q3. Which of the following activities would you use competencies? (select all that apply)

- a. Job descriptions
- b. Staff assessment
- c. Staff training and development
- d. Gap analysis of biosafety program
- e. Mechanism to recognize and award staff
- f. Other uses



### **Competencies** and the Learning Organization

- Leaders and managers
- Human resources personnel
- Trainers and educators



• Laboratory personnel working in PHLs and other organizations such as clinical, academic, private, research or veterinary laboratories







#### **Competencies and the Learning Organization**

Personnel management

- Developing position descriptions
- o Defining job requirements/performance expectations
- o Establishing career ladders
- o Assessing individual staff performance
- Training/Professional development
  - Performing training needs assessments
  - o Designing training courses/curriculum, education programs
  - Refining professional development plans
- Organizational and system capacity
  - o Assessing organizational capacity
  - o Improving program development and management
  - Supporting quality improvement
  - Ensuring a sustainable PHL system

Advocacy

- Articulating the role of PHLs in the public health system
- o Standardization across the PHL system



#### **Competencies and the Learning Organization**

- Outline the behaviors (knowledge, skills, and abilities) necessary for PHL professionals to efficiently and effectively deliver the core services of PHLs
- Pave the way for quality improvement and for enhanced personnel management and workforce development:
  - Defining career ladders
  - Articulating staff performance expectations
  - Developing standardized position descriptions (e.g., Biosafety Outreach Official)
  - Identifying and supporting training needs
  - Providing a guideline for personal professional development
  - Assessing individual staff performance
  - Enhancing organizational capacity

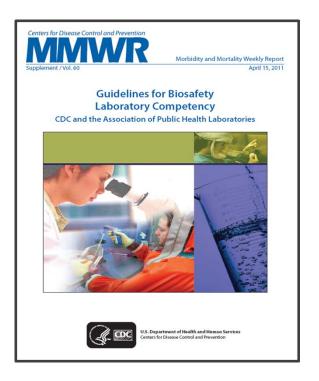


## Polling Question 4: MMWR 2011 Safety Comps

Q4. Are you <u>aware</u> of the "Guidelines for Biosafety Laboratory Competency" published in Morbidity and Mortality Weekly? [April 15, 2011 (60:1-6)]

a. Yes

b. No





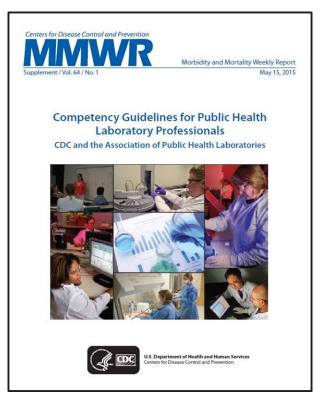
# Polling Question 5: MMRW 2015 PHL Comps

Q5. Are you **<u>aware</u>** of the "Competency Guidelines for Public Health Laboratory Professionals: CDC and the Association of Public Health Laboratories"?

[May 15, 2015 / 64(01);1-81]

a. Yes

b. No





#### **PHL Competencies Structure**

# Domains Core Competency Statements Sub-competencies Tier Levels\* Behaviors and tasks

\* Tiers Levels are Beginner, Competent, Proficient and Expert.



## **PHL Competencies Structure**

Safety subdomain: potential hazards											
SPH 1.00. Physical environment: works safely in the physical environment of the laboratory facility*											
Subcompetency	Beginner	Competent	Proficient	Expert							
SPH 1.01. Physical hazards* in the laboratory facility	Describes the physical hazards in the laboratory facility	Recognizes new physical hazards in the laboratory facility	Assesses staff knowledge of the physical hazards in the laboratory facility	Evaluates the laboratory facility for physical hazards							
SPH 1.02. Control measures* to be used when physical hazards are present	Describes control measures to be used when physical hazards are present in the laboratory facility	Implements control measures to be used when physical hazards are present in the laboratory facility	Ensures staff knowledge of control measures to be used when physical hazards are present in the laboratory facility	Establishes the control measures to be used when physical hazards are present in the laboratory facility							
SPH 1.03. Work practices* to be used when physical hazards are present	Describes work practices to be used when physical hazards are present in the laboratory facility	Implements work practices to be used when physical hazards are present in the laboratory facility	Ensures that staff implement the established work practices when physical hazards are present in the laboratory facility	Establishes the work practices to be used when physical hazards are present in the laboratory facility							



