



# Public Health Emergency Exercise Toolkit

Planning, Designing, Conducting, and Evaluating  
Local Public Health Emergency Exercises

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## About the Exercise Toolkit

This toolkit is intended to guide local public health agency staff in (1) developing, implementing, and evaluating emergency drills and exercises, and (2) facilitating the public health aspects of larger, multi-agency emergency exercise events.

The toolkit provides essential guidance including templates, checklists, and forms to assist with every stage of the exercise process. Emphasis is on identification of objectives during the planning phase, a critical step for ensuring a meaningful postexercise evaluation.

The information in this document is consistent with the approaches recommended by the U.S. Department of Homeland Security's (DHS) Office of Domestic Preparedness (ODP) and the Homeland Security Exercise and Evaluation Program (HSEEP).

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# Introduction

An emergency preparedness exercise program is progressive, moving an agency toward even better emergency preparedness. It requires careful planning, including clearly identifying long-term improvement goals and specific exercise objectives and then designing, developing, conducting, and evaluating each exercise accordingly. Following this process will provide insight into what does and does not work for each specific local public health agency (LPHA).

An exercise program enables an agency to test the implementation of emergency management procedures and protocols, fine-tune the internal coordination of the emergency plan, and practice coordinating with external response sectors. Depending on the scope and scale of the emergency preparedness exercises, they may involve many individuals, both internal (from within the LPHA) and external (from other response sectors).

The national framework for emergency preparedness began with Homeland Security Presidential Directive 5 (HSPD-5), which directed the development of the National Response Plan (NRP). This plan aligned federal coordination, capabilities, and resources into a multi-discipline, all-hazards approach under a comprehensive incident management system known as the National Incident Management System (NIMS).

HSPD-5 was followed by Homeland Security Presidential Directive 8 (HSPD-8), which put forth the following National Preparedness Goal: “establish mechanisms for improved delivery of Federal preparedness assistance to State and local governments” ([www.LLIS.gov](http://www.LLIS.gov)). Further, an interim National Preparedness Goal prescribes a capabilities-based planning approach for a wide range of threats and hazards. Among the capabilities-based planning tools available for use in developing emergency preparedness exercises are a suite of 15 National Planning Scenarios (Appendix D).

As a step toward strengthened preparedness, the Department of Homeland Security Office of Domestic Preparedness (DHS ODP) developed and implemented an Exercise Evaluation Program, HSEEP, to enhance and support prevention, response, and recovery capabilities at federal, state, and local levels. The program seeks to “standardize the language and concepts used by various agencies and organizations in the exercise planning process” (DHS, 2002). This toolkit is based on and consistent with the national goals, plans, and principles outlined above.

# Exercise Planning and Principles in Public Health

**E**mergency preparedness exercises should be based on the NRP and NIMS, which focus on the public health responsibilities for emergency response. Exercises should be consistent with HSEEP, which stipulates federal doctrine as a framework for all emergency response sectors and offers useful guidelines and formats for exercise development. Efforts should be made to coordinate exercise activities at the state and federal levels and with other partners and response sectors.

Exercise planning must include criteria that will allow assessment of how well an LPHA performs under the conditions of a specific public health emergency or disaster. They define various levels of response performance. Criteria define various levels of response performance. Measures of these criteria will provide the basis for additional planning, training, conducting, and evaluation of emergency response operations (Appendix B).

# Exercise Cycle and Organization

HSEEP requires that each state define a cycle, mix, and range of exercises in a multiyear exercise plan that covers the wide range of natural and deliberately caused emergencies that might occur. State and local public health agencies should participate in multiagency exercises, particularly those exercises with public health significance. For example, the requirement for a statewide Strategic National Stockpile (SNS) plan would be demonstrated through a tabletop exercise, then a functional exercise, followed by a full-scale exercise (Types of Exercises, page 4).

