

Leadership Skills for Biosafety Professionals: Effective Training

Student Guide





Leadership Skills for Effective Biosafety Professionals: Effective Training



Welcome to Leadership Skills for Biosafety Professionals:
Effective Training!

Agenda


- **Welcome & Introduction**
- Training for Biorisk Management
- Using the Training Design Cycle
 - Analyze
 - Design
 - Develop
 - Implement
 - Evaluate
- The Global Biorisk Management Curriculum
- Wrap-Up & Summary





Slide 2

Introductions

- Instructor
- Students
 - Your name?
 - Where are you from?





Slide 3

Biosafety Training

- Demonstrate how to design a training program
- Identify different ways of teaching (pro's and con's)
- Evaluate training



Slide 4

Teaching a Course

- Being effective in fulfilling your course goals.
- And help your students remember it!
- Make the learning experience enjoyable!



Slide 5

Question: What makes training “good”

Individually, think of a training you attended that you really liked.

- What did you like about the training session
- What made the session different from other training sessions?

Please take **5 minutes** and write these notes in your workbook.

SEP

What makes training good?

What did you like about the training sessions?

What made the session different from other training sessions?

Question: What makes training “good”

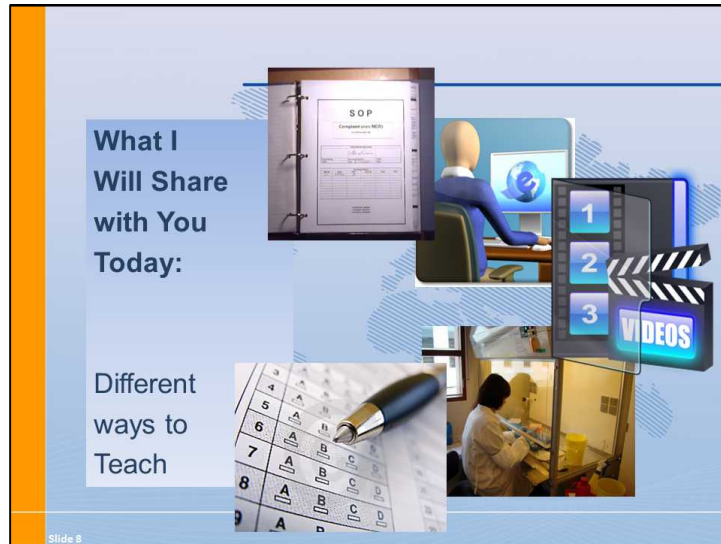
As a group:

- Take **10 minutes** to discuss the list you made in your workbook
- See what items you have in common.
- On your flip chart, list 7 to 10 items that are important to memorable training sessions.



Slide 7

What makes training good?



- What makes a training method strong?
- How do I develop good training materials?



- Evaluate what you hear
- Find gaps
- Draft an action plan to implement new training methods at home

Your goals: At the end of this course

Questions:



KNOW?

FEEL?

BE ABLE TO DO?

Take **5 minutes** and write your goals on the Action Plan in your workbook.

Slide 10



Action Plan

By the end of this lesson, I would like to:

KNOW		FEEL		BE ABLE TO DO	
------	--	------	--	---------------	--

Your learning doesn't stop with this lesson. Use this space to think about what else you need to do or learn to put the information from this lesson into practice.

What more do I need to know or do?	How will I acquire the knowledge or skills?	How will I know that I've succeeded?	How will I use this new learning in my job?

Use space on back, if needed



Agenda

- Welcome & Introduction
- **Training for Biorisk Management**
- Using the Training Design Cycle
 - Analyze
 - Design
 - Develop
 - Implement
 - Evaluate
- The Global Biorisk Management Curriculum
- Wrap-Up & Summary





Slide 12

Introduction

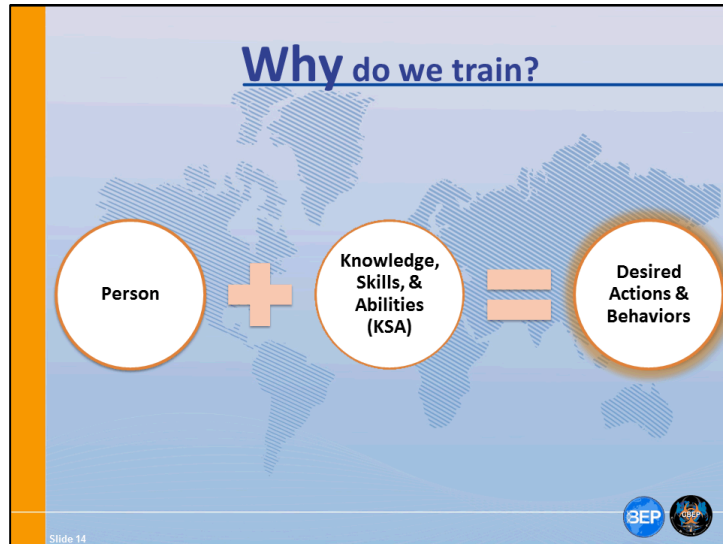
Question: Why do we train?

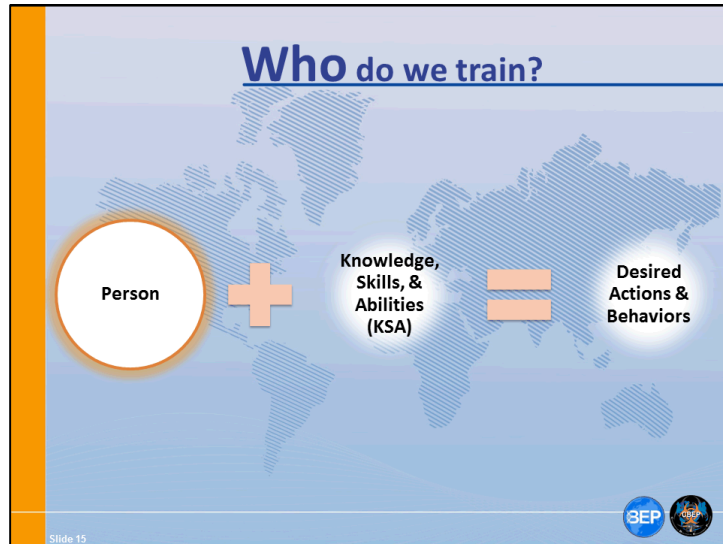
In your groups, please spend **5 minutes** to come up with as many different reasons as your group can, write each on a sticky note (one per sticky note) and place them on you flip chart.

Slide 13



Why do we train?







Who do we train?

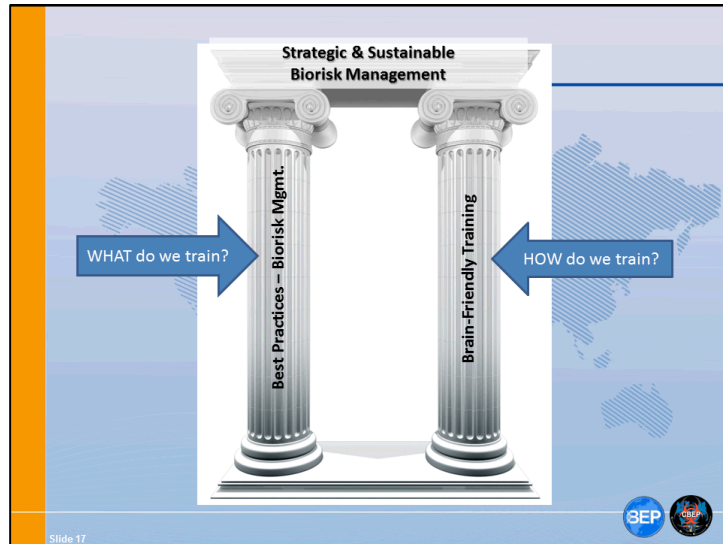
Question: What roles impact or influence biorisk management?

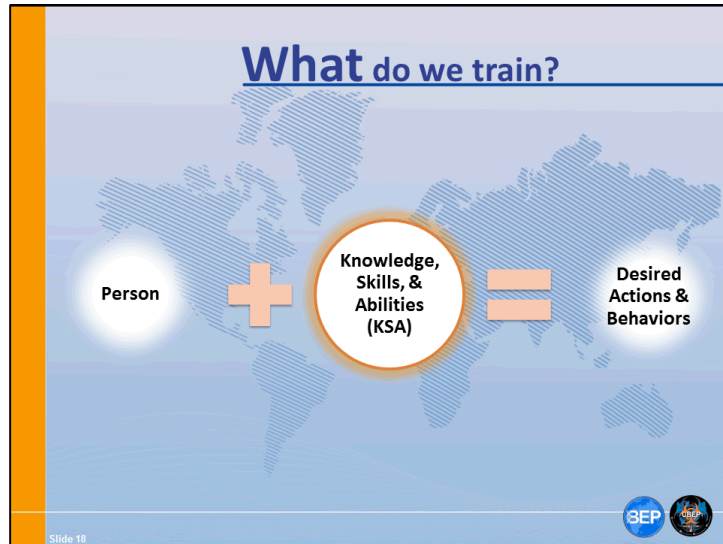
As a group, take **5 minutes** to brainstorm all the roles **within a facility** that can impact or influence biorisk management. Write each role on a separate sticky note.

Take another **5 minutes** to brainstorm all the roles **outside of a facility** that can impact or influence biorisk management. Write each role on a separate sticky note.



- Roles within a facility
- Roles outside of a facility









Biorisk Management Definitions

- Laboratory **biosafety**: containment principles, technologies, and practices implemented to prevent unintentional exposure to pathogens and toxins, or their unintentional release¹
- Laboratory **biosecurity**: protection, control and accountability for valuable biological materials within laboratories, in order to prevent their unauthorized access, loss, theft, misuse, diversion or intentional release²

¹Laboratory biosafety manual, Third edition (World Health Organization, 2004)

² Biorisk management - Laboratory biosecurity guidance (World Health Organization, 2006)






Slide 19

Definitions, continued

- The practices of laboratory **biosafety** and **laboratory biosecurity** are combined into an **integrated effort** known as **biorisk management** where the goals are, concurrently, to work safely and to keep the work secure.

Biorisk management (BRM) can be further defined as the actions taken (by laboratories or facilities which handle, store, or dispose biological agents or toxins) to control or minimize biorisk to acceptable levels in relation to employees, the community and others, as well as the environment, which could be directly or indirectly exposed to biological agents or toxins (adapted from CWA 15793:2011¹).


