

# Course: Introduction to Incident Management & Response

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*Design Document*





## Part I: Course Overview

### Course Description

#### Overview

*Introduction to Incident Management & Response* is intended to offer an understanding of the basic theory and practice of incident response systems, so that lab personnel, as well as managers, can gain an appreciation for the scope and complexity of the topic. Each of the components of an effective system is briefly discussed: 1) planning & preparation, 2) response (alert, assessment, & mobilization, including outside coordination), and 3) feedback and improvement (reporting, investigation, and improvement). It is the first course in a series on Incident Response.

#### Scope

This introductory course provides an overview, rather than specifics, on the components of an effective incident management and response system. Details on these components can be found in other GBRMC courses (1)*Incident Response Planning & Preparation*, 2) *Incident Response & Investigation*, 3) *Incident Response Evaluation & Improvement*, and 4) *Incident Recognition & Response in the Laboratory*)

#### Learning Level based on Bloom's taxonomy

- ✓ knowledge
- ✓ comprehension
- application
- synthesis
- evaluation

#### Length of Course

4 hours

### Course Objectives

At the end of this Course, Students will be able to:

#### Organizational Objectives

- Implement the basic features of an incident response system, including planning and preparation, drills & incidents, alert, assessment, mobilization, and feedback and outside coordination.

#### Instructional Objectives

- Convey the components of an incident response system and how they fit together to complement a biorisk management system.
- Discuss the roles and responsibilities of people involved in an incident response system.
- Explain the importance of incident assessment, drills, and feedback to an effective incident response system.



## Personal Objectives

Know	<ul style="list-style-type: none"><li>• The components and structure of an incident response system</li><li>• The personnel who should be involved in each phase of planning.</li><li>• The personnel who must be notified during an incident or test of the incident response system.</li><li>• Why it is important to test the function and effectiveness of the system</li><li>• Why feedback is essential to a robust incident response system</li></ul>
Feel	<ul style="list-style-type: none"><li>• Capable of being part of a team that provides expertise and consultation on an incident response system</li></ul>
Do	<ul style="list-style-type: none"><li>• Identify stakeholders to contribute to an incident response system</li><li>• Determine next steps to beginning to put an incident response system in place</li></ul>
Key Messages	<ol style="list-style-type: none"><li>1. An incident response system is broad in scope and complexity</li><li>2. An incident response system requires the input of many stakeholders – some internal and some external.</li><li>3. Planning and preparation is essential to the success of an incident response system.</li><li>4. To determine the effectiveness of an incident response system, it must be tested. Drills and other exercises are critical to measure how well as system has been designed and communicated and if it is the appropriate system.</li><li>5. The right personnel must be notified as part of an effective incident management system.</li><li>6. Providing feedback from drills and incident response and continually improving the system is imperative for success of the system.</li></ol>

## Evaluation Strategy

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<b>Level 1 (satisfaction):</b>	Students will complete a satisfaction survey about their experience with the Course
<b>Level 2 (learning):</b>	Students will complete a “learning contract” for the next steps needed to begin an incident response system implementation
<b>Level 3 (behavior):</b>	Desired behavior is for students to participate in additional learning opportunities on BIRMI—this behavior will be evaluated three to six months post-training and may encompass additional training courses
<b>Level 4 (organizational change):</b>	A repeat of the training needs assessment will be performed at least annually—this annual assessment can be compared to the baseline assessment to determine improvements in the risk management performance



## Description (for Course design purposes)

*Number of Students:* 10 to 25; small groups of 5 people each

*Biorisk Management Role:*

- Policy Makers
- ✓ Top Management
- ✓ Biorisk Management Advisors/Advocates
- ✓ Scientific/Lab Management
- ✓ Workforce

*Audience Assumptions:* (assumed range is indicated by shaded cells)

		Novice		Practitioner		Expert
Education	Scientific	1	2	3	4	5
	BRM*	1	2	3	4	5
Expertise	Scientific	1	2	3	4	5
	BRM	1	2	3	4	5
Competence	Scientific	1	2	3	4	5
	BRM	1	2	3	4	5