## State Responsibilities

Each state is expected to develop its own exercise program based on the guidelines provided by DHS. The program must address all of the tasks laid out by the federal guidelines, including

1. obtaining grants/funding
2. identifying roles and responsibilities for program development
3. designing, developing, implementing, and evaluating exercises
4. tracking improvements
5. monitoring whether the exercises conducted are consistent with HSEEP doctrine
6. designating a state-level agency/organization as the clearinghouse for all exercises conducted within the state
7. conducting an annual workshop to review the state exercise program, ensuring that the state objectives have been met and revising the multiyear exercise plan and schedule

## Local Responsibilities

States disseminate their requirements to local jurisdictions by two routes: through the local emergency response agency, which has a direct tie to the designated state Office of Emergency Management, and through the state health agency. On the local level, there are many response sectors with which the public health sector needs to plan and coordinate its exercise activities. These activities are common to all response sectors. In general, LPHAs are responsible for

1. coordinating activities with the state health agency
2. identifying goals and objectives for exercises consistent with local public health risk, vulnerability, and needs assessments, as well as DHS strategy
3. designing and conducting exercises that conform to HSEEP requirements
4. providing the plans, procedures, and personnel to support the design, development, support, control, and evaluation of public health exercises
5. providing an Improvement Plan (IP) that is based on the recommendations made in the After Action Report (AAR), which is issued following the completion of an exercise

# Types of Exercises

**E**xercise is the generic term for a range of activities that test emergency response readiness, evaluate an emergency response plan, and assess the success of training and development programs. The five basic categories of such exercises are as follows: orientation exercises, tabletop exercises (TTX), drills, functional exercises (FE), and full-scale exercises (FSE). The first two categories are primarily discussion based, whereas the other three are action oriented.

## A. Discussion-based Exercises

### Orientation Exercise (Workshops or Seminars)

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The purposes of an orientation exercise are to: (1) familiarize new staff with the agency's emergency response plan and/or (2) familiarize experienced staff with new or changing information/procedures. An LPHA may carry out an orientation exercise under a variety of circumstances, including the initiation of a new plan, procedure, or mutual aid agreement, or in the event of new staffing, leadership, facilities, or risk(s). The focus is usually on a single function, with roles and responsibilities clearly identified. It typically requires a scheduled meeting of pertinent agency staff. No previous experience is needed, and minimal staff preparation and lead time are required. Orientation exercises make use of various training techniques, including lectures, films, slides, videotapes, and panel discussions.

### Tabletop Exercise (TTX)

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A TTX is a low-stress event to stimulate discussion of a simulated situation. Participants discuss issues in depth and make decisions using slow-paced problem-solving methods in contrast to the fast-paced, spontaneous decision making typical of actual or simulated emergency conditions. TTXs are designed as an early step along the way to functional and full-scale exercises. Constructive problem solving is the goal of such an exercise. A copy of the appropriate emergency plan and other pertinent materials are available for reference during a TTX. A staff person is assigned to act as recorder, documenting actions taken during a TTX; these notations serve as a reference tool for evaluating the exercise.

A TTX begins with a briefing by the facilitator to orient participants and simulators to the TTX objectives, ground rules, and communication and simulation procedures. The scenario narrative is then presented in an intelligence briefing. The scenario is generally invented and describes an event or emergency incident, bringing participants up to a simulated "present moment" in time. The selected event should be one that is realistic for the agency (e.g., a hurricane on the Eastern seaboard, a transportation event at a major railroad hub, etc.). Materials may be distributed to provide details about an imaginary jurisdiction, or participants may be instructed to use their knowledge of actual local resources. The facilitator announces the beginning and end of the exercise, and introduces the first problem, along with subsequent pacing messages, to the participants.

## B. Operations-based Exercises

### Drill

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The purpose of a drill is to use repetition to instruct thoroughly. Drills can be used to test personnel training, response time, interagency cooperation and resources, and workforce and equipment capabilities. Drills optimally take place after orientation; staff should have an understanding of the agency function that will be tested in the drill and be given an opportunity to ask questions.

How a drill begins depends on the type of drill being conducted. Drill categories include but are not limited to notification, communication, command post, and evacuation. In most cases, a general briefing by the drill designer sets the scene and reviews the drill's purpose and objectives. Operational procedures and safety precautions are reviewed before the drill begins. Personnel are required to report, either in person or by telephone or e-mail, to a designated drill site or contact location. Both planned and spontaneous messages sustain the drill's action.

