

Healthcare Associated Infections – A Hospital Based Tabletop Exercise focusing on the MDRO Candida auris

(C. Auris)

Region X
Date
Site of Exercise







## **EXERCISE OVERVIEW**

Exercise Name	Healthcare-Associated Infections Tabletop		
Exercise Dates	October 2023 through May 2024		
Scope	This exercise is a tabletop, with 12 planned tabletops each four hours in 6 regions across the state of Iowa. Exercise play is limited to all partners that would be involved in the response and mitigation of an outbreak of CRAB.		
Focus Area(s)	Prevention, Protection, and Response		
Capabilities	Planning; Operational Coordination; Infrastructure Systems; Logistics and Supply Chain Management; Operational Communications; Public Health, Healthcare and Emergency Medical Services; Situational Assessment		
Objectives	<ol> <li>Goal 1: Increase awareness among lowa hospitals and their partners about emerging multi-drug resistant organisms (MDRO) threats.</li> <li>Objectives –         <ol> <li>Describe the characteristics of the CRAB, i.e., prevalence, mode of transmission, treatment, and prevention.</li> <li>Recognize the current emerging threat of MDRO to global, federal, state, and local public health.</li> <li>Goal 2: Increase the readiness and preparedness of lowa hospitals and their partners to quickly identify, respond to, contain, and develop future prevention strategies for an emerging MDRO event.</li> <li>Objectives –</li></ol></li></ol>		

Threat or
Hazard

Biological - multidrug-resistant organism (MDRO): CRAB

Scenario	Interactive, discussion-based exercises that will focus on the awareness and response of hospitals related to multidrug-resistant organism (MDRO) threats. MDROs are bacteria that resist treatment with more than one antibiotic. They are found mainly in hospitals and long-term care facilities and are often spread from patient to patient through the hands of healthcare workers.
Sponsor	University of Iowa Public Health Research and Policy, University of Iowa Carver College of Medicine, Iowa State Hygienic Laboratory, and Iowa Health and Human Services
Participating Organizations	Hospitals, their partners, and those responsible for community emergency preparedness, including Infection Prevention & Control, Emergency Preparedness, Public Health, Medical/Physician Administration, Emergency Management Agencies, Nursing Administration, Clinical Support, Healthcare Administration, Clinical Laboratory, Housekeeping and Emergency Medical Services.
Point of Contact	Vickie Miene, Interim Director, Iowa Institute of Public Health Research and Policy, University of Iowa College of Public Health, N571-B CPHB, 319-384-1511, Vickie-miene@uiowa.edu, Iowa City, IA., 52242

## INTRODUCTION

#### **Exercise Evaluation Overview**

Exercise evaluation assesses an organization's capability to accomplish a mission, function, or objective. Evaluation provides an opportunity to assess performance of critical tasks to capability target levels. Effective evaluation will facilitate thorough analysis of exercise events and help identify key issues, potential best practices, and areas for improvement.

#### **Evaluation Structure**

During the exercise, evaluators will observe and document exercise participation. Evaluators should be located so they can observe participant actions and hear conversations without interfering with those activities. In certain conditions, more than one evaluator may be needed in a particular setting or area. The evaluation team is structured as shown in figure 1.

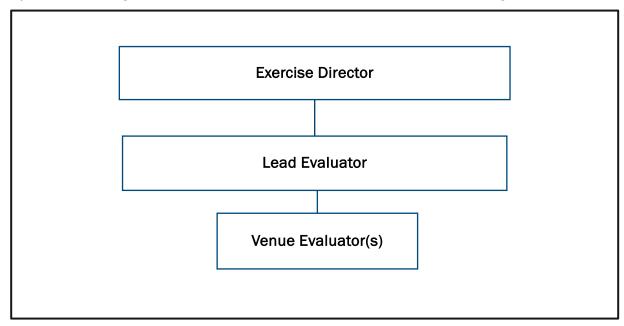


FIGURE 1: EVALUATION STRUCTURE

## **DOCUMENTATION**

#### **Evaluator Guide**

Evaluators should bring the guide to the exercise. They may reorganize the material so information that is critical to their specific assignment is readily accessible. Evaluators may bring additional professional materials specific to their assigned activities.

#### Participant Feedback Forms (Appendix B)

Participant Feedback Forms provide participants and exercise staff, including evaluators, the opportunity to comment on exercise activities and exercise design on a non-attributable form. Evaluators will collect all forms at the conclusion of the exercise.

#### **Raw Notes**

Evaluators should also keep a separate hard copy of raw notes taken during the exercise. These notes should inform their completion of the EEGs but will also serve as an overall record of evaluation observations from the exercise. Evaluators should submit all notes and EEGs to the Lead Evaluator at the conclusion of the exercise.

#### **Exercise Evaluation Guides (EEGs) (Appendix A)**

EEGs are structured to capture information specifically related to the evaluation requirements developed by the Exercise Planning Team. Evaluators should complete these guides as fully as possible, with clear assessments of how participants completed the critical tasks.