¹Laboratory biorisk management standard (CWA 15793:2011)



Slide 20

Biorisk Management Resources


- CWA 15793:2011 – Laboratory biorisk management standard (+ CWA 16393 guidance)
- CWA 16335 - BioSafety Professional (BSP) Competences
- World Health Organization Laboratory Biosafety Manual
- World Health Organization Laboratory Biosecurity Manual
- OECD Best Practice Guidelines for Biological Resource Centres
- Guidelines for Biosafety Laboratory Competency (MMWR Supplement Vol. 60)
- Local guidelines & regulations
- Current best practices



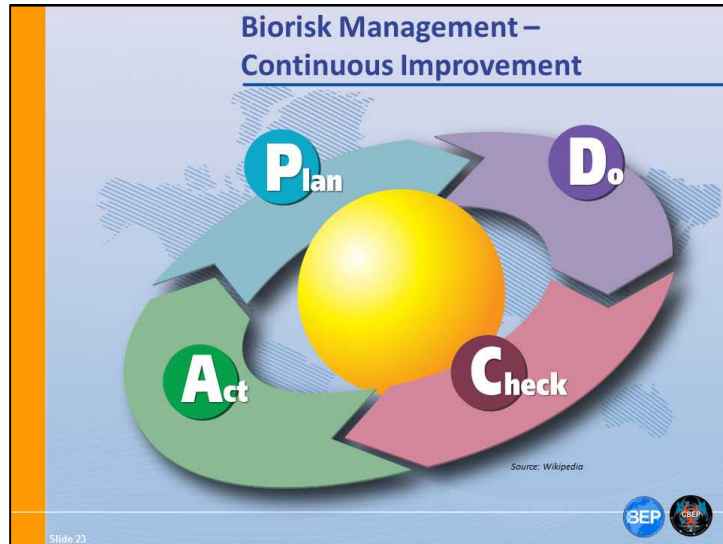
Slide 21

Key References for Training

- World Health Organization Laboratory Biosafety Manual, Chapter 21
- World Health Organization Laboratory Biosecurity Manual, Chapter 7
- CWA 15793:2011 – Laboratory biorisk management standard, Section 4.4.2
- Local guidelines & regulations
- Current best practices
 - example: U.S. Biosafety in Microbiological and Biomedical Laboratories



Slide 22



- Plan
- Do
- Check
- Act



- Define biorisk management system:

- Describe an AMP model:

Agenda

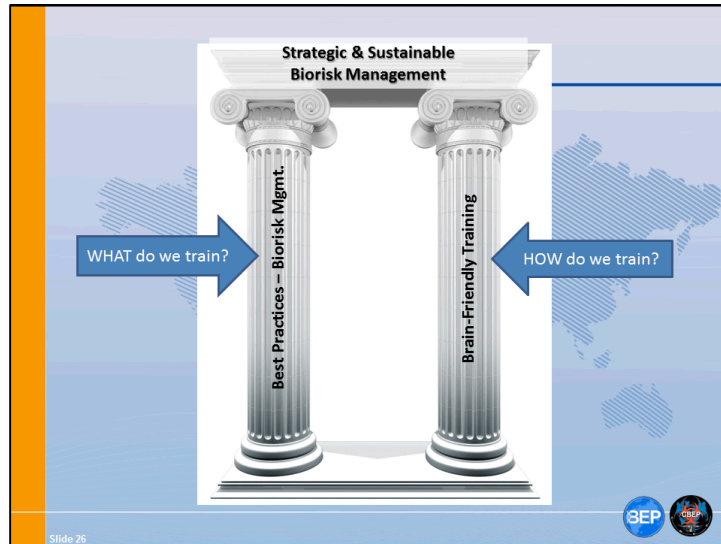
- Welcome & Introduction
- Training for Biorisk Management
- **Using the Training Design Cycle**
 - Analyze
 - Design
 - Develop
 - Implement
 - Evaluate
- The Global Biorisk Management Curriculum
- Wrap-Up & Summary

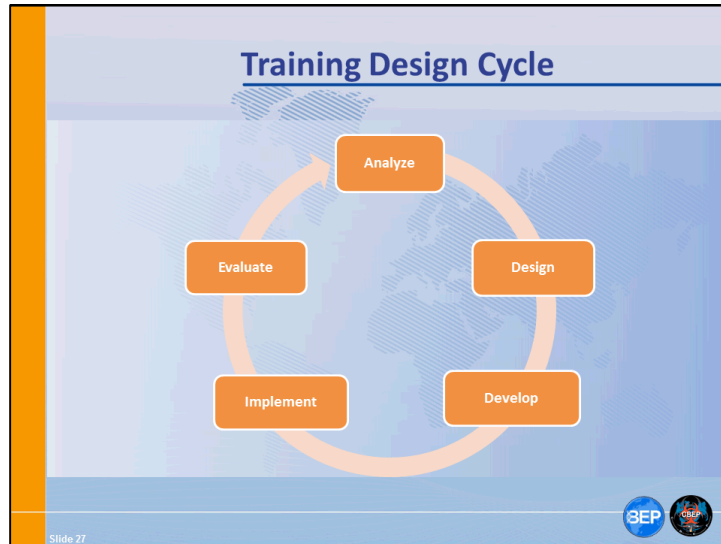


Slide 25

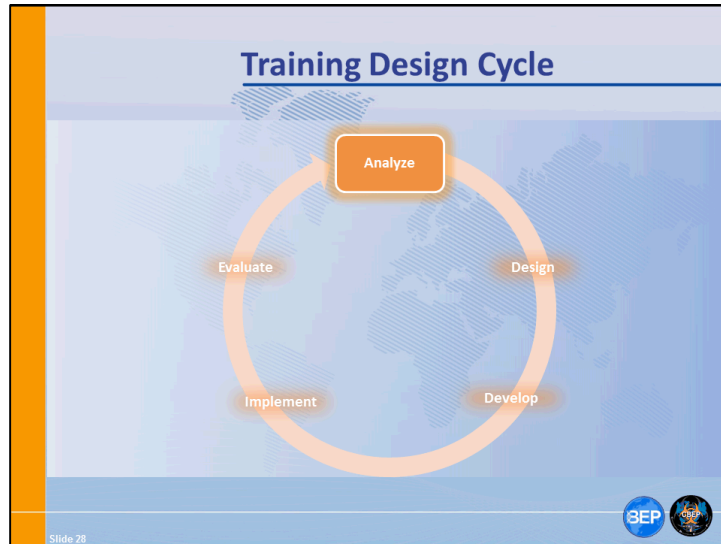
Leadership Skills for Effective Biosafety Professionals: Effective Training

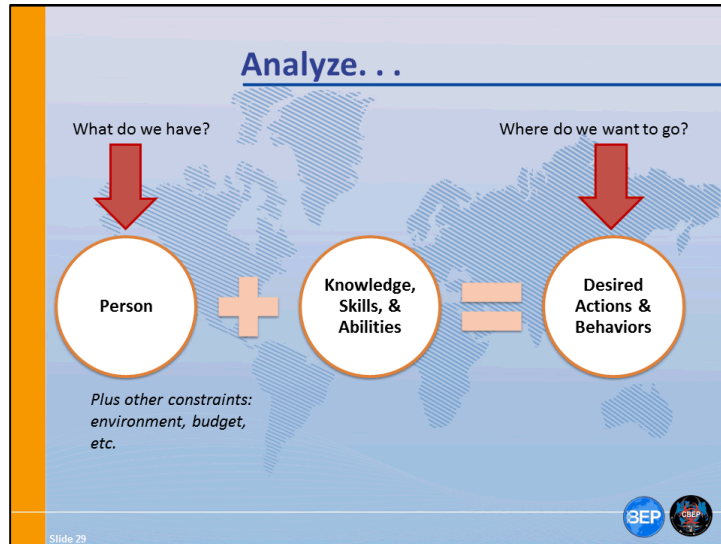
Using the Training Design Cycle: Analyze





- A = Analyze
- D = Design
- D = Develop
- I = Implementation
- E = Evaluate







Activity: Scenario-Specific Biosafety & Biosecurity

As a group, take **5 minutes** to brainstorm all the basic principles of biosafety or biosecurity that are **COMMON** to most settings (lab, field, public health, animal health, etc.). Write each principle on a separate sticky note.

Take another **5 minutes** to brainstorm all the **UNIQUE** features of biosafety or biosecurity found in a specific setting (like a public health lab). Write each feature on a separate sticky note.



Slide 36

Objectives

- Organizational → 
- Instructional → 
- Personal → 
 - Know
 - Feel
 - Do



Slide 31



Example: Learning Objectives

- **Know:**
 - Key concepts that making training “stick”
 - Useful models from learning science that will make developing training easier and also more effective
- **Feel:**
 - Excited about creating brain-friendly training sessions
 - Confident in designing and implementing training (and evaluating, etc., etc.)
- **Be Able to Do:**
 - Use validated instructional design processes to plan a biorisk management training session.
 - Design and practice a brain-friendly training activity to highlight an aspect of biorisk management
 - Identify next steps for creating or modifying an existing training with the models and techniques learned



Slide 33



Activity – Learning Objectives

Activity: Determine what you would like a trainee in a given role to KNOW, FEEL, and BE ABLE TO DO once they complete biosafety & biosecurity training.

If it helps, define the specific tasks they will be expected to do safely & securely.

Write your answers in your workbook. Ask one member of your group to write your answers on a blank worksheet and post it on your flipchart.

Take **10 minutes**.



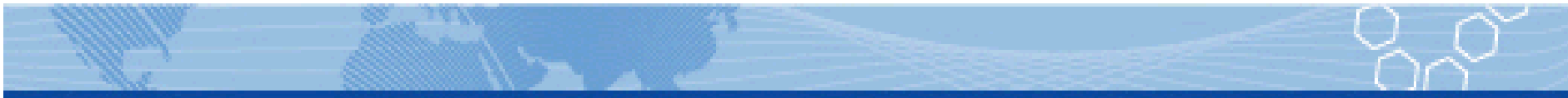
Slide 34

- Training Topic:

- Know:

- Feel:

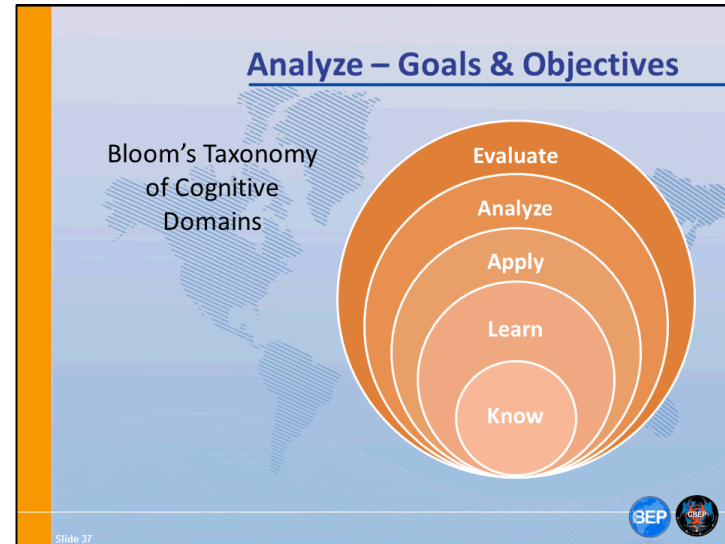
- Do:



Know – Feel - Do	
Tasks:	
1.	
2.	
3.	
4.	
After biosafety and biosecurity training, the worker assigned to the tasks above will:	
Know	
Feel	
Be Able to Do	

Levels of Learning	
Level	Goal
Evaluate	Make judgments about the value of ideas or materials.
Analyze	Use concepts and models from training to create a new use
Apply	Applies what was learned in the classroom into novel situations in the work place
Learn (Comprehend)	Understand the meaning, translation, interpolation, and interpretation of the training. State a problem in one's own words.
Know	Remember material in the same form as it was taught

Slide 36



Levels of Learning	
Level	Example Verbs for Objectives
Evaluate	assess, judge, defend, predict, support
Analyze	examine, compare, critique, categorize, experiment
Apply	demonstrate, use, perform, measure, solve, build
Learn (Comprehend)	explain, describe, restate, classify, recognize
Know	list, memorize, define, recall, label

SEP

Activity – Learning Objectives

Activity:

1. Look at the KNOW, FEEL, and BE ABLE TO DO objectives you have developed.
2. Then look at the Bloom's Taxonomy levels and determine the level you wish to reach with the training.
3. Write your answer at the top of the worksheet.

Take **5 minutes**.





Know – Feel - Do		
Tasks:		
1.		
2.		
3.		
4.		
After biosafety and biosecurity training, the worker assigned to the tasks above will:		
Know		
Feel		
Be Able to Do		
Slide 40		

Review of ANALYZE

Review

To wrap-up, let's discuss what we learned about analyzing the needs and goals for our training topic.

What did we learn?

