

# Drills and Exercises Requirements

July 27, 2023



# Agenda

- Regulatory Requirements
- Types of Scenarios
- Best Practices
- Drill, Exercise, or Incident Examples
- Drill and Exercise Planning Process
- Planning Toolkit
- Way Forward



# Drill or Exercise Regulations

- 42 CFR Part 73, 9 CFR Part 121, and 7 CFR Part 331
  - Section 11 Security
  - Section 12 Biosafety
  - Section 14 Incident Response



# Scenario Examples

- Extraction of an unconscious/incapacitated victim
- Suspicious package
- Hurricane preparation/response
- Active shooter
- Equipment fire



# Best Practices



# Best Practices: Exercise Overview

## General Information

- **Name of Drill/Exercise:** Example Tabletop Exercise, Drill, Incident
- **Date:** Month, Date, Year
- **Scope:** Discussion-based Tabletop Exercise, Real-Life Incident, In-person Drill Event

## Mission Area

- **Mission Area:** Prevention, Protection, Mitigation, Response, Recovery
- **Core Capabilities:** Planning, Environmental, Health and Safety, Security
- **Select Agent Plans:** Incident Response, Security, Biosafety

## Threat Hazard

- Potential Security Threat, Potential Biosafety Threat, Release of Agent or Toxin

## Participants

- **Sponsors:** Safety, Internal Select Agent Program
- **Internal Groups:** Health and Safety, Facilities, Security, Occupational Medicine, Laboratorians and Other Attendees
- **External Organizations:** FBI, Police, Emergency Medical Responders, etc.



# Best Practices: Objectives and Scenario

## Objectives

- Do the procedures or policies work? What worked? What did not work well?
- Did we identify operational gaps?
- Are the responsibilities clearly defined?
- Is the response appropriate, efficient, and sufficient?
- Have personnel been appropriately trained on the procedures and plans?

## Scenario

- “Suspicious Package”  
A researcher notices an unidentified package located outside the laboratory. The package has excessive postage, misspelled words, and there is no return address.



# Best Practices: Evaluation

## Evaluation

- Document observations and recommendations
- Follow-up meeting with participants
- Evaluate and compile the After-Action report

## After-Action Report

- Summary
- When the drill, exercise, or incident took place
- Who participated: internal and external groups
- Purpose, core capabilities, objectives
- Select agent plans evaluated
- Outcomes, observations, and recommendations
- Corrective actions taken or changes made to incident responses
- Training implemented
- Updates to plans or procedures





# Drill, Exercise, or Incident Examples



# Response to Unconscious Victim, Extraction, & Automatic External Defibrillator (AED) Intervention

The facilitator(s) simulated an in-person drill that required each participant to extract an unconscious victim from inside a BSL-3 laboratory to a designated area where life-saving measures, including using an automated external defibrillator (AED) device, were initiated.



# Objectives and Select Agent Plan Assessed

- Objectives:
  - Exercise "check, call, care" procedures
  - Exercise proper use of rescue creeper
  - Exercise proper decontamination of personnel or doffing procedures
  - Exercise appropriate use of AED
  - Exercise appropriate reporting and notification procedures
- Understand the select agent regulation requirements covered by the drill:
  - Section 11 Security
  - ✓ Section 12 Biosafety
  - Section 14 Incident Response



# “Suspicious Package” Tabletop Exercise

A researcher notices an unidentified package located outside the laboratory. The package has excessive postage, misspelled words, and there is no return address.



# Questions Asked for Participants

## Researchers:

- What actions should be taken?
- Who receives notifications?
- How was this communicated?
  - Phone number and location for contacts
  - Other people in the laboratory
  - Calling 911

## RO/AROs:

- Role and responsibility in the response
- Who gets notified and how?



# Questions Asked for Participants (continued)

## Security:

- Who is dispatched?
- How long does it take to respond?
- What is the expected outcome/action? Does this differ if FSAP approved personnel?
- Who do they contact and how?
- Do they know what personal protective equipment to wear and when?

## External Responders:

- Who responds and how?
- What was the outcome?
- Was decontamination required?