### **Competencies – Development Timeline**

- 1943 Military workforce competencies
- 1970 Educational relevance
- 2005 Informatics (CDC)
- 2006 Pandemic All Hazards Preparedness Act (PAHPA) (HHS)
- 2009 Epidemiology (CSTE and CDC)
- 2010 Laboratory biosafety (CDC and APHL)
- 2011 MMWR publication of laboratory Biosafety competencies
- 2012 PHL competencies through APHL and CDC collaboration
- 2015 MMWR publication of PHL competencies Biosafety Official job description PHL Competencies: Staff Competencies Assessment Tool
- 2016 Phase 2 Competencies: training for laboratory community, tool development, adoption by laboratory community, implementation



#### **National All-Hazards Preparedness (2006)**

S. 3678-2

#### TITLE I—NATIONAL PREPAREDNESS AND RESPONSE, LEADERSHIP, ORGA-NIZATION, AND PLANNING

SEC. 101. PUBLIC HEALTH AND MEDICAL PREPAREDNESS AND RESPONSE FUNCTIONS OF THE SECRETARY OF HEALTH AND HUMAN SERVICES.

Title XXVIII of the Public Health Service Act (42 U.S.C. 300hh-11 et seq.) is amended—

(1) by striking the title heading and inserting the following:

#### "TITLE XXVIII—NATIONAL ALL-HAZ-ARDS PREPAREDNESS FOR PUBLIC HEALTH EMERGENCIES";

and

(2) by amending subtitle A to read as follows:

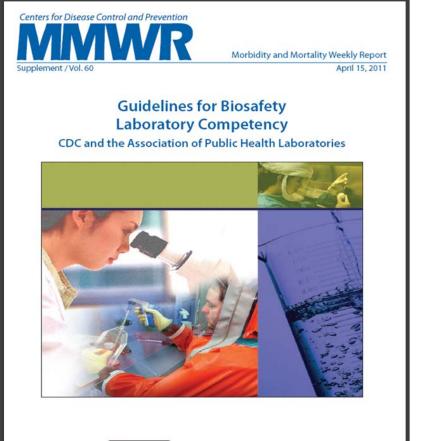
#### "Subtitle A-National All-Hazards Preparedness and Response Planning, Coordinating, and Reporting

"SEC. 2801. PUBLIC HEALTH AND MEDICAL PREPAREDNESS AND RESPONSE FUNCTIONS.

"(a) IN GENERAL.—The Secretary of Health and Human Services shall lead all Federal public health and medical response to public health emergencies and incidents covered by the National Response Plan developed pursuant to section 502(6) of the Homeland Security



#### **MMWR PHL Competencies Publications**





U.S. Department of Health and Human Services Centers for Disease Control and Prevention



Morbidity and Mortality Weekly Report May 15, 2015

#### Competency Guidelines for Public Health Laboratory Professionals

CDC and the Association of Public Health Laboratories





U.S. Department of Health and Human Services Centers for Disease Control and Prevention







#### **PHL Competencies – 15 Domains**





## **Adoption and Implementation of Competencies**

- PHL Competency Workgroup (March 2015)
  - Biosafety Official job description
  - PHL Competencies Assessment Tool
- ELC Grant
- APHL Emerging Leaders Program
- Laboratory Leadership Service (LLS) (fellowship program)
- Future projects



### **PHL Competency Assessment Tool**

Competencies are distinct from goals. Goals are concerned with 'what' has been accomplished; competencies are concerned with 'how' it was accomplished. Identifying the competencies that an individual already has and those that they need to develop is important to the individual and organization's success.

SUGGESTED COMPETENCY DOMAINS TO CONSIDER FOR LABORATORY POSITION TYPE													
							SAF	ETY					
	- OM	» Eth	SHC	EMP	. / &	SPH	SHC	SAC	4	SDR	No.	MCB	RHS
Laboratory Position Type	- Q1	<u> </u>	<u> </u>	EN.	wr	S	<u></u>	/ sr	انگو /	/ ७४	SRV	M	<b>P</b>
Biosafety outreach officer*	х	х	х	х	х	х	х	x	x	х		x	
Quality assurance officer*	х	х	х	х	х	х	х	х	х	х		х	
Safety officer*	х	х	х	х	х	х	х	х	х	х		х	
Scientist*	х	х	х	х	х	х	х	х	х		х	х	
Scientist-manager*	х	х	х	х	х	х	х	х	х	х	х	х	
Scientist-supervisor*	х	х	х	х	х	х	х	х	х	х	х	х	
Specimen receiving/shipping	х	х		х			х	х	х		х	х	
Technician*	х	х		х		х	х	х	х		х	х	
Training officer*	x	х	х	х	х	х	х	х	х	х		х	

Domain	Competency	Sub-competency	None	Beginner	Competent	Proficient	Expert	Areas for Improvemen <b>T</b>	Exceeds Expectations
Safety	SPH 1.00 Physical environment	SPH 1.01 Physical hazards in the laboratory facility		C/E					
		SPH 1.02 Control measures to be used when physical							
Safety	SPH 1.00 Physical environment	hazards are present		С	E				
		SPH 1.03 Work practices to be used when physical							
Safety	SPH 1.00 Physical environment	hazards are present			С	E			







Analysis. Answers. Action.