### Functional Exercise (FE)

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The purpose of an FE is to test and evaluate the capabilities of an emergency response system. Events and situations that would actually occur over an extended period of time are depicted or described. Time transitions advance the activity while staying within the time allotted for the exercise (e.g., "It is now 24 hours later"). The objectives of an FE determine how it is to be organized. For example, a "no-notice" exercise does not have a start time; in such an exercise, the objectives would include testing staff members' ability to move into their emergency response roles and activities quickly and efficiently. Other FEs, however, may be announced in advance.

Immediately before the start of the FE, participants are briefed on the objectives, procedures, time frame, and recording requirements. FEs depend on reaction to simulated information delivered by paper, telephone, or radio to individuals or agencies that must then coordinate responses with other players. These messages can be pre-scripted or developed by the simulation cell during the course of the exercise.

### Full-scale Exercise (FSE)

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The purpose of an FSE is to test and evaluate a major portion of the emergency operations plan in an interactive manner over an extended period. FSEs typically involve more than one agency. As with an FE, the objectives of an FSE must be specified, and the actual exercise begins with a simulated event that prompts the initiation of the plan. An FSE differs from a functional drill in that field personnel from the participating agencies physically proceed to the location of the mock emergency. The FSE includes all of the activities taking place at the emergency operations center (EOC) as well as on-scene use of simulated victims, equipment, and workforce. Activities at the scene serve as input and require coordination with the EOC. An FSE combines the planned and spontaneous messages characteristic of FEs with actions from the field.

# The Exercise Planning Process

It is critical for all exercise participants to be able to recognize the terms used to describe various exercise roles and responsibilities as well as other important exercise terminology. See Appendix C, page 32, for exercise terminology definitions.

## A. Organization of the Exercise Planning Team

To begin, an LPHA should establish an Exercise Planning Team. The team's overall responsibilities include

1. setting a timeline for the planning process
2. defining the exercise's purpose
3. selecting the scenario, goals, and objectives for the exercise (this step applies to all exercises, both local and multiagency); a scenario may be chosen from the Suite of National Planning Scenarios (Appendix D) as long as it is plausible for the jurisdiction
4. scheduling events, location, date, time, and duration of the exercise
5. defining the exercise control and preparing all documentation and exercise materials
6. facilitating exercise organization, including communication needs, rules of conduct, security and safety issues, and logistics, e.g., parking, assembly areas, transportation, restrooms, food/water for participants, maps and directions, etc.
7. providing training on the responsibilities/activities of the team, exercise participants, and evaluator(s)

The team's size will depend on the size of the LPHA and should be modified to fit the scope of a particular exercise. The roles and responsibilities for the planning team must be clearly defined and should include delegation of responsibilities among team members as described below.

**Command Role.** Assigns tasks and responsibilities, establishes the timeline, and guides and monitors exercise development. Typically, this role consists of a single team leader—often the health director or the bioterrorism (BT) coordinator. In cases where large departments or large-scale exercises are involved, other staff members may assist the team leader.

**Operations Group.** Ensures scenario accuracy and applicability, and develops the evaluation criteria. Participants in this group typically include departmental subject matter experts and technical experts (e.g., epidemiologists for surveillance activities, environmental health specialists for environmental health sampling, and public health nurses for mass prophylaxis and immunization clinic set up).

**Planning Group.** Collects and reviews all policies and procedures applicable to the exercise. Also develops simulation and *injects* (i.e., intermediate changes or challenges to the exercise participants) needed to sustain exercise flow. In small departments or for small-scale exercises, the planning group may be combined with the operations group.



**Logistics Group.** Gathers all supplies, materials, equipment, services, and facilities required for the implementation of the exercise. For small-scale exercises, the logistics group may consist of a single senior administrative support person working closely with the planning group.

**Administration/Finance Group.** Keeps an account of the costs involved in conducting an exercise. For small agencies, this group may consist of a single individual, who may be the same administrative support person assigned to the logistics role.