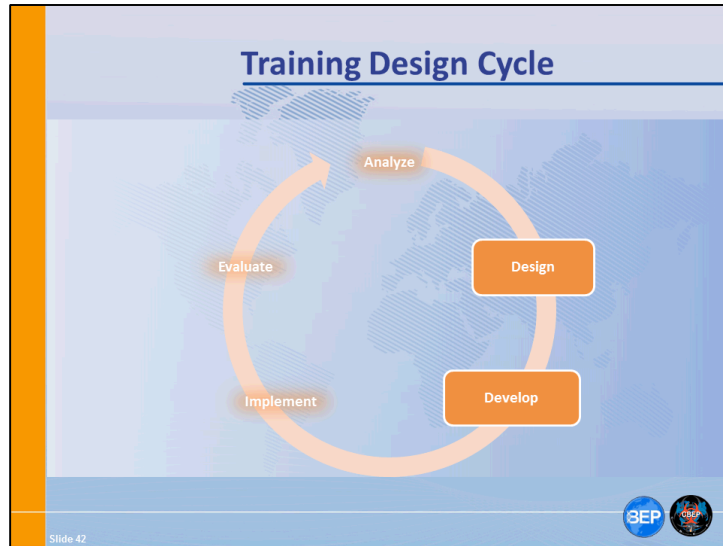
What does it mean?

Where do we go from here?

SEP

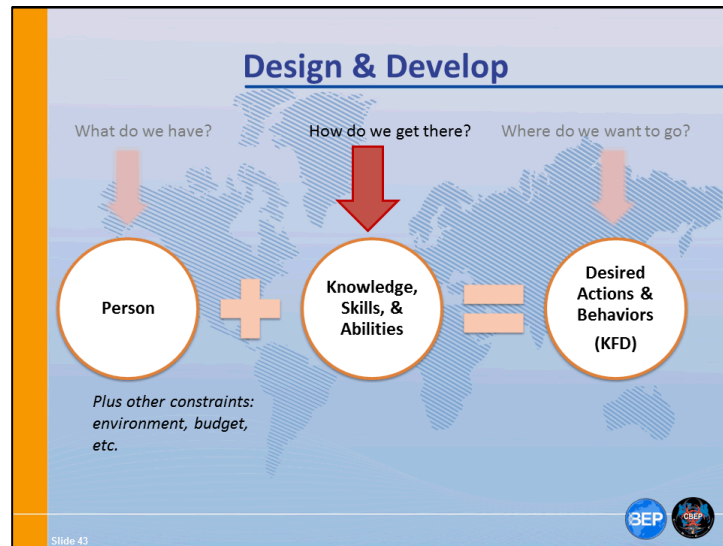
Leadership Skills for Effective Biosafety Professionals: Effective Training

Using the Training Design Cycle: Design & Develop



Leadership Skills for Effective Biosafety Professionals: Effective Training

Using the Training Design Cycle: Design & Develop



Leadership Skills for Effective Biosafety Professionals: Effective Training

Using the Training Design Cycle: Design & Develop

Design

- Apply training strategies to achieve goals & objectives
- Design the students' experience
- Apply visual design (look & feel)


Slide 44



Develop

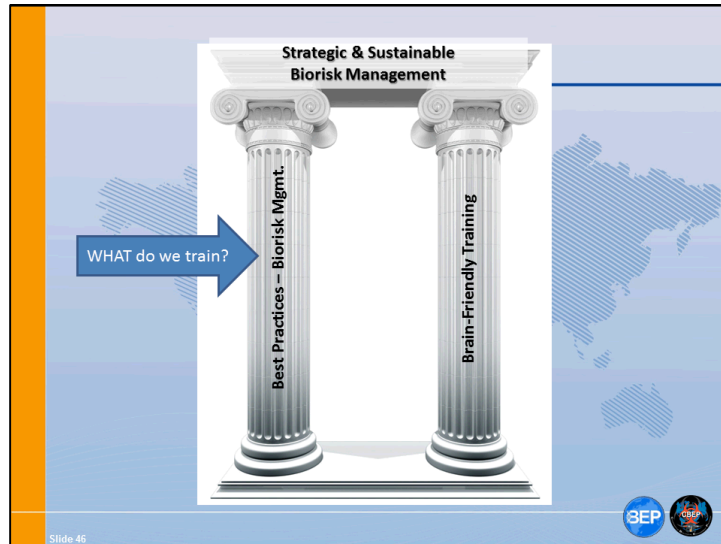
- Plan agenda
- Create content

Slide 45



Leadership Skills for Effective Biosafety Professionals: Effective Training

Using the Training Design Cycle: Design & Develop





Activity – Training Content

Activity:
Using the

- KNOW, FEEL, DO results from the previous exercise,
- the sticky notes with COMMON and UNIQUE training components, and
- the Bloom's level you've determined...

...string together a "course" that you feel will result in the KNOW, FEEL, DO for the trainee.
Post on your flipchart.

Take **10 minutes**.



Leadership Skills for Effective Biosafety Professionals: Effective Training

Using the Training Design Cycle: Design & Develop





Activity – Training Delivery

Activity:
Using the

- KNOW, FEEL, DO results from the previous exercise,
- the sticky notes with COMMON and UNIQUE training components,
- the Bloom’s level you’ve determined, AND
- The qualities of a GOOD training course. . .

What kind of training activities will create a strategic and sustainable training event?

Take **5 minutes** to brainstorm ideas – one idea per sticky note.



Leadership Skills for Effective Biosafety Professionals: Effective Training

Using the Training Design Cycle: Design & Develop

Example Activities

- Individual Work*
- Pair Work
- "Snowballing"*
- "Buzz" Groups
- Small Groups*
- Interactive Lecture*
- "Spin-off" Discussions
- Brainstorming*
- Games*
- Video
- Case Study*
- Role Play

*used during this course



Slide 50

Facilitate versus Teach

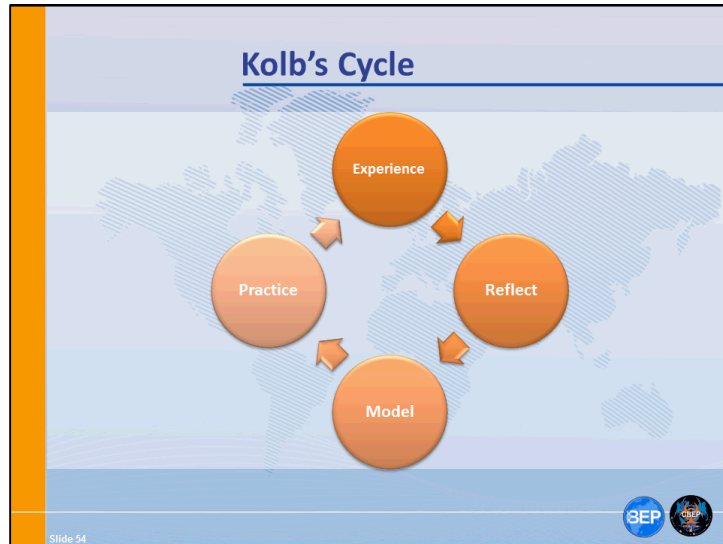


Slide 51

Leadership Skills for Effective Biosafety Professionals: Effective Training

Using the Training Design Cycle: Design & Develop




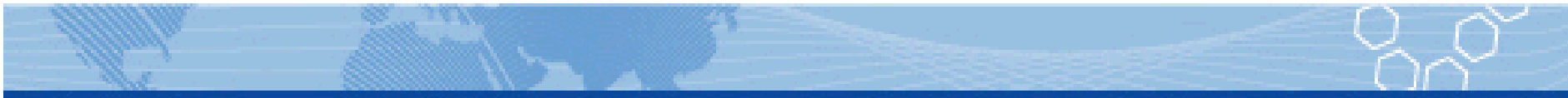


Activity - Design

Class Activity: Design a 10 minute training activity that will work with all 4 learning styles and different sensory learners.

Slide 50





DESIGN			
For Training Topic:			
Describe the training activity	Experience		
	Reflect		
	Model		
	Practice		
What key message or objective is addressed by this activity?			
What part of the activity works for these learners?			
Reflector		Visual	
Theorist		Auditory	
Activist		Kinesthetic	
Pragmatist			

Slide 56

Slide 56

Review of DESIGN



Review

To wrap-up, let's discuss what we learned about designing specific training activities for your training topic.

What did we learn?


What does it mean?

Where do we go from here?



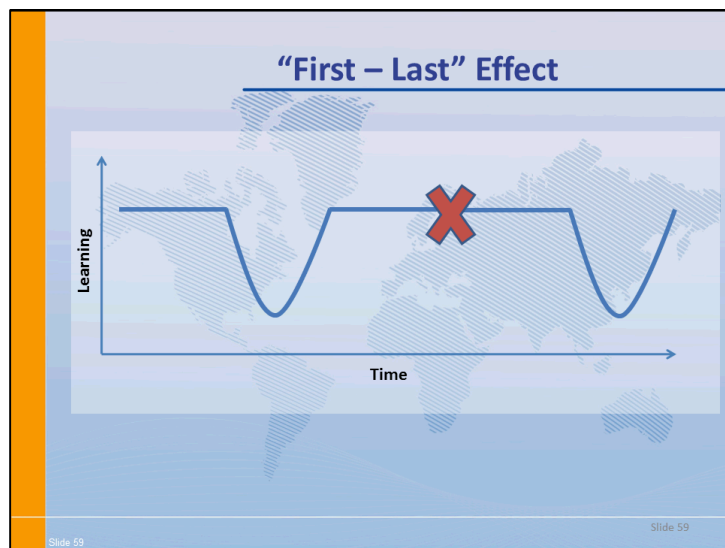
Agenda

- Set the stage
- Key message(s) – teach and/or facilitate
 - *remember Kolb's Cycle...*
- Debrief
- Breaks (< 90 minutes between breaks)
- Recap
- Evaluations



Slide 58

SEP



Notes:

Chunking and Anchoring

- Chunking:
 - Our brains work best when asked to learn in “chunks”.
 - 7 pieces of information (plus or minus 2)
- Anchoring:
 - Hook training to something familiar
 - “Looks like. . .”



Slide 60

Types of Content

- Input (Teaching)
- Activities
- Movement
- Recap
- Debrief
- BREAKS
- Sleep
- Color - Visual
- Sounds
- Reflecting
- Etc.


Slide 61

61

Set the stage

- Welcome
- Housekeeping
- Objectives
- Agenda
- Activity to get students ready to learn and to open the door to the topic
- New day or topic – new stage-setting activity or recap from previous day or topic.


Slide 62



Key Message: Input & Activity



- Remember. . .
 - the **balance between teaching and facilitating** depends on the knowledge the students bring to the course.
 - **anchoring** the training to something familiar (like the students' experiences) will help preserve memory.
 - **Kolb's Cycle** (experience – reflect – model – practice)
 - focus on the **outcome**

Slide 63



Directions to Students for Activities

- For students
 - How to record their response
 - How to report out their response
 - The time allowed
 - Question or action requested
- Make sure that all supplies are provided



Slide 64

Debrief

- To own the training, students need to know:
 - What?
 - Recap key message(s)
 - So What?
 - Why is this important to the student?
 - What's Next?
 - How can the student use this new information in their work?



Slide 65

Recap

- Over time, the brain will “snip” memories that it thinks are unimportant.
- Recapping helps the brain decide to keep the memory.
- This should happen before and after significant breaks (lunch and overnight).
- Reconstruct, through an activity, the key terms, timeline, and/or models of the previous section.



Slide 66

Review of DEVELOP

Review

To wrap-up, let's discuss what we learned about developing a training agenda for your training topic.

