Are You Ready To Respond?

Planning & Evaluating
Emergency Response Exercises
for a
Local Public Health Agency
Workshop Sessions

1. Identifying Overarching Goals
2. Choosing Exercise Type, Objectives and Scenario
3. Selecting and Utilizing Evaluation Criteria
4. Conducting the Exercise
5. Moving from Observation to Evaluation
1. Identifying Overarching Goals
Identifying Overarching Goals

Presentation Objectives:

- **Process** of identifying exercise goals
- **Reasons** for identifying exercise goals
- **Principles** for identifying exercise goals
- **Planning Team:** purpose & responsibilities
- **Example** of the process at the local level
Identifying Overarching Exercise Goals is a Process

No “off the shelf” document will define your agency’s goals

- Templates and guides, no matter how good, can’t capture specifics of your environment

Use a process to define your agency’s needs, capabilities, and reasons to exercise

- This process should be systematic and is the responsibility of an Exercise Planning Team
Exercise Planning Team: Purpose

Provide agency with systematic and structured way of planning and implementing exercises

Engage in discussions of your agency’s needs, capabilities, and reasons to exercise
Exercise Planning Team: Structure

At a minimum, representatives of the team should include*:

- Command Group
- Operations Group
- Planning Group
- Logistics Group
- Administration/Finance Group

*Center for Health Policy, Columbia University, School of Nursing, Guide for Planning, Designing, Conducting and Evaluating, Local Public Health Emergency Exercises (Pre-Publication review Version), July 2005
Exercise Planning Team: Structure

- Command group: Team Leader
  - assigns tasks and responsibilities,
  - establishes the timeline,
  - provides guidance and monitors the development;
    - the health director
    - the BT coordinator
    - may be assisted by others for large departments or exercises.
Exercise Planning Team: Structure

- Operations group
  - Departmental subject matter experts (SME) and technical experts to assure accuracy and applicability of scenario and criteria.
    - epidemiologist for surveillance activities,
    - environmental health specialist for environmental health sampling
    - public health nurses for mass prophylaxis and immunization clinic set up.
Exercise Planning Team: Structure

- **Planning group:**
  - Collect and review all policies and procedures needed for the exercise
  - Simulation and “inject” planning and development needed for flow of exercise
  - May be combined with Operations group.

- **Logistics group:**
  - Gathers any supplies, materials, equipment, services or facilities needed for the exercise
  - For small event, maybe a single senior administrative support person.
Exercise Planning Team: Structure

Administration/Finance group:

- Tracks costs of the exercise
- May be a single individual, or the same administrative/support staff assigned to Logistics.
Exercise Planning Team: Composition and Size

Dependent on:

- The agency’s composition and size
- The agency’s preparedness and response responsibilities
- The goals of the exercise.
Exercise Planning Team: Composition and Size

Examples of members: *Large Agency*

**Command**
- Deputy Health Commissioner
- Lead Epidemiologist
- Medical Director
- Director of Emergency Medical Services

**Operations**
- Medical Director
- Lead Epidemiologist
- Director of Emergency Medical Services
- Director of Hospital Services
- Director of Lab Services
- MH Services Director
- Clinic Manager
Exercise Planning Team: Composition and Size

Large Agency continued

**Planning**
- Medical director
- Epidemiologist
- EMS Director
- Hospital Services Director
- MH Services Director
- Clinic Manager

**Administration/Finance**
- Human Resources Rep
- Accounting
- Purchasing
- Grants and Contracts
- Legal
- Claims

**Logistics**
- Director of Facilities
- EMS Director
- Nurse Director
- Volunteer Coordinator
Exercise Planning Team: Small Agency (<30 employees)

Examples of members

Command
- Health Commissioner

Operations
- Medical Director
- Epidemiologist
- Director of Emergency Medical Services

Planning
- Epidemiologist
- Hospital Services Director
- MH Services Director
Exercise Planning Team: Composition and Size

Small agency cont…

**Logistics**
- Director of Facilities
- Nurse Director
- Volunteer Coordinator

**Administration/Finance**
- Human Resources Representative
- Purchasing
- Legal
Exercise Planning Team Responsibilities

- Define the Purpose of the Exercise
- Identify Over-Arching Exercise Goals
- Create Realistic and Measurable Objectives

- Define the Scope of the Exercise
- Define the Scale of the Exercise
- Define the Extent of Play

- Select the Exercise Scenario
- Select the Exercise Format

- Define the Evaluation Method
- Develop the Exercise Work Plan and Schedule
- Define Resource Requirements
Responsibilities: Defining the Purpose

The focus/purpose of the exercise is directly tied to the reasons why the agency is exercising.

