

GNYHA Workshop on Emergency Management Drills

Writing an Effective Drill Scenario

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Course Objectives

- Understand the JCAHO standards for testing and evaluating the facility emergency management plan
- Describe the process for identifying areas for opportunities for a facility to exercise
- Explain the various types of exercises that a facility may choose
- Identify the various tools used in writing an exercise scenario
- Examine the roles and responsibilities of emergency management staff during an exercise
- Draft a scenario based at a fictitious hospital

Definition

Drill – a coordinated, supervised activity normally used to test a single specific operation or function in an agency.



Perspective

- Exercise – is not an independent activity which has an easily marked beginning and ending point; it can better be seen as part of a complex development process, involving a number of tasks which affect one another

JCAHO Standards

- Joint Commission standards require health care facilities to regularly test the emergency management plan through planned drills
- EC 2.9.1 – The intent of EC 2.9.1 reads
 - *“The response phase of the emergency management plan is tested twice a year...”*
 - *“... at least one drill yearly that includes an influx of volunteer or simulated patients”*
 - *“participation in at least one community-wide practice drill”*

Purpose of Drills

- Drills are integral to the process of troubleshooting weakness in the emergency operations plan
- Designed to provide education for staff and identify challenges to implementation of the facility's emergency operations / management plan
- Effective drills are based on the current facility Hazard Vulnerability Analysis (HVA)

Hazard Vulnerability

- Identifies hazards known in your facility and those not so known in your community
- Risk reduction program
- Assists facility in prevention strategies annually
- Identifies opportunities for a facility to exercise events identified by the HVA

Hazard Vulnerability

- HVA example:
 - Identified area in facility that uses ethylene oxide
 - Research MSDS for ethylene oxide
 - Develop exercise that evolves around a spill/release of ethylene oxide
 - Involve local Haz Mat / Fire Department in scenario design, prevention and mitigation strategies
 - Schedule, perform, and critique exercise
 - Identify challenges to response plan for a release of ethylene oxide from drill
 - Educate staff on new response procedures for ethylene oxide release and prevention strategies

Types of Exercises

- Tabletop – simulates an emergency situation in an informal, stress-free environment; it is designed to elicit constructive discussion as participants examine and resolve problems based on existing EOP
- Function-specific – a simulated interactive exercise used to test the capability of a jurisdiction to respond to a simulated emergency testing one specific function of the EOP; it is a coordinated response to an emergency in a time-pressured, realistic simulation

Types of Exercises

- Full Scale – is as close to a real disaster as possible; it is a field exercise designed to evaluate the operational capability of emergency management systems in a highly stressful environment which simulates actual response conditions



Designing the Exercise

- Review your current plan and how any identified Hazards are pre-planned
- “When was your last exercise?”
- “How much preparation time can you reasonably expect to have allocated to developing an exercise?”
- “How much time can people devote to developing an exercise?” (planning should be 3 months minimum)
- Address costs and liabilities early on in the process

Designing the Exercise

- Gain administrative support – most executives are more supportive if the exercise is part of proven, consistent, and goal-oriented program.
- Organize the exercise design team (usually members from disaster committee and local municipal authority)

Designing the Exercise

- Decide – Internal or External, Table-top or Functional
- Identifying Scenario
 - Opportunities identified from HVA (i.e.chemical spill in the community from local industrial plant)
 - Recent changes to Emergency Management Plan (i.e.decontamination resource response)
 - New equipment (i.e. generators, communications equipment)
 - New threat identified from municipal authority (i.e.terrorism; infant abduction)

Designing the Exercise

- Identifying performance objectives:
 - Based on competencies in emergency preparedness
 - Knowledge of the facility's emergency management plan
 - Leadership ability to coordinate the ICS to manage the incident
 - Staff knowledge of activation process
 - SMART

Designing the Exercise

- S – simply phrased
- M – measurable
- A – achievable
- R – realistic
- T – task oriented
- Ex: *“To demonstrate an understanding of the procedures in protecting staff health and safety”*

Designing the Exercise

- Key objective action words:

Assess

Judge

Validate

Clarify

Justify

Inspect

Define

List

Identify

Describe

Notify

Illustrate

Determine

Record

Evaluate

Relate

Examine

Show

Explain

Test

Designing the Exercise

- Write a narrative of exercise
 - A brief description of the events that have occurred up to the minute the exercise begins; it sets the scene for later action, captures the attention of the participants and motivates them to continue.
- Master Sequence of Events List (MSEL) – outlines the chain of events that the scenario will follow
- Notification – notify the proper administrative staff that need to be made aware of the drill
- Assign roles and responsibilities

Roles of Exercise Design Team

- Exercise team leader should be able to devote a considerable amount of time to the exercise; he/she is responsible for the entire development process, and for managing all administrative and logistical matters.
- Ideally should not be a key player in the normal operational response
- Most emergency managers either assist with preliminary design and then actively participate or perform both functions

Roles of Exercise Design Team

- Team members determine exercise objectives, tailor the scenario, and develop the MSEL.
 - Participants – may play actual role in scenario
 - Evaluators – observe and document the scenario to offer feedback to objectives and goals
 - Facilitators – assist in running scenario by introducing time based challenges and obstacles for the scenario development
- Each team member should be given a “job aid” with description of their specific tasks for design and implementation of the exercise

Roles of Planning Team

- Challenges, Injects, Obstacles, or Expected Actions
 - Predetermined actions that when inputted by facilitators, cause staff to react and make critical decision as if in real time
 - Actions that you want participants to implement or react to, to demonstrate competence.
 - Should be listed on the MSEL so other areas that are affected by the action can react appropriately
 - Ex: During a drill for a community MCI during a storm, the facilitator injects a power failure at the hospital

Draft Scenario

- *Motherland Memorial hospital is a 245 bed tertiary hospital in the Rockaway's. Annually their Hazard Analysis identifies flooding and hurricane preparedness as potential threat elements to the hospital. The hospital's Disaster Committee has been proactive and has decided to write new policies for preparedness, has purchased new water pumps, and has obtained transfer agreements with mainland Queens hospital's for potential evacuation.*

Draft Scenario

- *Assemble the Disaster committee to review policies and procedures*
- *Assign team roles and responsibilities*
- *Write narrative*
- *Identify exercise objectives*
- *Gain leadership support*

Draft Scenario

- *The committee decides to have a table top drill to test some of these new policies and the operational effectiveness of their new transfer agreements.*
- *The committee decides to have a small hurricane as the scenario*

Draft Scenario

- *The committee agrees that the performance objectives of the scenario will be:*
 - *In a table top atmosphere, bring together key hospital staff for the purpose of executing a table top drill around a hurricane scenario*
 - *Examine staff implementation of hurricane annex of EOP*
 - *Challenge the staff to interact among facility departments and with external agencies like DOH, EMO, NYPD, FDNY*

Draft Scenario

- *Evaluate the communication between hospital departments and between command center and receiving hospital*
- *Evaluate the effectiveness of engineering's ability to recognize the need for pumps and the concept of their operation*
- *Examine the effectiveness of the transferring timelines and transportation agencies response*

Draft Scenario

- *Team members agree upon the objectives, now they must write a MSEL based on testing those objectives*

Master Sequence of Events List

MSEL

Time	Action	Objective	Observer	Facilitator
13:45	DOH notifies Motherland Hospital that Hurricane Doris a Category 2 Hurricane is coming up the coast with an impact expected within 12 hours	Staff implementation	Bill Walton	Jack Benny
13:56	HEICS implemented, IC identified, senior staff meeting to review DOH information	Staff implementation	Frank Rizzo	Jack Benny
14:02	HEICS Level One	Staff implementation	Bill Ford	Jack Benny
14:30	DOH orders facility evacuation starting at 16:00	Hurricane Annex	Gerry Spring	Bill Robinson
14:45	Water level in parking lot has reached the ED patients lot (15 feet from entrance)	Engineering	Tom Davis	Bob Thompson
14:49	Engineering deploys pumps to parking lot and begins to pump water to area away from ED	Engineering	Carl Wing	Bob Thompson
14:50	Hospital Command notifies local EMO that water is potentially affecting facility and DOH has ordered evacuation	Staff interaction	Bill Plunkett	John Havlecheck

Draft Scenario

- Bring in local municipal services for input
 - Police
 - EMS
 - Fire
 - Water authority
 - Power authority
 - Red Cross
 - Social Services

Draft Scenario

- Brief team members and observers prior to holding the actual exercise
- Hold exercise
- After action reporting

Questions



On to the drill evaluation section...