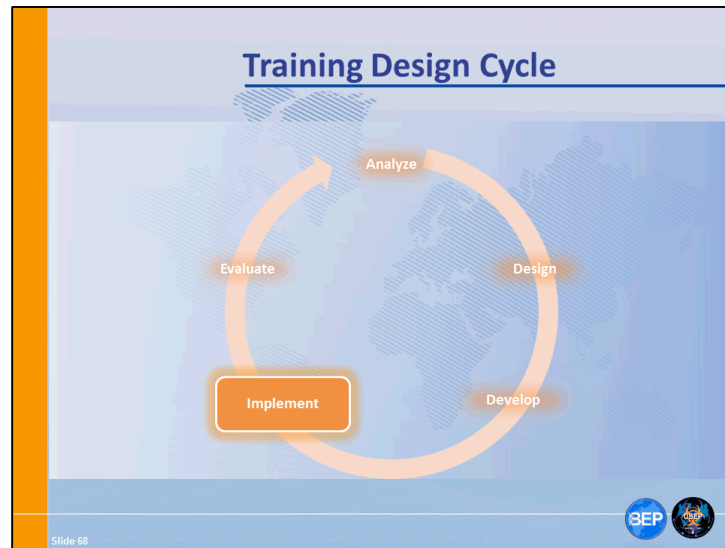
What did we learn?

What does it mean?

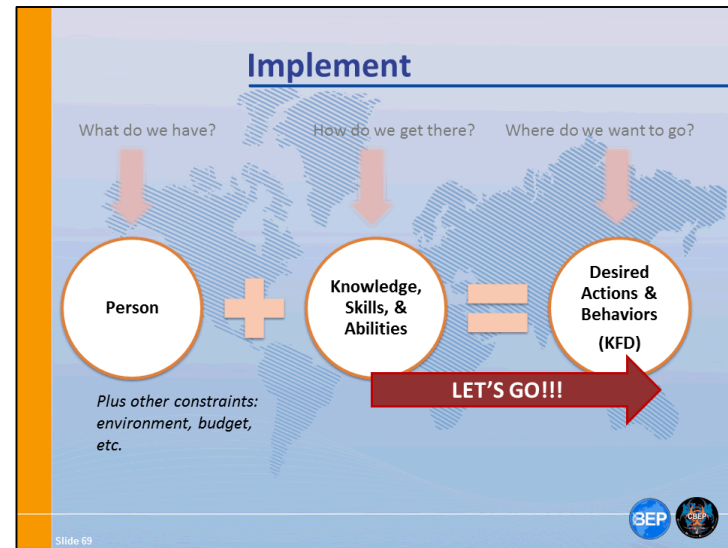
Where do we go from here?

SEP

Leadership Skills for Effective Biosafety Professionals: Effective Training





Using the Training Design Cycle: Implement



Activity - Implement

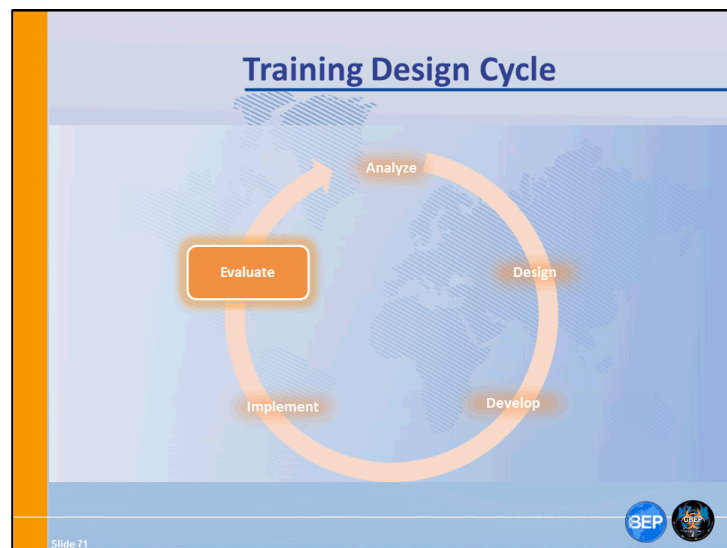
Activity: (Snowball)

1. INDIVIDUALLY, think of all the things that you must do to make sure you are ready to train. List them in your workbook. Take **5 minutes**.
2. AS A SMALL GROUP, share your individual lists and come up with a group list. Take **5 minutes**.
3. AS A CLASS, make a master list of all the things that must be in place BEFORE training begins. Take **5 minutes**.

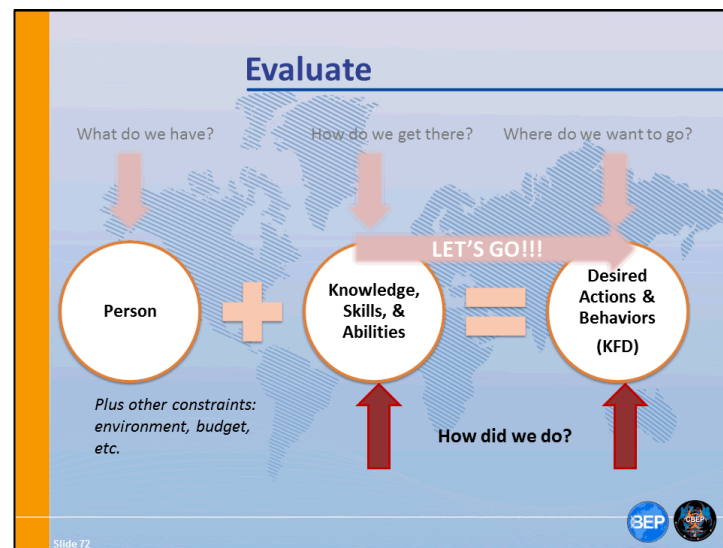


Slide 70

Leadership Skills for Effective Biosafety Professionals: Effective Training



Using the Training Design Cycle: Evaluate





Activity - Evaluate

Question: How do you know if students have met the objectives of the training session? How have you evaluated the effectiveness of training sessions you have conducted previously?

In your groups, discuss these questions. Put your answers on sticky notes – one answer per sticky note.



Take **5 minutes**.



Evaluate – Four Levels*

- Level 1
 - Was the student **happy** with the course?
- Level 2
 - Did the student **learn**?
- Level 3
 - Over time, did the student’s **behavior** change to meet the desired objective?
- Level 4
 - Over time, did the **organization** see **improvement** in biorisk management?

*(Donald) Kirkpatrick Learning Evaluation Model



Slide 74

Activity - Evaluate

Look at the sticky notes from the previous exercise.

Determine what Fitzpatrick level they address and write this on the sticky note.

Spend some additional time thinking of ways to evaluate all the Fitzpatrick levels. Add sticky notes to the class listings.

Take **10 minutes**.



- Level 1:
- Level 2:
- Level 3:
- Level 4:

Review of EVALUATE

Review

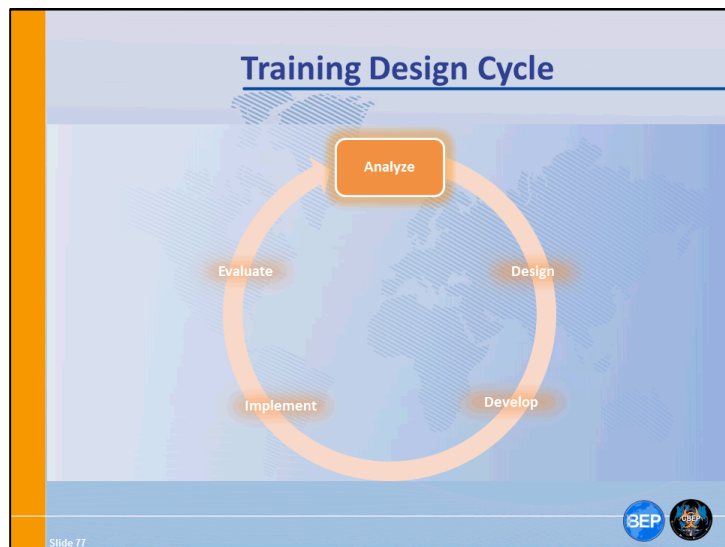
To wrap-up, let's discuss what we learned about evaluating training effectiveness.

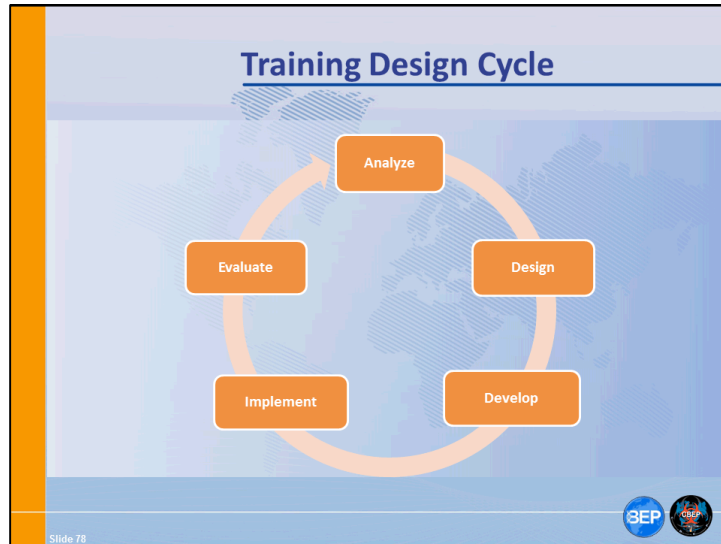
What did we learn?

What does it mean?

Where do we go from here?

SEP





Wrap-Up: Principles of Learning

- Readiness
- Exercise
- Effect
- Primacy

- Recency
- Intensity
- Freedom
- Requirement

Slide 79

- Readiness
 - Instructor and student meet half-way
- Exercise
 - Things most often repeated are best remembered
- Effect
 - A good experience increases learning
- Primacy
 - First impressions
- Recency
 - Things most recently learned are best remembered
- Intensity
 - Sharp, vivid, clear, dramatic experiences are retained longer
- Freedom
 - Things freely learned are best learned
- Requirement
 - Need a starting point; context; anchor

Leadership Skills for Effective Biosafety Professionals: Effective Training

GBRMC

Agenda

- Welcome & Introduction
- Training for Biorisk Management
- Using the Training Design Cycle
 - Analyze
 - Design
 - Develop
 - Implement
 - Evaluate
- The Global Biorisk Management Curriculum
- Wrap-Up & Summary



Slide 80

GBRMC

- What is the Global Biorisk Management Curriculum?
- GBRMC Pillars:
 - Biorisk Management
 - Brain-Friendly Training Methods
- GBRMC Configuration & Customization
 - Definitions & Examples
 - Activities
- GBRMC Library and Trainers' Network
 - Components
 - Access
- Using the GBRMC
- Q & A



Slide 81

Slide 62 features a blue header with the text "Welcome to the GBRMC Library!". Below the header is a large illustration of a library interior with bookshelves, a central reading area, and people. To the right of the illustration, the text "GBRMC = Global Biorisk Management Curriculum" is displayed. Below this, the word "Mission" is followed by a list of bullet points: "Biosafety & Biosecurity training materials...", "Strategic", "Sustainable", "Anywhere, anytime", "Well-branded", and "Well-managed". At the bottom right of the slide are two circular logos: "BEP" and "GBRMC".

Welcome to the GBRMC Library!