# Improvements Made to Incident Procedures

- Always Room for Improvement!
  - Continue to train relevant personnel
  - Maintain up-to-date contact information
  - Ensure multiple methods to notify during an incident and locations for posted information
  - Update plans to stress the need to maintain physical distance from the suspicious package



# “Hurricane” Planning Tabletop, Information Security Drill, and Incident

The entity was in the direct path of a hurricane requiring a coordinated response 96-48 hours, 48-12 hours, and in the response and recovery phases of the storm. Secondly, the select agent inventory security actions required safekeeping to ensure the information was not lost during the actual severe weather event.





# Planning, Core Capabilities, and Objectives

- **Planning Tabletop**

- **Objectives:**

- Determine what decisions need to be made, who makes the decisions, how communication with personnel will occur, and who will serve on the Incident Management Team (IMT)
- Improve coordination among the IMT

- **Incident Response Plan:**

- Securing agent, shutting down projects, and restricting access to select agent (or toxin) during the emergency
- Biosafety threats due to weather damage
- Animal welfare and care
- Essential personnel staffing and training for evacuation
- Preparing for extended power outages and equipment failures
- Hazmat responses



# Information Security Drill Planning and Objectives

- **Select Agent Inventory Security Drill:**

- Need to ensure information available following weather event in case of damage to equipment

- **Objectives:**

- Test backing up information systems
- Contingencies and planning in response to severe weather event

- **Incident Response and Security Plans:**

- Backing up information systems
- Ensure security of inventory information in preparation for weather event
- Ensure planned procedures outlined in the plan perform as intended



# “Active Shooter” Real Life Situation

Entity staff were notified of an active shooter in close proximity to the rear of the laboratory building. This real-life situation was used to test and evaluate the security and incident response procedures of the entity.



# Entity Responses to the Incident

- Immediate Responses

- Notifications via email of building lockdown
- Building annunciator system was used to direct staff to shelter in place and avoid windows until further notice
- Staff in laboratories notified to shelter in place within the labs until further notice
- 100% Accountability:
  - Report of current occupants procured from building security staff
  - Staff whereabouts verified via Health and Safety team members and call trees

- Follow-up Responses

- “All Clear” given when external situation was resolved
- Staff notifications via email, annunciator, and lab notification systems



# Improvements Made to Incident Response

- Notifications:
  - Fire panel was configured to allow Emergency Manager to set off the strobe lights without setting off the fire alarm
  - Changes to operation allows getting the attention of staff in the animal laboratory rooms to stop work and receive the emergency communication in a timely manner



# “Small Equipment Fire” Real Life Situation

A subcontractor was using a grinding tool to remove epoxy and expose stainless steel in a lab buffer corridor (not in containment). The tool threw off a possible spark which was drawn into the dust collector machine that was present to mitigate the dust from the grinding. The spark ignited the HEPA filters in the machine and the equipment caught fire in the hallway.



# Entity Immediate Responses

- Immediate Responses:
  - A hot work permit was in place and the facility staff member assigned to fire watch extinguished the flames
  - The immediate area was evacuated
  - Facilities staff evaluated the situation
  - The unit's engine was still smoldering and producing smoke
  - The local fire department was contacted



# Entity Immediate Responses (continued)

- Immediate Responses:
  - Per the fire department's instruction, facilities staff manually activated the fire alarm
  - Staff exited the building to the outdoor rally point
  - Staff inside labs were told to shelter in place
  - Local fire department arrived, were escorted to the corridor and fully extinguished the smoldering engine





# Entity Follow-up Responses

- 100% Accountability:
  - Achieved at the Rally point
  - Achieved by verification of staff sheltering inside the labs
- Follow-up Response:
  - The Incident Commander gave the “All clear”
  - Staff returned to the building



# Improvements Made for Future Responses

- Operational Improvements:
  - Changes made to the equipment on this renovation before work restarts
  - Doorstops will be positioned in key areas to facilitate firefighting equipment moving through the building



# Drill and Exercise Planning Process



# Planning Process

- Initial Planning Meeting/Conference
- Mid-Planning Meeting/Conference
- Master Scenario Event List Development
- Final Planning Meeting/Conference



# Initial Planning Meeting

- The Initial Planning Team Meeting: All involved agencies need to participate on the planning team from the outset to ensure a successful and safe event. At the initial meeting, the planning team should:
  - Develop a mission statement
  - Develop event objectives



# Mid-Planning Meeting

- Mid-Planning Meeting (MPM): Provide additional opportunities to engage local officials and to settle logistical and organizational issues that may arise during exercise planning. A walkthrough of the exercise site or venue will be conducted during this meeting.