## **Observer Rubric (Appendix C)**

Observer rubrics are structured to capture information specifically related to the critical tasks of the exercise. Observers should complete this rubric as fully as possible, with clear observations of how participants completed or did not complete the critical tasks.

## **EXERCISE EVALUATOR INSTRUCTIONS**

Effective evaluation is based on the following techniques:

- Use the EEGs to confirm that evaluation objectives are met.
- Take detailed notes concerning significant activities observed, including the time they were initiated and/or completed.
- When more than one evaluator is assigned to an area, divide responsibilities to ensure detailed evaluation of player activities.
- Stay in proximity to participants.

#### **Using Exercise Evaluation Guides**

The EEGs are structured to capture information specifically related to the evaluation requirements developed by the Exercise Planning Team. The following evaluation requirements are documented in each EEG:

- Capabilities: The distinct critical elements necessary to achieve a specific focus area (e.g., prevention). To assess both capacity and gaps, each capability includes capability targets.
- Capability target(s): The performance thresholds for each capability; they state the exact amount of capability that players aim to achieve. Capability targets are typically written as quantitative or qualitative statements.
- Critical tasks: The distinct elements required to perform a capability; they describe how
  the capability target will be met. Critical tasks generally include the activities, resources,
  and responsibilities required to fulfill capability targets. Capability targets and critical tasks
  are based on operational plans, policies, and procedures to be exercised and tested during
  the exercise.
- Performance ratings: The summary description of performance against target levels.
   Performance ratings include both Target Ratings, describing how exercise participants performed relative to each capability target, and Capability Ratings, describing overall performance relative to entire the capability.

#### **Recording Events**

Although numerous events may occur simultaneously, evaluators do not need to record every single action. Knowing which events are important eliminates superfluous information and provides the type of data most useful for evaluation. Observation notes should include *if* and *how* quantitative or qualitative targets were met. Evaluators should also note if an obvious cause or underlying reason resulted in players not meeting a capability target or critical task.

Based on their observations, evaluators assign a target rating for each capability target listed on the EEG. Evaluators then consider all target ratings for the core capability and assign an overall capability rating. The rating scale includes four ratings:

- **Performed without Challenge (P):** The targets and critical tasks associated with the capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws.
- Performed with Some Challenges (S): The targets and critical tasks associated with
  the capability were completed in a manner that achieved the objective(s) and did not
  negatively impact the performance of other activities. Performance of this activity did not
  contribute to additional health and/or safety risks for the public or for emergency
  workers, and it was conducted in accordance with applicable plans, policies, procedures,
  regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency
  were identified.

- Performed with Major Challenges (M): The targets and critical tasks associated with the capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws.
- **Unable to be Performed (U):** The targets and critical tasks associated with the capability were not performed in a manner that achieved the objective(s).

## **EVALUATOR ROLES AND RESPONSIBILITIES**

#### **General**

- Avoid personal conversations with participants.
- Do not give information to participants about event progress or other participants' methods of problem resolution. Participants are expected to obtain information through their own resources.

#### **Before the Exercise**

- Review appropriate plans, procedures, and protocols.
- Attend required briefings.
- Review appropriate exercise materials, including the exercise schedule and evaluator instructions.
- Review the EEGs and other supporting materials for your area of responsibility to ensure that you have a thorough understanding of the capabilities, capability targets, and critical tasks you are assigned to evaluate.

## **During the Exercise**

- Use EEGs to document performance relative to exercise objectives, capabilities, capability targets, and critical tasks.
- Focus on critical tasks, as specified in the EEGs.

#### After the Exercise

- Participate in the Hotwash and take notes on findings identified. Before the Hotwash, do
  not discuss specific issues or problems with participants. After the Hotwash, summarize
  your notes and prepare them for the Team Debriefing.
- Complete and submit all EEGs and other documentation to the Lead Evaluator at the end of the exercise.

## **GENERAL INFORMATION**

#### **Exercise Schedule**

The full exercise schedule can be found in Facilitator or participant guide

#### **Scenario**

Interactive, discussion-based exercises that will focus on the awareness and response of long-term care facilities related to multidrug-resistant organism (MDRO) threats. MDROs are bacteria that are resistant to multiple antimicrobial treatments. They are found mainly in hospitals and long-term care facilities (LTCF) and are often spread from patient to patient through the hands of healthcare workers.

## **POST-EXERCISE ACTIVITIES**

#### **Hotwash**

At the conclusion of exercise play, site evaluators will facilitate a hotwash to allow participants to discuss strengths and areas for improvement and allow evaluators to seek clarification regarding participants actions and decision-making processes. Evaluators should actively participate in these hotwashes to validate their initial observations and gather new information.

#### **Participant Feedback Forms**

Participant Feedback Forms provide players with the opportunity to comment candidly on exercise activities and exercise design. Participant Feedback Forms should be collected at the conclusion of the hotwash.