GBRMC = Global Biorisk Management Curriculum

Mission

- Biosafety & Biosecurity training materials...
- Strategic
- Sustainable
- Anywhere, anytime
- Well-branded
- Well-managed

Slide 62

GBRMC

- What is the Global Biorisk Management Curriculum?
- **GBRMC Pillars:**
 - Biorisk Management
 - Brain-Friendly Training Methods
- GBRMC Configuration & Customization
 - Definitions & Examples
 - Activities
- GBRMC Library and Trainers' Network
 - Components
 - Access
- Using the GBRMC
- Q & A

Slide 83



**Strategic & Sustainable
Biorisk Management**

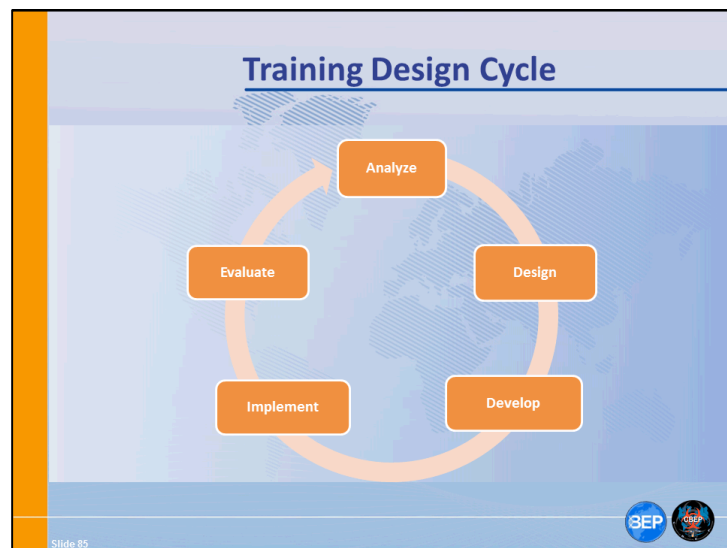


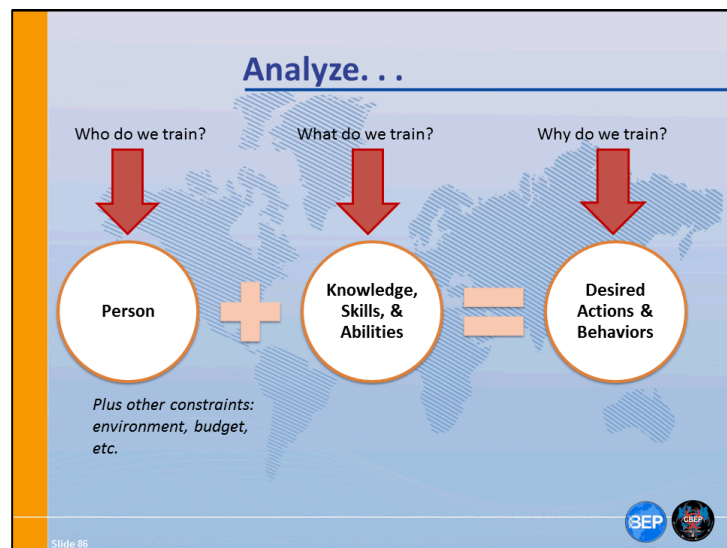
Best Practices – Biorisk Mgmt.

Brain-Friendly Training

Slide 84

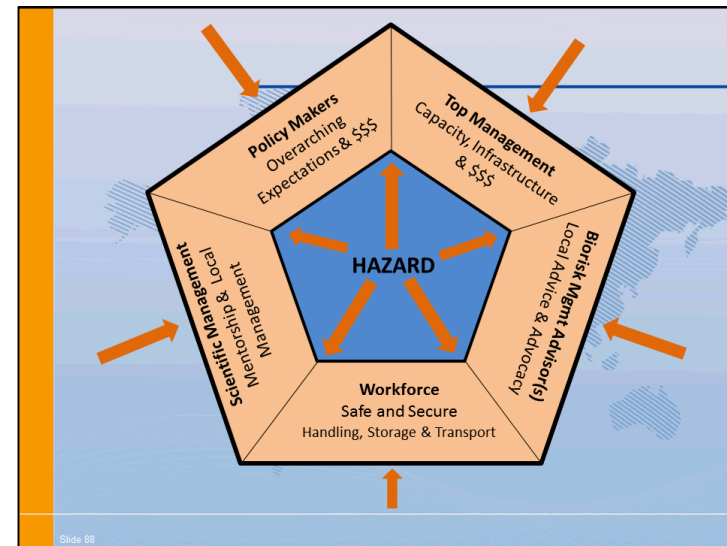
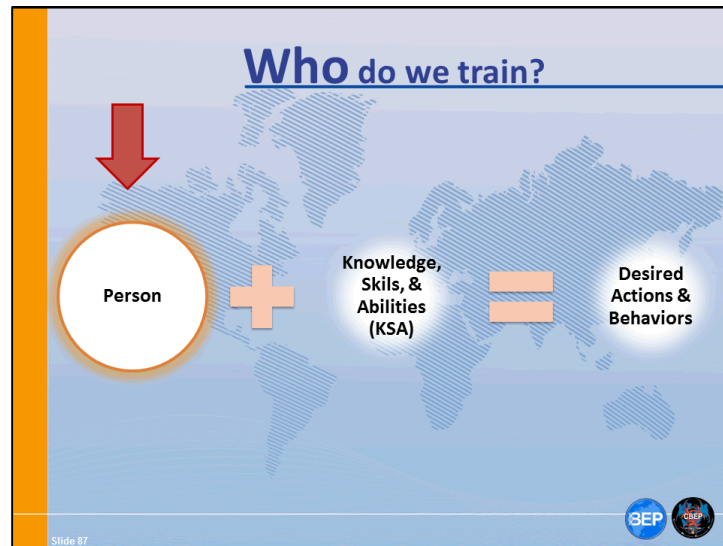


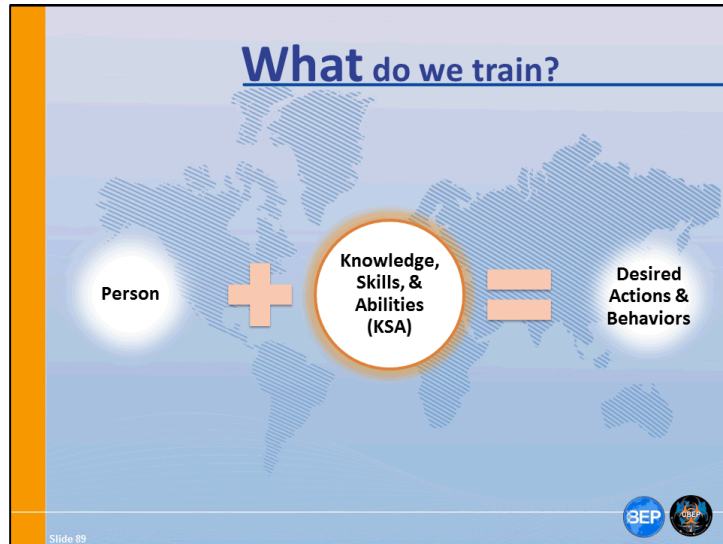


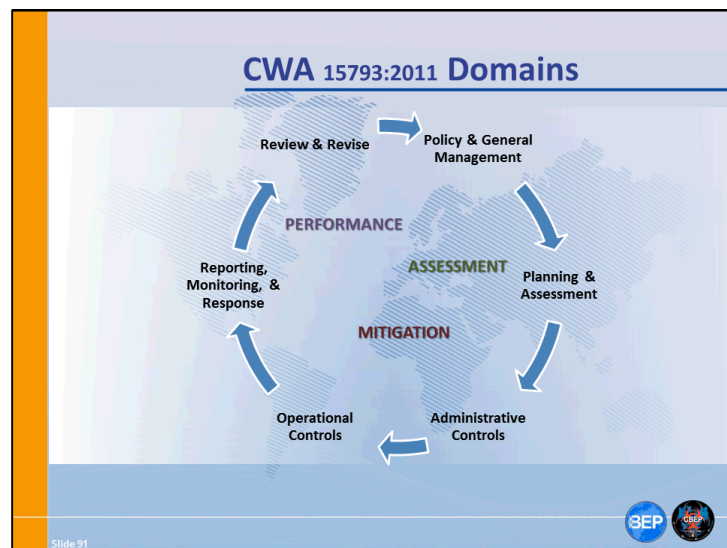


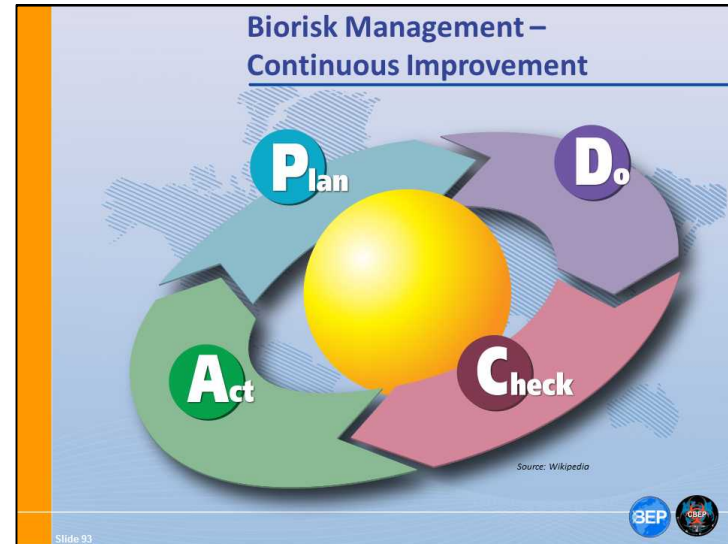
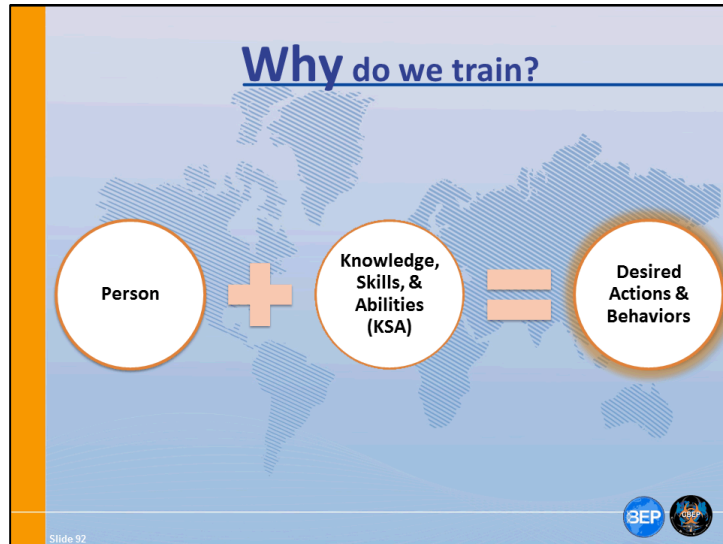
Leadership Skills for Effective Biosafety Professionals: Effective Training

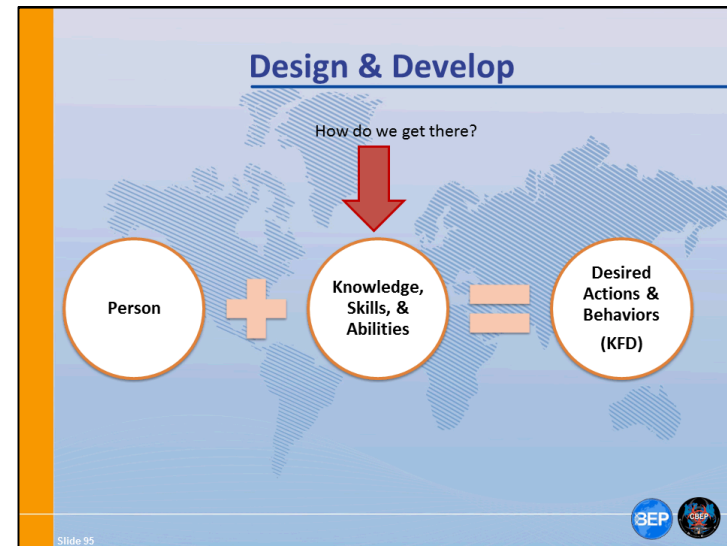
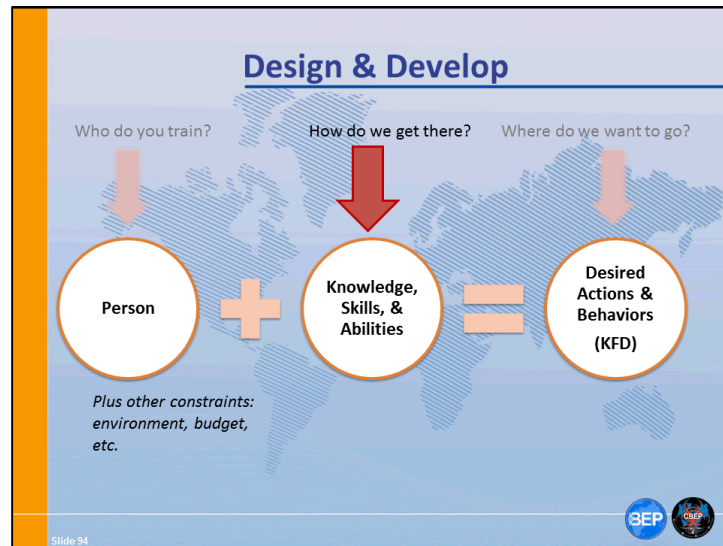
GBRMC











GBRMC Pillars – Training Techniques

- So what's different?
 - Experiential learning
 - Small group and plenary activities
 - Breaks
 - Movement & colors
 - Debriefs, recaps
 - Outcome based
 - What do you have?
 - Where do you want to go?