Competencies for the Biosafety Outreach Official structure the position of the biosafety official by providing a framework for producing education and training programs, identifying worker roles and job responsibilities, and assessing individual performance and organizational capacity.

#### **Biosafety Official Job Description**



#### **Biosafety Officer Competency-Based Position Description Template**

#### Program/Department: Public Health Laboratory

Position Title: Biosafety Officer

Reports to: Laboratory Director / Operations Director / Division Director

Previous Incumbent: None (New position)

#### Job Position Summary:

The Biosafety Officer within the public health laboratory will ensure adequate biosafety training and practices to avoid potential hazards associated with the handling of biological materials, the spread of multi-drug resistant pathogens and threats of emerging pathogens, and acts of biological terrorism. The person in this position develops and monitors adherence to laboratory biosafety programs, provides related workforce training for biosafety for the agency and sentinel clinical laboratories, assists public health and clinical laboratories with biosafety risk assessments and risk mitigation plans, and works cohesively with key system partners and public health officials to improve communications and emergency management and response practices. Efficient communication skills, knowledge of microbiology and general laboratory practices, and experience in laboratory safety, training and outreach, and quality management systems are necessary for this position.

#### Essential Job duties:

#### Biosafety in Public Health Laboratory and Sentinel Clinical Facilities:

- Educates, trains and provides guidance to in-house staff on performing biosafety risk assessments, using personal protective equipment (PPE), implementing decontamination procedures, packaging and shipping of infectious agents, and reviewing waste management plans, including methods for recycling and disposal of biological hazards
- Coordinates with in-house staff to conduct outreach to public and private sentinel clinical laboratories in jurisdiction to assist with performing biosafety risk assessments, using personal protective equipment (PPE), implementing decontamination procedures, packaging and shipping of infectious agents, and reviewing waste management plans, including methods for recycling and disposal of biological hazards
- Encourages a culture of safety and reporting of actual and potential safety issues which may
  place staff and others at risk; assesses those risks; and implements redundant systems to keep
  risks to the absolute minimum
- Guides the development of policies and procedures that help to ensure the safety of laboratory staff and the provision of a safe physical environment to meet agency biosafety and broader safety requirements

Page 1 of 6

Biosafety Officer Competency-Based Position Description Template

#### 

- Develops and oversees site-specific workplace safety policies and procedures (including review) and maintains a safety plan that meets agency requirements
- Provides input on emergency management and response policies and assists in implementation
  of processes and procedures in coordination with agency management and systems partners
- Collaborates with safety committee, occupational health and other partners to build an effective biosafety program

Job Position Competencies:

#### Safety (25%)

- 1. Biological materials: works safely with biological materials in the laboratory
  - Distinguishes biohazardous materials from non-biohazardous materials in the laboratory (C)
    - Recognizes hazards associated with new biological materials used in laboratory procedures (C)
    - c. Trains staff in the hazards associated with the laboratory procedures employed (C)
    - d. Demonstrates knowledge to distinguish organisms and testing requiring biosafety level 2 (BSL-2) physical containment and safety work practices from organisms and testing requiring BSL-3 physical containment and safety work practices (C)
  - Demonstrates knowledge of application of biohazard risk assessments to the management of workplace biosafety programs (C)
- Engineering controls: implements intervention strategies to control hazards by systematically minimizing, isolating, or removing hazards from the workplace
  - Develops standard operating procedures (SOPs) and work instructions that incorporate engineering controls (P)
  - b. Develops required training for engineering controls (P)
  - c. Demonstrates knowledge and application of physical containment requirements in the safe work with biohazardous materials (C)
- Safe work practices: designs work practices and procedures to minimize exposure to hazards and to adhere to regulatory requirements
  - Develops processes and procedures related to the establishment and maintenance of good housekeeping (P)
- Personal Protective Equipment (PPE): employs the selection, use, and care of personal protective
  equipment while being continually mindful of its limitations
  - a. Develops procedures for the appropriate selection of PPE (P)
     b. Determines procedures for use of specific PPE (P)
- Systems to track hazards: establishes a system to detect and to control or eliminate the underlying causes of hazards or exposures
  - a. Develops procedures to report, track and investigate hazards in their workspace (P)
- 6. Decontamination and laboratory waste management: provides guidance on decontamination