## B. Identifying Overarching Goals and Objectives

### Agency-specific Goals

There are no off-the-shelf documents that will define an LPHA's specific emergency preparedness goals. Templates and guidelines cannot take into account the unique requirements of local environments. Developing an exercise program that matches those requirements is a systematic process and the responsibility of the exercise planning team.

Given that the overarching goal of all exercises is improved preparedness, identifying goals for any one exercise is a process centered on one question: Why does an agency need to exercise? The answer may be staff demonstration or plan validation. The goals must also feed into an organization's preparedness mission, support its preparedness plan, be realistic, and include objectives. For example, a sample preparedness mission might be: *To serve the county by distributing mass prophylaxis to employees of a UPS facility that houses a biological detection system (BDS).* A sample preparedness plan for such a mission might be: *To set up a point of distribution (POD) clinic.*

### Objectives

The objectives for any exercise must be challenging yet achievable and should support an LPHA's overall mission and preparedness plan. Whether there is a single objective or several, they should be based on the following:

1. an agency's current stage of emergency preparedness
2. gaps, weaknesses, or areas of concern affecting the agency's performance as identified through prior exercises
3. level of staff knowledge and understanding of emergency preparedness roles and responsibilities
4. applicability to emerging problems

## Example

### Draft Goal: Test activation of the county POD operational model

*Potential Specific Objectives:*

- 1** Test activation of the POD operational model through evaluation of POD layout and patient flow.
- 2** Provide staff with an opportunity to practice following the incident command system (ICS) and the functional roles required for expeditiously receiving and dispensing appropriate medications.
- 3** Provide and maintain effective two-way communications to ensure a 24/7 flow of critical health information among public health departments, health care organizations, law enforcement, public officials, and others.

# Scenario Development Steps

Once the exercise goals and objectives have been formulated and the type of exercise selected, there are further considerations in the exercise planning process. These include developing support materials such as an exercise participant handbook/manual and evaluation forms, and scheduling a training or briefing session. Such a session will ensure that all exercise participants, including the team conducting and evaluating the exercise, the players (e.g., “victims,” hotline callers, community members, etc.), and others are clearly informed about their roles in the exercise prior to its start. These steps are discussed more fully, including examples, on page 16 (Developing Exercise Briefing Materials).

The scenario is the foundation of an effective exercise. It lays the groundwork for development of exercise objectives and selection of public health emergency exercise criteria. The process for scenario development is the same, regardless of whether an exercise will be conducted entirely within an LPHA or as part of a larger multigency exercise. An LPHA may select a scenario from the Suite of 15 National Planning Scenarios,\* as long as the chosen scenario is plausible for the jurisdiction.

When developing drills, or tabletop, functional, or full-scale exercises, follow these steps:

- 1 Use agency content experts to assist in scenario development.
- 2 Research and gather background information to make the scenario realistic.†
- 3 Draft and review the scenario with the exercise planning team.
- 4 Do a “talk-through” with the entire planning team to identify possible problems and areas in need of improvement.
- 5 Finalize the scenario, including the development of simulations and injects needed for scenario flow if the exercise includes response to changing information.

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\*These scenarios represent a range of potential natural disasters or deliberately caused events and are expected to be the basis of the National Exercise Program. Use of these scenarios can facilitate cross-agency collaboration or evaluation. See Appendix D.

†This is needed even if the exercise makes use of one of the National Planning Scenarios.

## Discussion-based Exercise

### 1. Research

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Gather the background and technical information needed to ensure that the scenario events are realistic and complete. This

includes the flow, proper timing, and integration of the scenario elements.

### 2. Draft the Scenario Components

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The scenario should be broken up into discrete episodes called “*moves*.” Each move details the events that have transpired and the response actions that have taken place during a specific timeframe. Each one is sequenced and introduces the events in a chronological

order. First the scenario (narrative) background is presented, followed by scenario moves:

Scenario Move I  
Scenario Move II  
Scenario Move III

### 3. Create Problem Statements and Messages

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These are questions that the facilitator can verbally present to the group, which then discusses them one at a time. Alternatively, the facilitator can provide written detailed events

(messages) and related discussion questions to individuals to answer from the perspective of their own organization and role. These are then discussed by the group.