Slide 96

GBRMC Pillars – Training Techniques

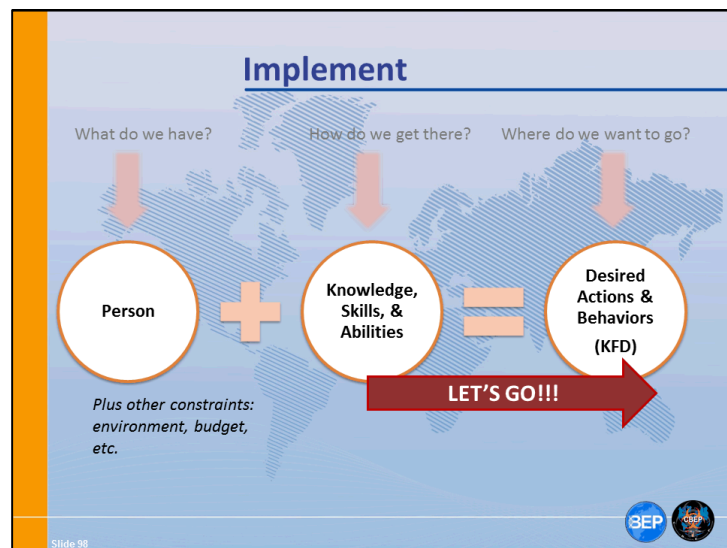
- So what's different, continued?
 - Implementation “Blind”
 - No specific training scenarios anticipated
 - Comprehensive Toolkit
 - Detailed design document and instructor guide
 - Student guide and key references
 - Evaluations
 - Leave your fingerprints
 - Trainers’ Network to capture feedback, solutions, configurations, customizations, revisions, translations, etc.



Slide 97

Leadership Skills for Effective Biosafety Professionals: Effective Training

GBRMC



GBRMC: Agenda

- What is the Global Biorisk Management Curriculum?
- GBRMC Pillars:
 - Biorisk Management
 - Brain-Friendly Training Methods
- **GBRMC Configuration & Customization**
 - Definitions & Examples
 - Activities
- GBRMC Library and Trainers' Network
 - Components
 - Access
- Using the GBRMC
- Q & A



Slide 99

Configuration & Customization



Configuration

matching objectives between training needs and GBRMC courses

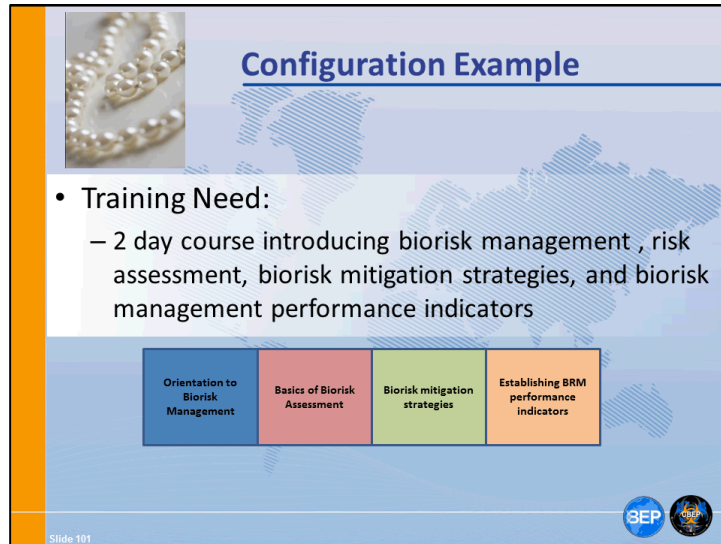


Customization

adding course materials to address additional objectives not met by GBRMC



Slide 100



Configuration Example

- Training Need:
 - 2 day course introducing biorisk management , risk assessment, biorisk mitigation strategies, and biorisk management performance indicators

Orientation to Biorisk Management	Basics of Biorisk Assessment	Biorisk mitigation strategies	Establishing BRM performance indicators
-----------------------------------	------------------------------	-------------------------------	-----------------------------------------

Slide 101

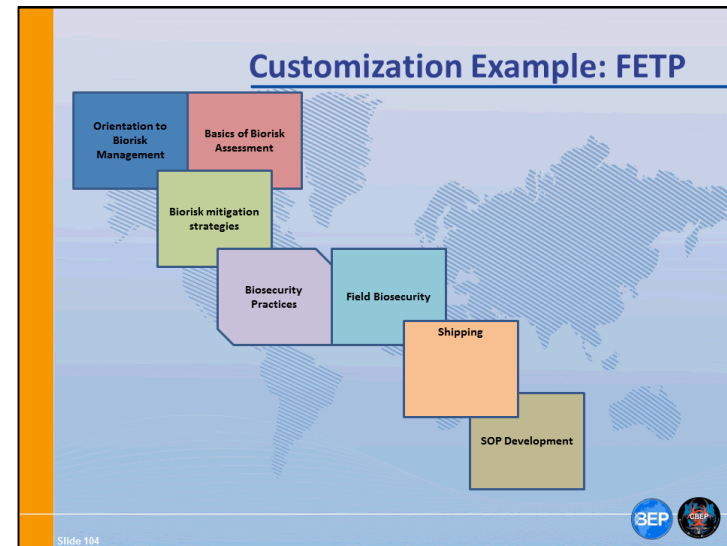
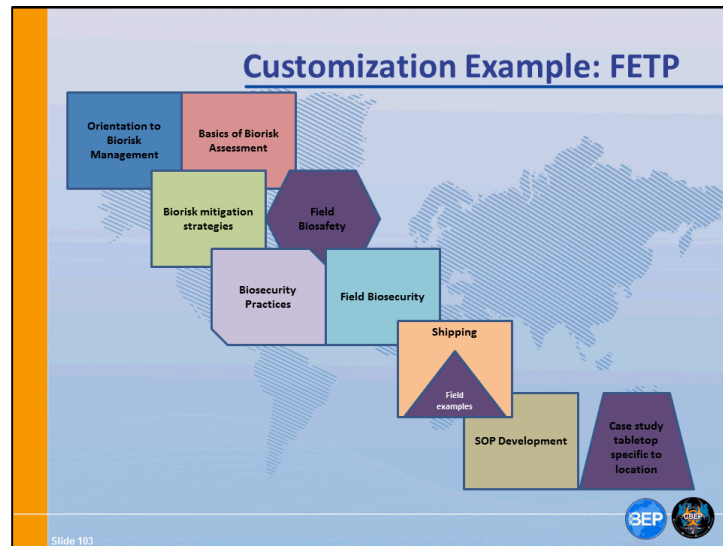


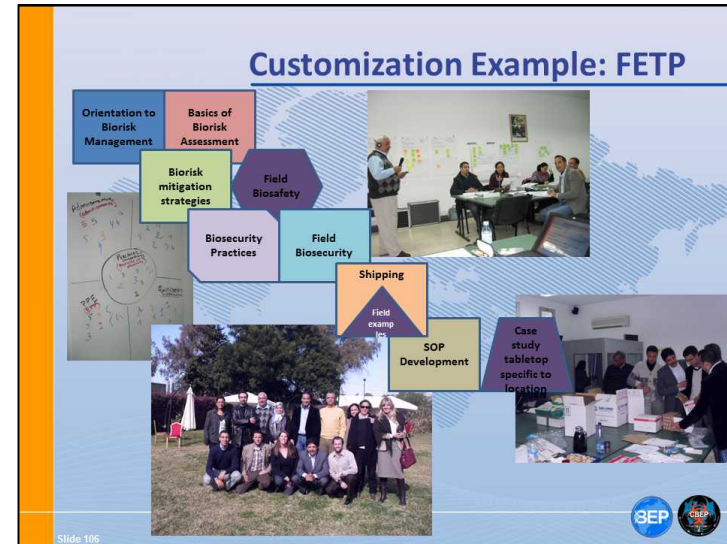
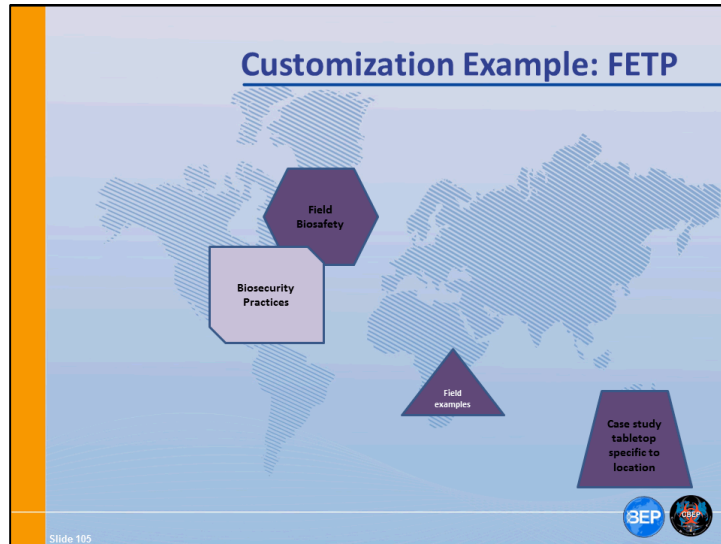
Customization Example: FETP

- Training Need:
 - 1 week biosafety and biosecurity module for Field Epidemiology Training Program

Slide 102

SEP GBRMC





Activity – Configure the GBRMC



Activity:

Using the

- KNOW, FEEL, DO results from the previous exercise,
- the sticky notes with COMMON and UNIQUE training components, and
- the GBRMC course cards. . .

. . .match the GBRMC course cards to as many sticky notes as possible. Replace the matched sticky notes with the cards, leaving the unmatched sticky notes in place.

Take **5 minutes**.



Slide 107

Activity – Identifying Gaps



Activity:

Using the

- leftover sticky notes

...identify areas for potential customization.

Take **5 minutes**.