**Question:** “Why does my agency need to exercise?”

Possible Responses

- Plan Validation
- System Validation
- Training
Responsibilities: Identifying Overarching Exercise Goals

Identifying overarching exercise goals is a process centered around the question:

“Why does my agency need to exercise?”

Additionally, overarching goals MUST:

- Feed into your organization’s preparedness mission
- Feed into your preparedness plan
- Be realistic and achievable
- Include measurable objectives
Identifying Over-Arching Exercise Goals: Example

Step 1: Determine why your agency needs to exercise?

Sample Response: Plan Validation

Step 2: Determine what your agency’s preparedness responsibilities are? In other words, determine your agency’s preparedness mission.

Sample Mission:
Serve the County by distributing Mass Prophylaxis to employees of USPS facility housing a Biological Detection System (BDS).
Identifying Over-Arching Exercise Goals: Example

Step 3: Determine what your preparedness plan, or work plan, is to complete your agency’s mission.

*Sample Agency Preparedness Plan:*

*Stand-up a Point of Distribution (POD) Clinic*
Identifying Over-Arching Exercise Goals: Example

Step 1 + Step 2 + Step 3 = Draft Goal

**Draft Goal:** Test the activation of the County Point of Distribution (POD) operational model

What is missing?

Goal must be:

- Realistic and achievable
- Include measurable objectives
Identifying Over-Arching Exercise
Goals: Example

*Draft Goal*: Test the activation of the County Point of Distribution (POD) operational model

**Is the goal realistic?**
Don’t know yet . . .
Why?
- Lacking specifics

**Is the goal achievable?**
Don’t know yet . . .
Why?
- Lacking specifics

**What is needed?**
- Standard
- Measurable Objective
- Knowledge of Current Capacity
Example Exercise Standards and Measurable Objectives

Exercise Standards

- Are there required Federal, State, County, or Local standards?
- What standards does the agency want to reasonably set for itself?
- What is the agency’s current capacity?
Example Exercise Standards and Measurable Objectives

Measurable Objective

- County Standard: Requires that the agency be able to provide prophylaxis to 500 USPS workers.

  Note: It is assumed that this county has done research on this standard and believe it is a reasonable one.

Current Capacity

- Untested-Unknown
Identifying Overarching Exercise
Goals: Example

**Draft Goal:** Test the activation of the County Point of Distribution (POD) operational model

- Is the goal realistic? √ Yes
- Is the goal achievable? √ Yes
Other Examples of Exercise Goals

- Enhance cooperation among county emergency response partners and the Area Regional Office

- Assist the Area Regional Office in understanding each county’s needs and resources

- Test the activation of the County Hospital Surge Capacity Model
Small Group Work

Assume you are the Exercise Planning Team for a 50 person Health Department

- Assign Exercise Planning Team roles
- Identify the goals of the exercise
Workshop Sessions

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2. Choosing Exercise Type, Objectives and Scenario
Choosing The Exercise Type, Objectives and Scenarios

The Basics

- The Planning Team
- Timelines
- Briefings/Meetings

Exercise Design and Development

- Determine Objectives
- Determine Focus and Format
Example of Objective

Test activation of POD operational model

- Evaluation of POD layout and patient flow
- Introduce staff to POD management and Job Action Sheet responsibilities
- Provide staff with an opportunity to practice ICS & functional staff roles to expeditiously receive and dispense appropriate medications
Example of Objective

Provide and maintain effective two-way communications connectivity to ensure a 24/7 flow of critical health information among:

- public health departments
- healthcare organizations
- law enforcement
- public officials and others
Example of Objective

Provide communication of risk and dissemination of information to educate the public regarding exposure risks and effective public response.
Types of Exercises

Discussion-based

Operational-based
Discussion-Based Exercises

Orientation Seminars

Tabletops (TTX)
Operation-Based Exercise

Drills

Functional Exercises (FE)

Full-scale Exercises (FSE)
15 National Planning Scenarios

1. Nuclear Detonation
2. Biological Attack – Aerosol Anthrax
3. Biological Disease Outbreak – Pandemic Influenza
4. Biological Attack – Plague
5. Chemical Attack – Blister Agent
6. Chemical Attack – Toxic Industrial Chemicals
7. Chemical Attack – Nerve Agent
8. Chemical Attack – Chlorine Tank Explosion
9. Natural Disaster – Major Earthquake
10. Natural Disaster – Major Hurricane
11. Radiological Attack – Radiological Dispersal Devices
12. Explosives Attack – Bombing Using Improvised Explosive Devices
13. Biological Attack – Food Contamination
14. Biological Attack – Foreign Animal Disease (Foot and Mouth Disease)
15. Cyber Attack
Selecting from the National Planning Scenarios

Each follows same general outline:

- Scenario Overview
- Planning Considerations
- Implications
Planning Scenarios

The scenarios have been developed in a way that allows them to be adapted to local conditions throughout the country.
Planning Scenarios

The focus of the scenarios is on *response capabilities and needs* not threat-based prevention activities.
Mission Areas

1. **Prevention/Deterrence/Protection**
2. **Emergency Assessment/Diagnosis**
3. **Emergency Management/Response**
4. **Incident/Hazard Mitigation**
5. **Public Protection**
6. **Victim Care**
7. **Investigation/Apprehension**
8. **Recovery/Remediation**
Your Objectives

- What do you want to learn?
- What phase or component of the plan do you want to test?
- What communications or logistics do you want to practice?
Exercise Investment

Exercises don’t just “happen”

The Cost
- Time away from everyday job
- Training
- Materials/resources

What you get for a cost: A prepared Public Health Workforce able to respond to any emergency or disaster
Choosing the Type of Exercise
Small Group Work

➢ Pick a scenario and exercise type that matches your overarching goal

➢ State specific objectives
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Evaluation

Did you reach the point you wanted?

Did you reach that point when you wanted to?

Were all participants appropriately involved?

Were you pleased with the manner in which you got to the end point?
Being clear on what you are evaluating, such as

Exercise *process*

Agency’s emergency *plan*

Ability of the agency to fulfill the plan

*Speed* with which some portion of the plan is put into place

*Efficiency* with which some portion of the plan can be carried out

*Competency* of agency staff in some specific functional roles
The exercise process

Some exercises, drills or events work better than others to develop staff skills or demonstrate abilities

If this is the first time you’ve done a specific type of exercise, assessing whether it meets your needs is useful

RAND has done an extensive project on evaluating exercises and has resources on its web site
The agency’s emergency plan

Has the plan anticipated all key needs?

- Space
- Communication equipment
- Other supplies

Have all needed roles been anticipated?

Does your plan really match community expectations?
The ability of the agency to fulfill the plan

What happens when a plan that, on paper or even in tabletop review, is perfect is put into actual use?

- Do people go where they are supposed to?
- Are functional role assignments followed?
- Did the desired outcome happen?
The speed with which the plan is put into place

Initial application is the establishment of an incident command post

- Time to notify
- Time to be in place

Other times are dependent upon action plan
The efficiency with which the plan can be carried out

Down time?
Repeated messages?
Duplicate instructions?
Conflicting instructions?
Supplies wasted?
The competency of agency staff in some specific functional roles

Functional roles to be assessed need to be identified in advance

Competency statements and applicable JAS must be incorporated into the assessment
## Ways to evaluate