#### http://www.aphl.org/mycareer/lablead/Documents/WF\_2015\_Biosafety-Officer-Position-Description.pdf

### **Domestic Ebola Supplement to ELC: Ebola**

# Strategy 1: Enhance Public Health Laboratory Biosafety Capacity

- Update jurisdiction's biosafety guidelines for Ebola specimens and other emerging infectious diseases based upon CDC guidelines and make them readily available
- Perform risk assessment(s) of jurisdiction's public health laboratory to assure the lab can safely handle and dispose of specimens suspected of Ebola and other highly infectious agents
- Develop, provide or assure access to tools (i.e., risk assessment templates or models, exercises), guidance, trainings and other educational activities for sentinel clinical laboratories and facilities to maintain competent staff knowledgeable in working with infectious organisms of public health concern.
- Implement mitigation strategies based upon results of assessment at Public Health Lab Work with clinical labs to identify and implement mitigation strategies from the clinical laboratory risk assessments
- Address gaps identified through assessment at public health laboratory



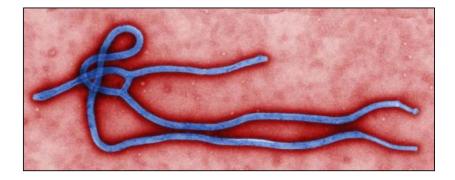
### **Domestic Ebola Supplement to ELC: Ebola**

#### Strategy 2: Improve Laboratory Coordination and Outreach

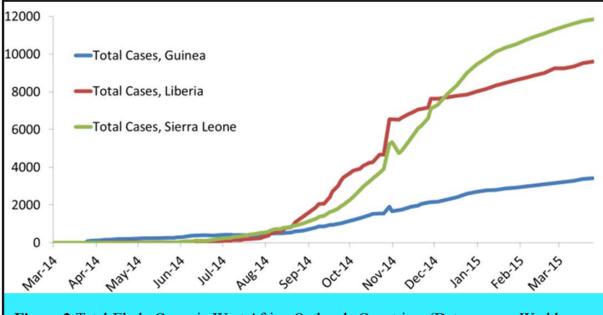
- Work with jurisdiction's clinical laboratory partners to perform their own risk assessments and coordinate this activity with any proposed infection control assessments performed as part of a proposed Infection Control Assessment and Promotion Program
- Work with jurisdiction's clinical laboratory partners to address gaps identified in their own risk assessments
- Work with clinical labs to identify and implement mitigation strategies from the clinical laboratory risk assessments



### Implementing Ebola Viral Disease (EVD) Testing in PHLs



#### Ebola Zaire virus



**Figure.2** Total Ebola Cases in West Africa Outbreak Countries. (Data source: World Health Organization Ebola Situation Report; 03/2015).



Analysis. Answers. Action.

# **2014: EVD Testing Timeline**

#### August

Aug 5

FDA grants emergency use authorization (EUA) for DOD Assay.

CDC selects the Miami Laboratory among the first to receive the DoD EUA Assay.

Aug 14

Aug 11

FL Bureau of Public Health Laboratories releases two Ebola guidance documents: the "Ebola Virus Diagnostic Specimen Collection, Packaging and Shipping Guidance for Laboratories and County Health Departments" and the "Ebola Virus Diagnostic Specimen Submission Check List".



CDC conference calls on preparing LRN laboratories for testing.



Third CDC conference call addressing remaining laboratory concerns; APHL releases a Risk Assessment Template for the LRN laboratories testing for Ebola Virus.



# Development of LRN PHL to perform EVD testing: Risk Knowledge Base

Knowledge required to determine the risk of working with an organism:

- Known biology of the organism
- Path of the organism through the lab facility
- Process steps in handling the organism
- Chemicals involved in handling the organism
- Waste steam(s) for all process steps