Slide 108

GBRMC: Agenda

- What is the Global Biorisk Management Curriculum?
- GBRMC Pillars:
 - Biorisk Management
 - Brain-Friendly Training Methods
- GBRMC Configuration & Customization
 - Definitions & Examples
 - Activities
- GBRMC Library and Trainers' Network
 - Components
 - Access
- Using the GBRMC
- Q & A



Slide 109

Leadership Skills for Effective Biosafety Professionals: Effective Training

GBRMC

Global Biorisk Curriculum Library, 1

Basic Track

Audience: all personnel involved in biorisk management

- Biorisk Management Basics
 - Orientation to biorisk management
 - Bioethics
 - Dual-use and responsible conduct of research
 - Risk Characterization & Evaluation
 - Biosafety Risk Assessment
 - Biosecurity Risk Assessment
 - Biorisk Mitigation Strategies
 - Introduction to Incident Management & Response

Laboratory-Level Track

Audience: Biorisk Management Advisors, Scientific/Laboratory Management, Lab Workforce

- Lab-Level Administrative Controls
 - Human Performance for Biorisk Management in the Laboratory
 - Developing, evaluating, validating, and communicating standard operating procedures
 - Laboratory level hazard and risk communication

Laboratory-Level Track, continued

- Lab-Level Operational Controls
 - Risk mitigation strategies
 - Developing, evaluating, validating, and communicating standard operating procedures
 - Facility features
 - Engineering Controls and Equipment
 - Good laboratory practices
 - Personal protective equipment
 - Decontamination
 - Disposal
 - Biosecurity
 - Field biosecurity
 - Shipping Infectious Substances and Biological Specimens
- Reporting, monitoring, and Response
 - Incident recognition and response in the laboratory
 - Drills, audits, and inspections (lab-level)



Slide 110

Global Biorisk Curriculum Library, 2

Management & Leadership Track

Audience: (Policy Makers) Top Management, Biorisk Management Advisors, Scientific/Laboratory Management

- Policy, Planning, and Assessment
 - Writing and communicating biorisk management policy
 - Establishing and communicating BRM roles, responsibilities, objectives, and goals
 - Developing, conducting, and maintaining a hazard inventory
 - Identifying legal requirements that impact BRM
 - Work program review and approval
- Developing and Maintaining Human Capacity for Biorisk Management (Managing People)
 - Managing human performance in the BRM workforce
 - Developing, implementing, and evaluating training and other methods to assure BRM competence
 - Establishing and maintaining formal and informal BRM mentoring programs
 - Establishing and maintaining Worker Health Programs
 - Developing roles & responsibilities for risk-based access to and accountability for biological agents and toxins

Management & Leadership Track, continued



- Developing and Maintaining Physical Infrastructure for Biorisk Management
 - Understanding and maintaining facilities & equipment for biorisk management
 - Basic features & maintenance for physical and information security measures
- Incident Management & Response
 - Incident Response Planning and Preparation
 - Incident Response & Investigation
 - Incident Response Evaluation & Improvement
- Measuring and Improving Biorisk Management Performance
 - Measurement and Analysis of Biorisk Management System Performance
 - Conducting Audits and Inspections to Assess Biorisk Management Performance
 - Revising and Improving a Biorisk Management System based on Performance Results
 - Establishing and Using Performance Indicators



Slide 111

Options for Customization

- Demonstrations
- Guided exercises (tabletops, drills, SOP development, hands-on technique, etc.)
- Tours
- New courses with locally specific information:
 - Legal requirements
 - Facility & equipment specifics, etc.
- Replacement in GBRMC courses of case studies and examples with locally specific examples.
- Others?



Slide 112

Activity – Customize



Activity:

Using the

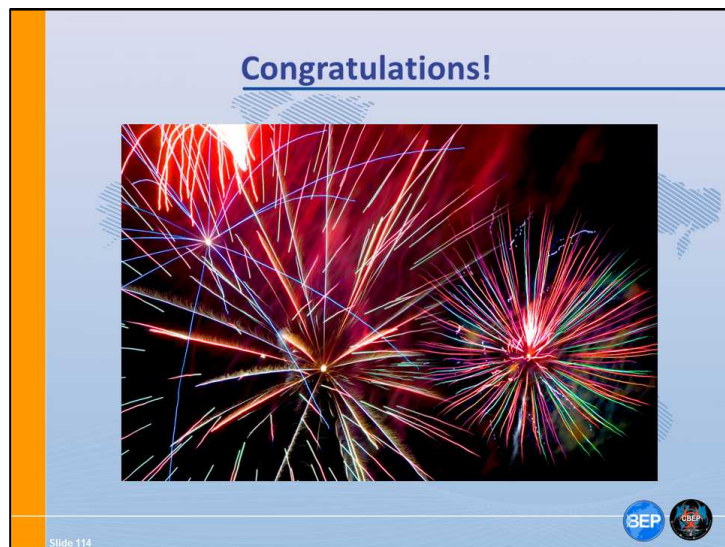
- KNOW, FEEL, DO results from the previous exercise,
- the GBRMC course cards (configured content), and
- the leftover sticky notes and identified gaps

...decide options for customization that address the gaps. Put each on its own sticky note and add to your string of course material.

Take **10 minutes**.



Slide 113




GBRMC Course Components

- Design Document
 - Course objectives, pre-requisites (for students & trainers), course outline, etc.
- Instructor's Guide
 - Detailed notes
 - Instructions and materials for interactive exercises
 - Handouts, if used
- Slide Deck

- Student Guide
 - Student workbook
 - References & resources
- Instructor and Student Evaluation materials
- References & resources
- Other materials as needed

SEP

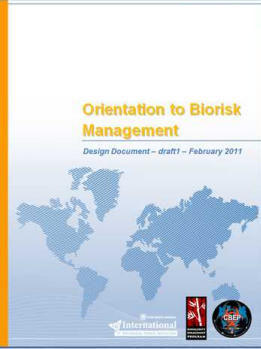


Slide 115

Leadership Skills for Effective Biosafety Professionals: Effective Training

GBRMC

GBRMC Components: Design Document (DD)




Part I: Lesson Overview	
Lesson Description	Overview: Overview of Biosafety Management in the Bioscience Sector Scope: This lesson will provide an overview of biosafety management in the bioscience sector and its importance in the high technology industry. It will also provide an overview of the various types of biosafety management systems and their components.
Learning Level	Knowledge Application Analysis Evaluation
Length of Course	Hours
Lesson Objectives	At the end of this lesson, learners will be able to: • Understand the "Biosafety Management" concept • Recognize the importance of biosafety management in the bioscience sector • Apply the various types of biosafety management systems and their components • Evaluate the various types of biosafety management systems and their components • Analyze the various types of biosafety management systems and their components
Personal Objectives	None

- Part I:
 - Lesson Overview
 - Student Description
 - Instructional Environment, Resources
- Part II:
 - Course Outline

Slide 116

GBRMC Components: Slide Deck (SD)



Slide 117

Leadership Skills for Effective Biosafety Professionals: Effective Training

GBRMC

GBRMC Components: Instructor Guide (IG)

What is biorisk management?

Slide 11

Biorisk Management: the AMP Model

Biorisk Management + Assessment, Mitigation, Performance

Background information for instructor

Explain that this slide will present a biorisk management system that will use the AMP model. Explain that this model will be used repeatedly throughout training and it is a model that they will participate in.

Slide 12

Biorisk Management System

It is a living, breathing system that is always in flux and can be changed over time.

Explain that this slide will present a living, breathing system that is always in flux and can be changed over time.

What is biorisk management?

Small group activity (10 minutes)

Activity instructions (to student)

- How do we organize these elements?
- How do we organize these elements?

You have 10 minutes to complete this activity

Directions for instructor

- How many times have you created a biorisk management system and what is a management system? and why is it important?
- How many times have you created a biorisk management system and why is it important?
- How many times have you created a biorisk management system and why is it important?
- How many times have you created a biorisk management system and why is it important?

Primary Discussion (10 minutes)

Question to consider:

Why are management systems important?

Directions for instructor

- How many times have you created a biorisk management system and why is it important?
- How many times have you created a biorisk management system and why is it important?

Capstone activity sheet

- Be prepared to report answers on a class page

Slide 119

GBRMC Components: Student Guide (SG)

Orientation to Biorisk Management

Group activity 10 min

What is a management system?

How do we organize these elements?

How do we organize these elements?

How do we organize these elements?

How do we organize these elements?

Components of Biorisk Management

Assessment

Mitigation

Performance

Orientation to Biorisk Management

The AMP Model

Define the AMP model system (the next activity may help you understand your definition)

Describe the AMP model

Slide 119

Course & Instructor Evaluation (Level 1)					
Student Name: _____					
Course Number: _____					
<p>Please rate how much you enjoyed each of the following activities. Use the following scale:</p> <p>1 = Not at all 2 = A little 3 = Fairly 4 = Quite a bit 5 = Very much</p>	Very good	Good	Fair	Not good	Very poor
1. The instructor's presentation style	5	4	3	2	1
2. The instructor's knowledge of the subject	5	4	3	2	1
3. The instructor's ability to answer questions	5	4	3	2	1
4. The instructor's ability to explain difficult concepts	5	4	3	2	1
5. The instructor's ability to relate the material to your life	5	4	3	2	1
6. The instructor's ability to make the material interesting	5	4	3	2	1
7. The instructor's ability to make the material easy to understand	5	4	3	2	1
8. The instructor's ability to make the material challenging	5	4	3	2	1
9. The instructor's ability to make the material relevant	5	4	3	2	1
10. The instructor's ability to make the material useful	5	4	3	2	1
11. The instructor's ability to make the material enjoyable	5	4	3	2	1
12. The instructor's ability to make the material motivating	5	4	3	2	1
13. The instructor's ability to make the material inspiring	5	4	3	2	1
14. The instructor's ability to make the material thought-provoking	5	4	3	2	1
15. The instructor's ability to make the material memorable	5	4	3	2	1
16. The instructor's ability to make the material meaningful	5	4	3	2	1
17. The instructor's ability to make the material valuable	5	4	3	2	1
18. The instructor's ability to make the material worthwhile	5	4	3	2	1
19. The instructor's ability to make the material enjoyable	5	4	3	2	1
20. The instructor's ability to make the material motivating	5	4	3	2	1
21. The instructor's ability to make the material inspiring	5	4	3	2	1
22. The instructor's ability to make the material thought-provoking	5	4	3	2	1
23. The instructor's ability to make the material memorable	5	4	3	2	1
24. The instructor's ability to make the material meaningful	5	4	3	2	1
25. The instructor's ability to make the material valuable	5	4	3	2	1
26. The instructor's ability to make the material worthwhile	5	4	3	2	1
27. The instructor's ability to make the material enjoyable	5	4	3	2	1
28. The instructor's ability to make the material motivating	5	4	3	2	1
29. The instructor's ability to make the material inspiring	5	4	3	2	1
30. The instructor's ability to make the material thought-provoking	5	4	3	2	1
31. The instructor's ability to make the material memorable	5	4	3	2	1
32. The instructor's ability to make the material meaningful	5	4	3	2	1
33. The instructor's ability to make the material valuable	5	4	3	2	1
34. The instructor's ability to make the material worthwhile	5	4	3	2	1
35. The instructor's ability to make the material enjoyable	5	4	3	2	1
36. The instructor's ability to make the material motivating	5	4	3	2	1
37. The instructor's ability to make the material inspiring	5	4	3	2	1
38. The instructor's ability to make the material thought-provoking	5	4	3	2	1
39. The instructor's ability to make the material memorable	5	4	3	2	1
40. The instructor's ability to make the material meaningful	5	4	3	2	1
41. The instructor's ability to make the material valuable	5	4	3	2	1
42. The instructor's ability to make the material worthwhile	5	4	3	2	1
43. The instructor's ability to make the material enjoyable	5	4	3	2	1
44. The instructor's ability to make the material motivating	5	4	3	2	1
45. The instructor's ability to make the material inspiring	5	4	3	2	1
46. The instructor's ability to make the material thought-provoking	5	4	3	2	1
47. The instructor's ability to make the material memorable	5	4	3	2	1
48. The instructor's ability to make the material meaningful	5	4	3	2	1
49. The instructor's ability to make the material valuable	5	4	3	2	1
50. The instructor's ability to make the material worthwhile	5	4	3	2	1
51. The instructor's ability to make the material enjoyable	5	4	3	2	1
52. The instructor's ability to make the material motivating	5	4	3	2	1
53. The instructor's ability to make the material inspiring	5	4	3	2	1
54. The instructor's ability to make the material thought-provoking	5	4	3	2	1
55. The instructor's ability to make the material memorable	5	4	3	2	1
56. The instructor's ability to make the material meaningful	5	4	3	2	1
57. The instructor's ability to make the material valuable	5	4	3	2	1
58. The instructor's ability to make the material worthwhile	5	4	3	2	1
59. The instructor's ability to make the material enjoyable	5	4	3	2	1
60. The instructor's ability to make the material motivating	5	4	3	2	1
61. The instructor's ability to make the material inspiring	5	4	3	2	1
62. The instructor's ability to make the material thought-provoking	5	4	3	2	1
63. The instructor's ability to make the material memorable	5	4	3	2	1
64. The instructor's ability to make the material meaningful	5	4	3	2	1
65. The instructor's ability to make the material valuable	5	4	3	2	1