<table>
<thead>
<tr>
<th></th>
<th>External evaluator</th>
<th>Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective</strong></td>
<td>Checklist with stated objectives</td>
<td>Post-event checklist</td>
</tr>
<tr>
<td><strong>Subjective</strong></td>
<td>Narrative of observations</td>
<td>‘Hot wash’ comments</td>
</tr>
</tbody>
</table>
Pre-exercise actions 1

Identify exactly what portion of public health emergency response will be activated

- Use Universal Task List or local planning decision

- Example:
  Stand up agency Emergency Operations Center (EOC) with complete telecommunication and radio connections with branches and county EOC
Pre-exercise actions 2

Identify all components of agency expected to participate

Example:
- Will logistics actually procure items or are they to be assumed?
- Will all branch offices participate, or only selected?
Pre-exercise actions 3

Identify all functional roles to be activated

Include those functional roles likely to be identified if initial participants perform as desired

Example:

- Planning unit activated
- Planning calls for extensive field epidemiology
Pre-exercise actions 4

Select specific agency level criteria (if available for intended area from menu or DHS sources)

If external criteria not available, specify preferred performance

- Action verb
- object;
- context
- Time

Identify all JAS associated with those criteria
Pre-exercise actions 5

Prepare observer documents

- Criteria to be observed
- JAS to be observed
Pre-exercise actions 6

Prepared participant feedback form

- One form for those carrying out assigned JAS
- One form for any individual playing parts of community members or patients during the drill.
Pre-exercise actions 7

Observers and evaluators

Locations

- For observers
- For collection of participant feedback

Numbers needed
Pre-exercise actions 8

Just in time training for observers and evaluators

Forms, clipboards, pens
Day of the event

All observer forms collected

Participant feedback collected

Hotwash notes collected
Small Group Work

Given your goal and scenario, identify criteria from the **Universal Task List** and **Menu of Criteria**

1. Select the applicable Job Action Sheets
2. Prepare at least one evaluator form
3. Prepare participant questions
4. Prepare outlines for observer training.
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What Is It?

Exercise Conduct Terminology

- THIS IS AN EXERCISE!
- THIS IS AN EXERCISE!
- THIS IS AN EXERCISE!
- THIS IS AN EXERCISE!
Exercise Roles and Conduct Terminology

- Players
- Controllers
- Data-Collectors
- Evaluators
- Actors
- Observers
- Facilitators
- Timekeeper and Recorder
- Briefings
- Player Hot Wash Debriefings
- After Action Report
Player

Member of the response organization (local public health agency personnel) who is playing a specific functional role during the exercise under an ICS/NIMS model.
Controller

Monitors exercise flow

Ensures exercise accordance with scenario, timeline and scope

Operation-based exercises only
Data Collector/Evaluator

Observe effectiveness and record player action

Subject matter experts

Operation-based exercises only
Actors

May be volunteers or other members of the LPHA who act as patients or victims.
Observers

No official role

May be asked to submit their observations

Operation-based exercises only
Facilitator

Leads the group discussion

Involved in tabletop exercises
Time Keeper/Recorder

Records critical events and times of exercise
Exercise Manuals

Provide necessary information of exercise play and conduct for all participants

Contain exercise Participant Roles and Responsibilities
Using the Manuals: What kind of exercise is this?

- Purpose: Overarching Goals
- Objectives
- Scope
- Exercise Roles and Responsibilities
- Concept of Operations
- Exercise Assumptions
- Exercise Artificialities
- Exercise Safety: Limitations and Restrictions
Scope and Extent of Play

Establishes parameters of exercise activity

Defines

- Duration
- Player involvement
- Level of detail and simulation
- Extent of mobilization
- Time, duration and date
- Announced or unannounced
Concept of Operations

Mission

Command and Control

Coordination of Response Sectors
Exercise Assumptions

Exercise players will respond in accordance with the existing plans, procedures and policies.
Exercise Safety

Point of contact

Access control, site restrictions, badge procedures, incident reporting

“This is an Exercise”
Exercise Artificialities
Simulation/Simulation Cell
Master Scenario Events List (MSEL)
FOR USE BY CONTROLLERS