# Master Scenario Event List Development

- Complex exercises may require one or more additional meetings, known as the Master Scenario Event List (MSEL) meeting. This meeting is used to review and edit the scenario timeline.



# Master Scenario Event List Template

File Home Insert Draw Page Layout Formulas Data Review View Help Acrobat Comments Share

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	A	B	C	D	E	F	G	H	I
1	Event	Date	Time	Category	Inject Mode	Synopsis	From	To	Message
2	Alpha Numeric Value (See Numbering Guide)	04/20/2016	17:00	Inject	Electronic Mail	20 words or less summary	Agency name and any known contact info.	Agency Name & any known contact info	Text that serves as the implementer script for an inject.
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# Final Planning Meeting

- The Final Planning Meeting (FPM) is the final forum for reviewing exercise processes and procedures. Both before and after the FPM, the exercise team leader should engage selected local officials to ensure that the exercise is aligning with their intent, address any questions, and receive any last-minute guidance.



# Planning Toolkit Links

- **FSAP:**

- <https://www.selectagents.gov/compliance/guidance/drills/index.htm>
- <https://www.selectagents.gov/compliance/guidance/drills/documententity.htm>

- **FEMA Links:**

- [Welcome - Preparedness Toolkit \(fema.gov\)](https://www.fema.gov/preparedness)
- [Exercise and Preparedness Tools | FEMA.gov](https://www.fema.gov/emergency-preparedness-response-recovery/exercise-and-preparedness-tools)
- [Homeland Security Exercise and Evaluation Program | FEMA.gov](https://www.fema.gov/homeland-security-exercise-and-evaluation-program)

- **Active shooter:**

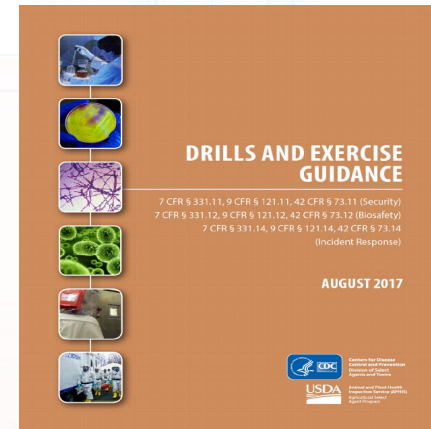
- [Options for Consideration \(Active Shooter Preparedness\) Video | CISA](https://www.cisa.gov/active-shooter-preparedness)
- [Scenario 1- Active Shooter \(fema.gov\)](https://www.fema.gov/active-shooter)

- **Master Scenario Event List Template:**

- [Master Scenario Events List \(MSEL\) \(fema.gov\)](https://www.fema.gov/master-scenario-event-list)

- **FEMA Exercise Training:**

- [Emergency Management Institute - Independent Study \(IS\) | Search Results Course List \(fema.gov\)](https://www.fema.gov/emergency-management-institute-independent-study)
- [IS-120.C: An Introduction to Exercises: FEMA - Emergency Management Institute \(EMI\) Course | IS-120.C: An Introduction to Exercises](https://www.fema.gov/emergency-management-institute-independent-study)



# Way Forward



# Way Forward

- Develop Repository for Drill Templates
  - Entities able to share drill planning information
- Responders Agreements
- Provide Exercise Planning Training



[www.selectagents.gov](http://www.selectagents.gov)

CDC Contact Information  
Division of Select Agents and Toxins  
[LRSAT@cdc.gov](mailto:LRSAT@cdc.gov)  
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APHIS Contact Information  
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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention or the Animal and Plant Health Inspection Service.