## **Team Debriefing and After-Action Meeting**

Exercise team members will attend a debriefing within I week after the exercise or before the next exercise. This may be in person, online, or hybrid. An email with the summary of post exercise analysis will be sent prior to scheduling a meeting. During this debriefing, facilitators and evaluators will provide an overview of the exercise and discuss strengths and areas for improvement for future exercises.

#### **Appendix A: Evaluator Rubric**

Please use the rating system below to rate each critical task. Details for each rating can be found on page 6/7. Give an example of each critical task. Write these examples under "observer/Rating explanation."

- Performed without Challenge (P)
- Performed with Some Challenges (S)
- Performed with Major Challenges (M)
- Unable to be Performed (U)

Goal I: Increase awareness among Iowa LTCs, hospitals, and their partners about emerging multi-drug resistant organism (MDRO) threats.

Objective I: Describe key characteristics of the MDRO, i.e., prevalence/incidence, mode of transmission, treatment options, and prevention methods. Core Capability of Situational Assessment: For each MDRO, identify the prevalence and/or incidence, mode(s) of transmission, available treatment options, and prevention methods. **Target Rating Capability Target Critical Tasks Observer Notes/Rating Explanation** Identify key Identify the prevalence characteristics of the and/or incidence of each MDRO, such as MDRO. prevalence/incidence, Identify transmission transmission. mechanisms utilized by treatment, and each MDRO. prevention. Identify treatment options available for each MDRO. Discuss and compare available prevention methods for each MDRO.

Objective 2: Recognize current emerging MDRO threats to local, state, federal, and global public health.				
Core Capability of	Core Capability of Situational Assessment: List current and relevant emerging MDRO threats.			
Capability	Critical Tasks	Observer Notes/Rating Explanation	Target Rating	
Target				
Identify an example of an emerging MDRO and discuss its effects on various responses agencies.	Recognize an emerging MDRO threat in a situation.  Discuss the effects of the MDRO threat at the local, state, and federal level.			
	Discuss the effects of the MDRO on various responses agencies.			

- Performed without Challenge (P)
- Performed with Some Challenges (S)
- Performed with Major Challenges (M)
- Unable to be Performed (U)

## Goal 2: Increase the readiness and preparedness of Iowa LTCs, hospitals, and their partners to quickly identify, respond to, contain, and develop future prevention strategies for an emerging MDRO event.

**Objective 1:** Identify local and state partners needed to effectively address an MDRO event and continuously maintain these partnerships, including coordinating and effective and efficient response.

Core Capability of Situational Assessment: Participants can identify local and state partnerships available to address an MDRO event.

Capability Target	Critical Tasks	Observation notes, and explanation of rating	Target Rating
Capability target 1: List local and state partners specific to each agency.	Identify the appropriate platform of communication for each partnership? i.e., call, email, etc.		
	Discuss the required elements of a MDRO response plan with prevention strategies.		

- Performed without Challenge (P)
- Performed with Some Challenges (S)
- Performed with Major Challenges (M)

• Unable to be Performed (U)

Objective 2: Review evidence-based planning and response strategies appropriate to the participants' situations				
Core Capability of Situ	Core Capability of Situational Assessment: Explore evidence based planning and strategic response criteria for various partnerships.			
Capability Target	Critical Tasks	Observation notes, and explanation of rating	Target Rating	
Analyze evidence-based planning and response strategies used in various agencies.	Discuss the required elements of a MDRO response plan with prevention strategies.  Describe the process of MDRO recognition, notification and reporting at the local, state, and federal levels.			

- Performed without Challenge (P)
- Performed with Some Challenges (S)
- Performed with Major Challenges (M)
- Unable to be Performed (U)

Objective 3: Identify the principles of Incident Command System to a MDRO event			
Core Capability of Situational Assessment: Define incident command system.			
Capability Target	Critical Tasks	Observation notes, and explanation of rating	Target Rating
Outline the incident command system in hierarchical order.	Recognize the importance of an ICS.  Outline the chain of command during an emergency (incident commander, liaison, field response units).  Various factors of the ICS during an MDRO event.		

- Performed without Challenge (P)
- Performed with Some Challenges (S)
- Performed with Major Challenges (M)Unable to be Performed (U)

**Objective 4**: Explain the process of requesting additional resources through the local, state and federal partners including the Strategic National Stockpile program

Core Capability of Situational Assessment: Outline the process for requesting additional resources for MDRO response.

Capability Target	Critical Tasks	Observation notes, and explanation of rating	Target Rating
Outline the proper communication channel for request of resources.	Recognize the need for additional resources compared to those at hand.  Outline resources available through FEMA, CDC, and IHHS.		
	Outline the process to request resources from the SNS.		

Ratings:

• Performed without Challenge (P)

- Performed with Some Challenges (S)
  Performed with Major Challenges (M)
  Unable to be Performed (U)