Complete list of all chronologically exercise events and designated scenario time

“Injected” into exercise play by controllers
Exercise Briefings and Conduct

Timetable

Key do’s and don’ts
The Exercise Cycle as a Timetable

Design
Develop
Conduct
Evaluate
Time Considerations

- Work teams
- Overarching goals and objectives
- Selection of Exercise Type
- Scope and extent of play
- Work-plan and schedule
- Evaluation plan
- Resource requirements
Small Group Work

Outline full exercise handbook for your exercise including forms.
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Moving from Observation to Evaluation

Presentation Objectives

- Observe exercises
- Analyze the data you have collected through your observations
- Move beyond surface to identify root causes of differences between planned and observed actions
- Identify needed improvements and sharable lessons learned
- Discuss purpose and format of After Action Report
- Discuss key principles when evaluating the exercise itself
Review of Day of Event Activities

Day of Event:

- Prepared observer forms completed
- Participant feedback collected
- Detailed notes of hot wash collected
Observing Exercises

What to look for

- General and Specifics

Written Records

- Free-notes vs. Checklists
- Accuracy
Analyzing Data

Assess Performance at different levels

- Task-level
- Department/discipline/function-level
- Mission-level

Link to performance metrics to established goals
Analyzing Data (cont.)

Data Sources

- Observer logs and worksheets
- Data from automated systems (if applicable)
- Player Hot wash

Methodology

- Reconstructing events
- Cross-functional, perhaps, cross-jurisdictional analysis
Root Causes

Identify Root Causes of Differences

- Planned versus Observed Actions
- Staircase Model
  - Get past the surface
Identify Opportunities for Improvement

- State **what** needs to be addressed
- State **who** should address them
- Recommendations must be **clear**
- Recommendations must be **actionable**
- Recommendations must be **aimed at a specific level**
  - Individual
  - Team
  - Department
  - Function
  - Jurisdiction
Lessons Learned: Homeland Security Exercise and Evaluation Program (HSEEP)

Identify Lessons Learned

- What are Lessons Learned?
  - Should be suitable to share
  - Not just a summary of what went right or wrong
After Action Report: HSEEP

Purpose of After Action Report (AAR)

- Provide feedback to players, funders, organizers, etc.
- Summarize exercise occurrences
- Address player’s capacity to deal with a specific mission
- Provide recommendations for improvement
- Highlight current state of jurisdiction, or national preparedness
Who is responsible for completing the AAR?

- One or two people
- However, should include input from others
After Action Report: HSEEP

Format of AAR

a) Executive Summary
b) Exercise Overview
c) Exercise Goals and Objectives
d) Exercise Synopsis
e) Analysis of Mission Outcomes
After Action Report: HSEEP

Format of AAR

f) Analysis of Critical Task Performance
   i. Task Number and Description
   ii. Issue Number and Description
   iii. References
   iv. Summary
   v. Consequences
   vi. Analysis
   vii. Recommendations
   viii. Improvement Actions

*The above can be analyzed in table format*

g) Conclusion and Recommendation
After Action Report: Template

[Agency Logo]

[Agency Name]

[Exercise Title]

[Exercise Date]

AFTER ACTION REPORT
Evaluating the Exercise

Key Points

Operating assumptions and their unintended impact on:

• Players
• Scenario
• Protocols and Procedures

Identifying needed improvements for exercise

Develop an implementation plan for improvements

• What needs to be addressed
• Who should address them
Moving from Observation to Evaluation: Summary

Pre-drill preparations and day of the event activities are essential to observing and evaluating an exercise.

There are a number of strategies one can implement to observe and evaluate an exercise.

Analysis of exercise data should be systematic and methodical.
Moving from Observation to Evaluation: Summary

When identifying areas for improvement get past the surface; identify the root causes of the differences.

Opportunities for improvement, or recommendations, should be specific, clear, and actionable.

After Action Report must be structured in a systematic way that is HSEEP compliant.

Evaluate the exercise itself, and take actions to improve your exercise plan.
Small Group Work

Group Reports and Summary Discussion
Thank you for your participation!