# **Development of LRN PHL to perform EVD testing**

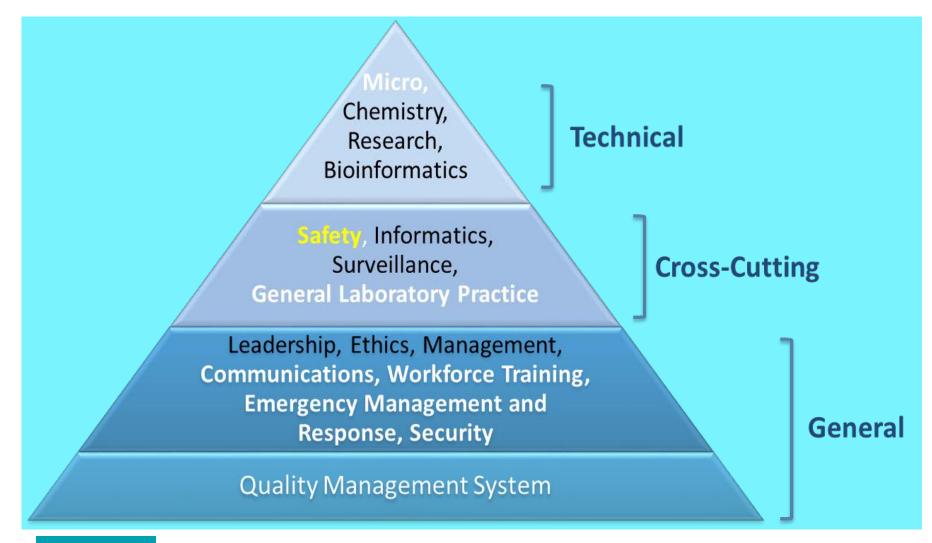
To bring EVD testing to the LRN laboratory required:

- 1. Ability to determine the risk of an organism
- 2. Ability to mitigate the risk of an organism

The competencies used to prepare the BSO Position Description (PD) were established with these two main ideas regarding Safety.



## **PHL Competencies: Safety**





## **BSO Competencies: Safety Domain**

## Sub-domain: Potential hazards

- 1. Biological materials: Works safely with biological materials in the laboratory
- a. Distinguishes biohazardous materials from non-biohazardous materials in the laboratory (C)
- b. Recognizes hazards associated with new biological materials used in laboratory procedures (C)
- c. Trains staff in the hazards associated with the laboratory procedures employed (C)
- d. Demonstrates knowledge to distinguish organisms and testing requiring biosafety level 2 (BSL-2) physical containment and safety work practices from organisms and testing requiring BSL-3 physical containment and safety work practices (C)
- e. Demonstrates knowledge of application of biohazard risk assessments to the management of workplace biosafety programs (C)



# **BSO Competencies: Safety Domain**

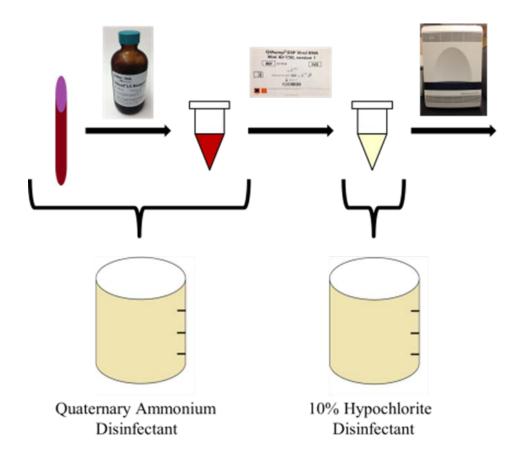
Sub-domain: Hazard Control

2. Engineering controls: implements interventions strategies to control hazards by systematically minimizing, isolating, or removing hazards from the workplace

- a. Develops standard operating procedures (SOPs) and work instructions that incorporate engineering controls (P)
- b. Develops required training for engineering controls (P)
- c. Demonstrates knowledge and application of physical containment requirements in the safe work with biohazard risk materials (C)
- 3. Safe work practices: Designs work practices and procedures to minimize exposure to hazards and to adhere to regulatory requirements
- a. Develops processes and procedures related to the establishment and maintenance of good housekeeping (P)
- 4. Personal Protective Equipment (PPE): Employs the selection, use, and care of personal protective equipment while being continually mindful of its limitations
- a. Develops procedures for the appropriate selection of PPE (P)
- b. Determines procedures for use of specific PPE (P)



# **Development of LRN PHL to perform EVD testing**





# **Development of LRN PHL to perform EVD testing**





Analysis. Answers. Action.

# **BSO Competencies: Safety Domain**

Sub-domain: Hazard Control

- 5. Systems to track hazards: Establishes a system to detect and to control or eliminate the underlying causes of hazards or exposures
- a. Develops procedures to report, track and investigate hazards in their workspace (P)

6. Decontamination and laboratory waste management: provides guidance on decontamination and establishes a laboratory waste management plan that adheres to federal, state, and local regulations

- a. Guides the development of policies, processes, and procedures for spill cleanup and decontamination of laboratory surfaces and instruments (E)
- b. Implements procedures for disposal and treatment of laboratory waste (C)
- c. Implements procedures for reporting and responding to issues or problems regarding laboratory waste management (C)
- d. Demonstrates knowledge of technical and regulatory requirements applicable to products used for routine work surface disinfection (C)



