Biorisk Performance – Session 4

Biorisk Management = Assessment, Mitigation, Performance

April 2012
Review

Take 15 min to answer the following questions:

⚠️ What did you learn yesterday? What was new?

⚠️ What new insights do you have from yesterday’s material? What are the implications of that learning?

⚠️ What will you do with this information when you go home? What will you change at your institute?
What is performance?

In what way does performance improve biorisk management?

Or…what specific steps are still missing from the system after assessment and mitigation?
Performance

Performance is the way in which someone or something functions

Performance is the result of all the efforts of a company or organization

Performance improves biorisk management: you know that your system works and is sustainable, and that the risk is acceptable
Group Exercise 1, Step 1

Split into groups

Each group receives the scenario. You have 15 min to:

- Identify the performance issues/problems in the scenario
- Write each issue on a separate post-it using a felt-tip marker

Place post-its on your flip chart

Present to the class
How could you categorize these performance issues?
Biorisk Management System

**Control:** Processes, procedures, structures, and responsibilities to manage biorisk

**Assurance:** Systematic process of checking the system through audits and inspections

**Improvement:** Setting and achieving biorisk management goals based on internal and external feedback
Group Exercise 1, Step 2

In your groups, take 5 min to organize the performance issues that you identified into either

- Control
- Assurance
- Improvement

Present your results to the class
Group Exercise 2

In your same groups, refer to yesterday’s assessment / mitigation scenarios (20 min)

- For each mitigation measure you implemented, what performance measures also need to be incorporated?
- How do performance factors affect or change your mitigated risk?
- How might the results on your graph change?

Report your results to the class
Performance: the Relevance of Time

![Diagram showing the relationship between consequence, likelihood, and time](image)

- **Time**
- **Consequence**
- **Likelihood**
Access Control Performance

Video Clip
Biorisk Management

Biorisk Management = Assessment, Mitigation, Performance

- Risk identification
- Hazard/threat identification
- Likelihood evaluation
- Consequences evaluation

- Elimination or Substitution
- Engineering Controls
- Administrative Control
- Practices and Procedures
- Personal Protective Equipment

- Control
- Assurance
- Improvement
Identification of Biorisks

Biosafety Risk Assessment

Biosecurity Risk Assessment

Biosafety Risk Mitigation

Biosecurity Risk Mitigation

Performance Measures
Group Exercise 3, Step 1

Individually, carefully read the *Cataract University* exercise

Split into groups and take 40 min to:

- Identify *problems* in Assessment, Mitigation, and Performance
- Use post-it notes, one for each problem
- Place post-it notes on “university board” in appropriate section
- How have these problems affected the university?

Report results to the class
Laboratory Biorisk Management Standard

- CWA 15793:2008
- Management system
- Consistent with other international standards such as ISO 9001/14001 and OHSAS 18001
- Performance based
- Voluntary
- PDCA based
Systematic Approach

CWA 15793:2008

Examples of topics covered:

- Biorisk Management Policy
- Hazard identification, risk assessment and risk control
- Roles, responsibilities and authorities
- Training, awareness and competence
- Operational control
- Emergency response and contingency plans
- Inventory monitoring and control
- Accident and incident investigation
- Inspection and audit
- Biorisk management review
Availability

How does “plan, do, check, act” relate to the “assessment, mitigation, performance” model?
AMP vs. PDCA

Assessment = Plan, Do, Check, Act

Mitigation = Plan, Do, Check, Act

Performance = Plan, Do, Check, Act
Systematic Approach

AMP

Plan

Do

Act

Check
Group Exercise 3, Step 2

In the same groups, use the table of contents of the CWA15793 to develop recommendations for change at Cataract University

- Pick *two* identified problems related to Assessment, mitigation or performance and propose *solutions*

- Agree on the benefits and challenges of making these changes at Cataract University

- Identify the specific paragraphs in CWA 15793 that apply to your selected solutions

Record your conclusions on a flip chart

Report the results to class in 20 min
Individual Reflection

How does AMP apply to your own lab?

How could you improve biorisk management at your own lab, short-term and long-term?

What would be the challenges of implementing AMP?

What would be the benefits of implementing AMP?

Write your answers on a piece of paper; you only have to share your answers if you wish.
Summary I

How does performance improve biorisk management?

- You know that your system works and is sustainable, and that the risk is acceptable.

Three components of performance

- Control, assurance, and improvement.

CWA 15793:2011: Laboratory Biorisk Management

- Plan, do, check, act.
Summary II

The AMP model

- Assessment = Plan, Do, Check, Act
- Mitigation = Plan, Do, Check, Act
- Performance = Plan, Do, Check, Act

Mitigation is improved and sustained when performance measures are included.
Biorisk Management

Biorisk Management = Assessment, Mitigation, Performance

Risk identification
Hazard/threat identification
Likelihood evaluation
Consequences evaluation

Elimination or Substitution
Engineering Controls
Administrative Control
Practices and Procedures
Personal Protective Equipment

Control
Assurance
Improvement

CWA 15793:2011
Identification of Biorisks

- Identification of Biorisks
  - Biosafety Risk Assessment
    - Biosafety Risk Mitigation
  - Biosecurity Risk Assessment
    - Biosecurity Risk Mitigation
- Performance Measures
Systematic Approach

\[ \text{Plan} \rightarrow \text{Do} \rightarrow \text{Check} \rightarrow \text{Act} \]

AMP