*BRM = "biorisk management". See definitions for terms in Resources section*

*Language of instruction; translation or interpretation anticipated:* English (for design purposes)

*Prerequisites* Orientation to Biorisk Management

*Pre- or post-work required for completion:* None

*Certificates or documents of completion:* Certificates of completion will be provided

*Preparation for future coursework*

*Anticipated next steps* Students will participate in learning tracks, as defined by the local training needs assessment and other subject matter expert (SME) recommendations.



## Instructional Environment

*Number of Instructors/Staff required:* TBD depending on number of Students – optimal ratio is 1 Instructor per no more than 12 Students

*Instructor Qualifications:* Instructors must have completed the Global Biorisk Management Curriculum (GBRMC) orientation, including this course, and be enrolled in the GBRMC training network.

## Learning Environment

*Media:* Instructor-led course.

### Exercises & Activities

<b>Experience (Activists)</b>	Students will be asked to consider their experiences in regard to incident response and if any of their past experiences in planning & preparation, alert, assessment, mobilization and feedback stages
<b>Reflection (Reflectors)</b>	Students will be asked to reflect on those experiences to help develop a model how they would implement an incident response plan.
<b>Models (Theorists)</b>	Students will be introduced to a working model of an effective incident response system and work through the components of the model.
<b>Practice (Pragmatists)</b>	Students will be given exercises to determine how they would handle managing an incident response system.

## On-Site Specifics

*Location* TBD

*Room organization* Clusters of tables to facilitate small group (no more than 5 Students per group)

*Dress code and/or important cultural considerations* TBD

## Instructional Materials

*Equipment & Supplies* Large flip charts  
Markers (enough for up to 5 groups plus instructor(s))  
6 x 8 inch multicolor Post-it notes (no lines)  
Student binders (1" or less) and tabs  
Pens  
Laptop computer with PowerPoint files loaded  
Projector  
Easels (x ~6)  
Name tags/lanyards or placards



Certificates  
Notepads  
PowerPoint files  
Facilitator notes  
Student handouts/notes pages  
Course evaluation forms  
Reference materials (WHO LBM and Biorisk Management Guidance, SNL Lab Biosecurity handbook, CWA 15793:2008 and CWA guidance documents)

***Student  
Handouts***

Course agenda and schedule  
Student notes  
Glossary  
CWA 15793

**Resources**

*Dependencies*

*Authorities*

*References*

CWA 15793  
CEN WS 55, 53  
WHO Laboratory Biosafety Manual  
Laboratory Biosecurity Handbook  
CDC/WHO Laboratory Quality Management System Training Toolkit  
Biosecurity Plan template (in development)  
Glossary of terms (in development)

*Terms used in this  
document*

- Knowledge – remembering the material in the same form as it was taught
- Comprehension – student’s ability to understand the material by (for example) explaining or summarizing key messages
- Application – ability to use the material in a new or given situation
- Synthesis – ability to put together learning material in a new whole entirety. For example, using the material to create a new program or plan.
- Evaluation – ability to judge the value of the material presented as a peer (to be able to critically advise or judge others on their application and synthesis of this learning material).
- Novice – a person who is new to the circumstances, work, etc. in which s/he is placed; beginner
- Practitioner – a person engaged in the practice of a profession; a person who practices something specified
- Expert – a person who has special skill or knowledge in some particular field; specialist; authority; trained by practice
- Education – the act of acquiring particular knowledge or skills, as for a profession



- Expertise – the process of personally observing, encountering or undergoing something; knowledge or practical wisdom gained from what one has observed, encountered, or undergone
- Competence – Possession of a suitable or sufficient skill, knowledge, experience, etc. for some specified purpose; properly qualified



## **Part II: Course Outline/Schedule**

KM = key messages ; T/F = teaching versus facilitation (instructor-based versus -based)