### 4. Finalize the Scenario

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The scenario should be reviewed several times to ensure that all technical aspects are covered and that the timeline is logical and realistic. Once this has been done, conduct a

talk-through at a working meeting of the planning team to make any changes and finalize the scenario.

## Operations-based Exercise

### 1. Research

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This will be the same as for discussion-based exercises.

### 2. Draft the Scenario Components

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- Develop an outline, which will eventually become the narrative.
- Develop a timeline of major events.
- Add technical details to the timeline. These will help generate specific messages.
- Develop injects or messages to replicate actual events and to ensure and drive the major events. Player responses should be anticipated and planned for. Draft a message summary, which is a chronological list of all events and expected player actions. This is sometimes called a Master Scenario Events List (MSEL).

### 3. Finalize the Scenario

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The scenario should be reviewed several times to ensure that all technical aspects are covered and that the timeline flows and is realistic. Once this has been done, conduct a talk-through at a working meeting of the planning team to make any changes and finalize the scenario.

# Developing an Evaluation Plan

The most important step in planning an exercise is developing an exercise evaluation plan. An exercise is only as useful as the results of its evaluation. It is therefore critical to clarify evaluation criteria early on, which should include the following:

- an LPHA's exercise process
- an LPHA's emergency plan
- an LPHA's ability to fulfill the plan
- the speed with which an LPHA puts some portion of the plan into place
- the efficiency with which some portion of the plan can be carried out
- staff competency in specific roles

## Pre-exercise Activities

Consider the following pre-exercise activities when developing the evaluation plan.

- 1 Identify exactly what portion of public health emergency response will be activated. Use the universal task list or a local planning decision to determine which specific response activities will be practiced.  
*Example:* Set up LPHA EOC with complete telecommunications and radio connections with branches to the county EOC.
- 2 Identify all LPHA components that are expected to participate.  
*Example:* Will logistics actually procure items or are they to be assumed? Will all branch offices participate, or only those selected?
- 3 Identify all functional roles to be activated. Include those likely to be identified only if initial participants perform as desired.  
*Example:* If the LPHA planning unit will be activated, there may be a need to exercise and evaluate field epidemiology.
- 4 Select specific LPHA-level criteria from the menu in Appendix B (or DHS sources, if available for your locale). If external criteria are unavailable, specify preferred performance using the following format: action verb; object; context; time. Identify all job action sheets (JAS) associated with those criteria.
- 5 Prepare observer documents. List criteria and JAS role evaluations to be observed.

## Evaluation Questions

Some exercises work better than others to develop staff skills, demonstrate abilities, or test community communication. Examples of evaluation questions tailored to specific criteria include:

### 1. Evaluating an LPHA's Emergency Response Plan

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- Did the plan anticipate all key needs, such as space, communication equipment, supplies?
- Did the plan match the community's expectations?
- Did it anticipate all needed roles?

### 2. Evaluating How Well an LPHA Fulfilled Its Plan

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What happened when the plan was put into actual use?

- Did people go where they were supposed to?
- Were functional role assignments followed?
- Was the desired outcome achieved?

### 3. Evaluating the Speed with Which the Plan Is Put into Place

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- Time to notify?
- Time to be in place?
- Other times as detailed in the action plan

### 4. Evaluating the Efficiency of Plan Execution

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- Down time?
- Repeated messages?
- Duplicate instructions?
- Conflicting instructions?
- Supplies wasted?

### 5. Evaluating LPHA Staff Competency in Specific Functional Roles

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- Functional roles to be assessed need to be identified in advance.
- Competency statements and applicable JASs must be incorporated into the assessment.

## Evaluation Methods

Consider the following ways to evaluate. Any of these methods can be used, but each requires specific criteria for best effect.