# BSO Competencies: Safety Domain Sub-domain: Administrative Controls

7. Guideline and regulation compliance: ensures staff compliance with guidelines and recommendations

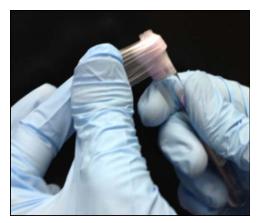
- a. Instructs staff on current regulatory requirements and guidelines governing the safe performance of laboratory procedures (P)
- b. Complies with institutional safety committee requirements (C)

8. Risk management: manages risk though systematic practices to evaluate, minimize, or eliminate them

- Oversees the policies, processes, and procedures related to risk management to ensure controls are appropriate for activities, agents and materials used in the laboratory (E)
- b. Designs policies, processes, and procedures for reporting and performing root-cause analyses of events (E)

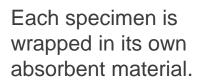


# Guidance on Packaging and Shipping Suspect Ebola Specimens



Each specimen is sealed with paraffin film.





Insulated

STP-100 Package

ThermalPal

Fibreboard

box and sulated chest

Replaceable Outer Box (STP-301)

SAFTPAK QADOC034 Rev. 2



Each specimen is placed in its own leak-proof container.

Diagram of completed package



Analysis. Answers. Action.

www.aphl.org 45

# **BSO Competencies: Safety Domain**

## Sub-domain: Communication and Training

9. Hazard communication: promotes safety through effective hazard communication

a. Implements a variety of communication tools and techniques for the promotion of safe work practices (P)

10. Safety training: ensures that safety training needs are identified and training solutions are implemented to meet performance and productivity goals

- a. Provides training on the work practices and techniques required for staff to safely perform their job duties (C)
- b. Adheres to procedures for recording safety training of staff (C)



# **2014: EVD testing timeline**



#### Sept 5

The Miami Laboratory receives its first suspect Ebola specimen.



After action meeting with ~40 interested stakeholders for two hour meeting to discuss all aspects of testing. (PHL, sentinel laboratory managers & supervisors, hospital ICPs, MDs, Florida Department of Health leadership, leadership and epidemiologists from Department of Health of Miami-Dade)



First US case of Ebola confirmed by CDC following presumptive positive identification at the Department of State Health Services, BSL-3 Laboratory in Austin, Texas.



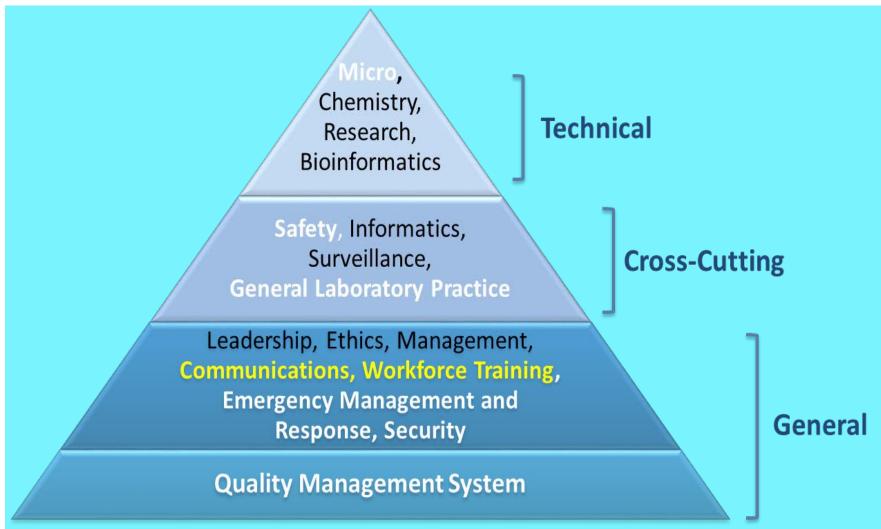
# **BSO Competencies: Training and Communication**

The competencies that were used to prepare the BSO Position Description were established with two main ideas regarding Training and Communication:

- 1. Ability to understand the knowledge level of the PHL and sentinel laboratory for pathogen risk
- 2. Ability to increase knowledge level of PHL and sentinel laboratory staff for pathogen risk



## **PHL Competencies: Training and Communication**





# **BSO Competencies: Workforce Training Domain**

- 1. Content: gathers training content
  - a. Develops needs assessment tools (P)
  - b. Integrates principles of adult learning for use in designing training (P)
  - c. Implements established science and technology content (C)
  - d. Implements training for emerging training topics (C)
  - e. Collaborates with subject matter experts to gather content (C)