[illegible]

Resources & References

- Resources – as needed:
 - Case studies
 - Templates
 - Card decks, etc.
 - Core documents
- References
 - For instructor – background references
 - For student – for student guide or separate distribution



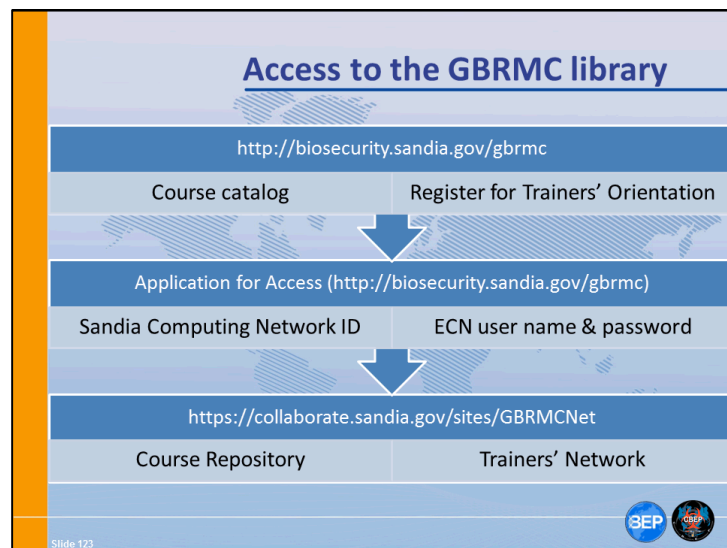
Slide 121

Access to the GBRMC library

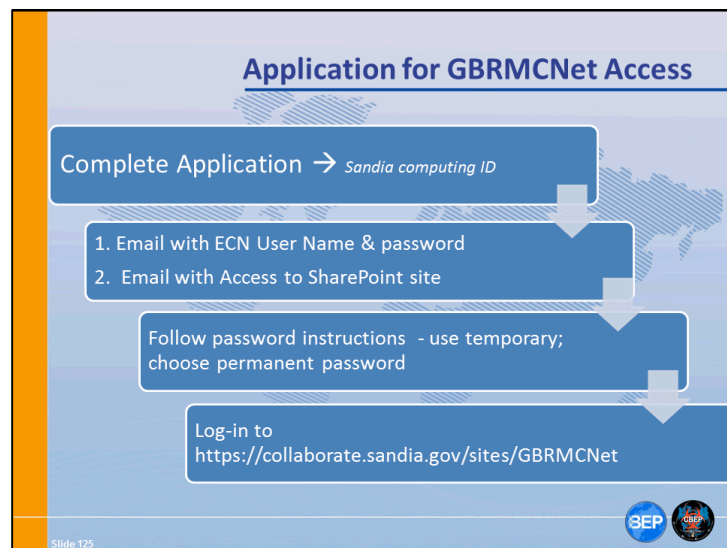
- GBRMC Trainers' Network – SharePoint:
 - Housed on Sandia Nat'l Laboratories External Collaboration Network (ECN)
 - Requires registration to gain:
 - Sandia computer profile
 - ECN username and password
 - Permission to access Trainers' Network site



Slide 122









GBRMC Trainers' Network

- Phase I
 - Repository
 - Downloads only
- Phase II
 - Feedback and Contributions
 - Uploads
- Phase III
 - Templates for creating GBRMC materials
 - Calendar
 - Chat room



Slide 126



Tips for preparing GBRMC courses

- *Request final materials (if GBRMCNet materials state "draft" or are only in PDF).*
- Review Instructor Guide and Slide Deck.
- If multiple courses are to be configured together, remove touch stones (welcome, reviews, etc.) from slide deck.
- Remove touchstones from student guide, as necessary (Word Table format).
- Carefully review activities and assure that all materials (or suitable substitutes) are available . Understand the logistics for conducting the activity.
- Suggested timing is provided in the IG.



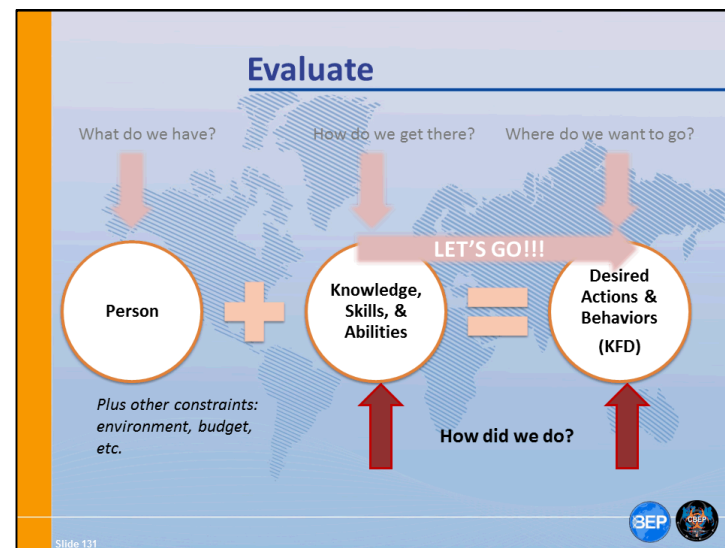
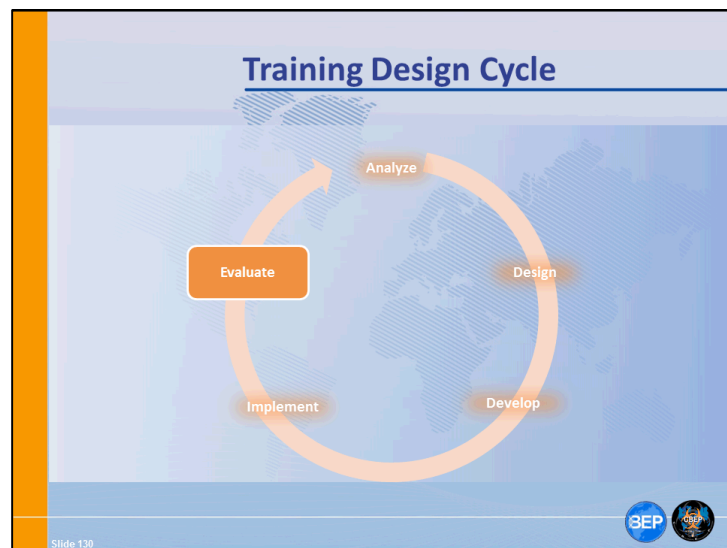
Slide 128

Tips for teaching GBRMC courses

- Be aware of the timing – do not try to teach the course in a smaller time slot.
- Be sure to communicate the means for students to record and report their small group discussions.
- Follow-up with expected answers and add in new answers from students in the space provided in the IG.
- Understand what key messages are addressed by which slides and exercises. If time is tight, determine which key message to minimize or eliminate rather than just cutting the course short.



Slide 129



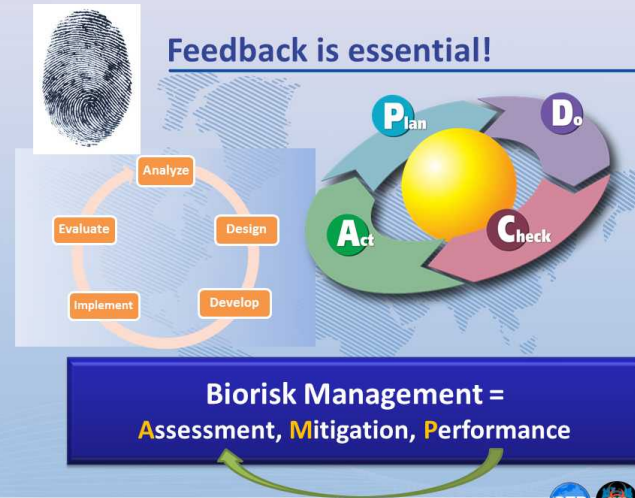
Evaluations & Instructor Debrief

- EXTREMELY critical to ongoing success of biorisk management training and capacity building
- Changes and additions to training materials will be based on these documents
- *“When you’ve seen one training session, you’ve seen one training session.”*

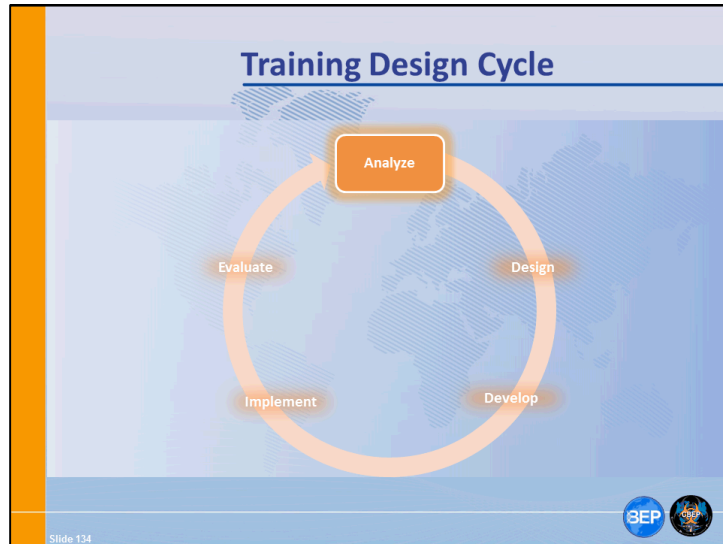


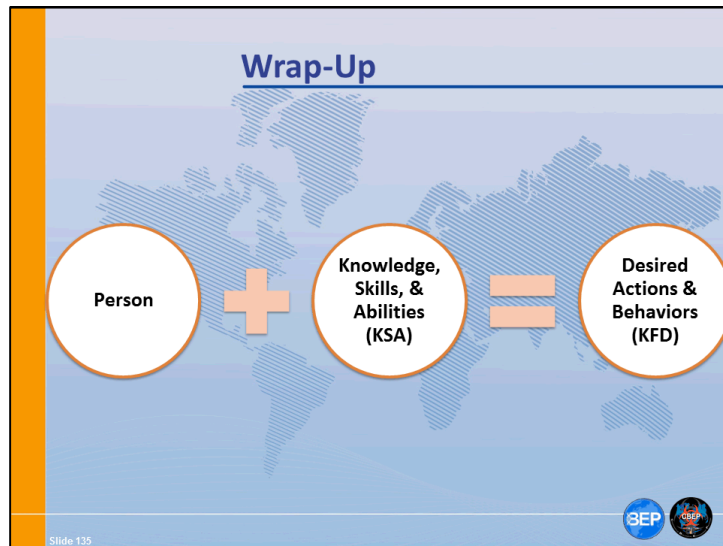
Slide 132

Feedback is essential!



Slide 133












- Make an action plan!
 - A one page strategy, in visual form, of points to focus on when returning home

Recap Timeline

- Pick a card randomly from the Timeline Deck.
- Be prepared to say what you learned about the topic on your card.
- As a class, construct a timeline for this course using the cards.





<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>