# **BSO Competencies: Communication Domain**

1. Communication techniques: deploys formal written and oral communication strategies

a. Applies logical structure to written communications (C)

b. Applies language and tone in oral communications tailored to target audience (C)

2. Communication technology: utilizes technology to communicate information to internal and external partners

- a. Selects laboratory's technology options to align with partner's capabilities (C)
- b. Uses designated technology for sharing information (C)



# **BSO Competencies: Communication Domain**

3. Communication professionalism: ensures professionalism in communication with customers and stakeholders

a. Displays professional demeanor in all situations with customers and stakeholders (C)

b. Determines information needs through collaboration with customers and stakeholders (C)

c. Selects information to share (C)

4. Professional reports: prepares professional written reports and oral presentations

a. Creates drafts of written reports (C)

b. Creates drafts of oral presentations (C)

5. Public health laboratory value: promotes the value of the public health laboratory

a. Coordinates opportunities for promoting the public health laboratory and system (C)

b. Presents communication materials to explain the importance of the public health laboratory (C)



# **2014: EVD Testing Timeline**



Oct 3

Florida Incident Management Team (IMT) activated.

Oct 24

Oct 31

Packaging and shipping materials distributed to selected county health departments.

The Miami Laboratory begins presenting packaging and shipping refresher seminars.





www.aphl.org 53

# FL DOH Incident Management Team (IMT) Incident name - Severe Viral Illness Operations Section – Laboratory Branch

When packaging and shipping a specimen, where in the patient area should each step of the packaging sequence (primary, secondary and tertiary receptacles) take place (clean vs dirty area)?

Along with wiping the primary receptacle with a bleach wipe or other appropriate disinfectant, are there any other measures that need to be taken to disinfect specimen packaging?

If the sample goes for testing, it will take longer than a few hours? What do we do with/tell those With a U C to

With the recent release of the Biofire Defense, LLC test entitled FilmArray Biothreat E that was approved by the FDA, will the state be switching to or acquiring this testing to improve, augment or speed up testing capabilities? This test is reported to take one hour to complete.



# **BSO Competencies: Workforce Training Domain**

#### 1. Content: gathers training content

- a. Develops needs assessment tools (P)
- b. Integrates principles of adult learning for use in designing training (P)
- c. Implements established science and technology content (C)
- d. Implements training for emerging training topics (C)
- e. Collaborates with subject matter experts (C)

### 2. Training design: designs training

a. Develops training activities around existing learning objectives and integrates biosafety laboratory competencies into course content (C)

b. Implements the modality for training (C)

c. Develops instructional materials for new programs that are aligned with the type of training activity and modality (P)

- d. Integrates multiple types of training materials into training design (C)
- e. Integrates individual training lessons, including experiential exercises (C)
- f. Creates formative assessments (P)
- g. Follows continuing education provider requirements when conducting training (C)



# **BSO Competencies: Workforce Training Domain**

# 3. Delivery set-up: manages the logistics of set-up for training delivery

- a. Ensures that equipment capability aligns with the training requirements (P)
- b. Manages processes of the learning environment (C)
- 4. Training delivery: applies principles of learning to training implementation and delivery
  - a. Develops presentation materials to address learning preferences and styles (P)
  - b. Uses the most effective presentation tools and techniques (C)

# 5. Training evaluation: evaluates learner knowledge and skill development

- a. Develops training evaluation tools for a new activity (P)
- b. Implements the training assessment rubric to ensure training outcomes are met (C)
- c. Compiles tracking data into summative training reports (C)

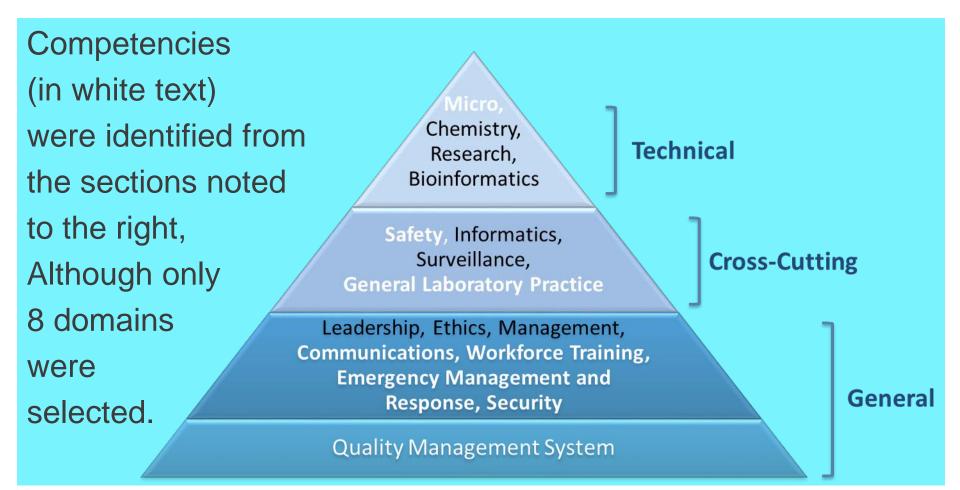
d. Assesses participants' achievements of training objectives, such as the ability to don, doff, and properly dispose of PPE (C)

### 6. Marketing: markets training opportunities

a. Composes content for marketing materials (C)



# **BSO Competencies Domains**





## **Biosafety Official Position Description: Job Position Competency Domain Composition**

Safety - 25% Workforce Training - 15% Security - 15% Communication - 10% Microbiology - 15% **Emergency Management and Response - 10%** Quality Management System - 5% **General Laboratory Practice - 5%** 



# **Summary**

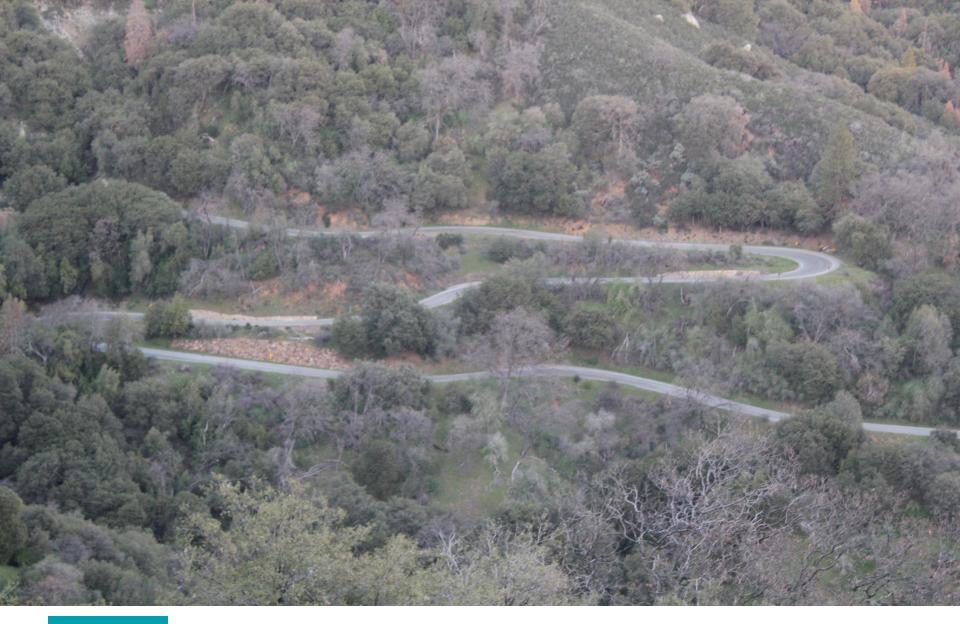
#### Competencies

- Definition of competencies
- Uses of competencies in a learning-based organization
- Users of competencies
- Ways to apply competencies
- Pathway to PHL Competencies Guidelines

#### **Biosafety Official (BSO) Competencies**

- Background of BSO competencies
- Practical application of BSO competencies
- Biosafety Official (BSO) competencies in action
- BSO Tools











# **Session Objectives**

- At the end of this session, you will be able to:
  - Describe how competency statements and behavioral anchors are used to define the work of the biosafety official
  - Identify three major competencies that apply to the work of the biosafety official



# **Reflective Learning Questions**

#### What did I learn about:

- 1. How competencies will be used at my laboratory?
- 2. How competencies can be used by management and leadership in my learning based organization?
- 3. How BSO competencies and BSO competencies tools will be used at my laboratory?
- 4. How others will work together to develop more competencies tools at my laboratory?







## **Resources and Tools**

Tools and other resources are available at <u>www.aphl.org</u>

Pandemic and All-Hazards Preparedness Act (2006) <a href="https://www.govtrack.us/congress/bills/109/s3678/text/enr">https://www.govtrack.us/congress/bills/109/s3678/text/enr</a>

Guidelines for Biosafety Laboratory Competency (April 15, 2011 / 60(02);1-6)

http://www.cdc.gov/mmwr/preview/mmwrhtml/su6002a1.htm

Competency Guidelines for Public Health Laboratory Professionals: CDC and the Association of Public Health Laboratories (May 15, 2015 / 64(01);1-81)

http://www.cdc.gov/mmwr/preview/mmwrhtml/su6401a1.htm