	EXTERNAL EVALUATOR	PARTICIPANT
<b>OBJECTIVE</b>	Checklist with stated objectives	Post-event checklist
<b>SUBJECTIVE</b>	Narrative of observations	“Hot wash” comments

## Selecting and Utilizing Evaluation Criteria

Appendix B contains a menu of criteria for evaluating the performance of LPHA emergency drills and exercises. These public health–specific criteria follow the HSEEP observer documentation format.‡ The exercise planning team should select applicable criteria from this menu, develop any additional criteria pertaining to the local plan or the nature of the exercise, and prepare observer forms that match the criteria selected.

For example, in an exercise where the objective is to assess the internal workings and throughput of a mass prophylaxis distribution site, the criteria selected from the menu might include:

### Criteria for Mass Prophylaxis, Mass Immunization, and Pharmaceutical Stockpiles

- 1** Adapt generic mass–dispensing strategy to specific event within 60 minutes of notification.
- 2** Staff dispensing site(s) with adequate and appropriate personnel for mass dispensing (including volunteer surge staff) prior to site opening.
- 3** Identify and request any “just-in-time” training needs—including use of personal protective equipment (PPE)—at least 2 hours prior to site opening.
- 4** Ensure that system is fully in place for restocking supplies throughout duration of site activation.

‡ Other criteria to evaluate public health emergency exercises include

- The Universal Task List (UTL), developed by the Department of Homeland Security, which can be found through the Office for Domestic Preparedness (ODP) Secure Portal at [www.llis.gov](http://www.llis.gov)
- Emergency Preparedness Performance Measures from the Centers for Disease Control and Prevention, found in Appendix 4 of Cooperative Agreement Guidance for Public Health Emergency Preparedness at <http://www.bt.cdc.gov/planning/guidance05/index.asp>



- 5 Ensure that system is fully in place for rotating and/or relieving staff throughout duration of site activation.
- 6 Prepare and deliver all required record-keeping supplies to Site Coordinator prior to site opening.

In the case of an unannounced exercise that included the objective of assessing the process by which the LPHA moved to open a mass distribution site, including logistics, notification of staff, and just-in-time training, the evaluation criteria would also include the following:

### Criteria for Communication

- 1 Establish liaison with jurisdiction-wide Joint Information Center (JIC) within 15 minutes of notifying the Incident Commander (IC) that the JIC is operational.
- 2 Draft and approve public information for anticipated phases of response within 2 hours of establishing the agency's EOC.
- 3 Identify key partners (e.g., other health jurisdictions, law enforcement, hospitals, etc.) and convey initial public health information to these partners no later than one (1) hour after approval of such information by the agency's IC.
- 4 Establish a schedule to update partners on a regular basis.
- 5 Test backup communications procedures.
- 6 Identify a public health spokesperson whose expertise is applicable to the nature of the emergency (e.g., Health Director, Health Officer, Epidemiologist, etc.).
- 7 Develop and convey Single Overriding Communication Objective (SOCO) through the ICS structure.
- 8 Update and distribute the SOCO (e.g., posted to Situation Boards, etc.) as needed, but at least every 4 hours.

Once an LPHA identifies the functional roles to be activated, the expected duties of each role related to each objective can be inserted into the observer format, as illustrated in the Sample Role Evaluation Checklist for Clinic Manager (Flu), in Appendix F, pages 56–59.

# Developing Exercise Briefing Materials

**B**riefing materials convey critical information and instructions pertaining to the implementation of a public health emergency exercise. These materials may be used in briefings conducted with exercise participants in a variety of roles (e.g., controllers, players, actors, evaluators, and observers). The following elements should be included in any set of briefing materials.

## Exercise Objectives:

To establish the purpose of the exercise and define the exercise's goals.

## Scenario:

A realistic and comprehensive storyline that serves as the backdrop for the exercise and details the conditions and technical issues at play.

## Scope of Play:

The parameters in which the exercise will be conducted, including duration of the exercise, players involved, and level and details of involvement. Exercise activities are set within this scope to enable exercise participants to perform against the established objectives.

## Simulations and Artificialities:

Mechanisms used to artificially simulate events, activities, or actions within the scenario to allow for further exercise response (for example, a mock TV news broadcast).

## Rules of Conduct and Safety Information:

Vitally important information that provides for the safe conduct and protection of all persons involved in the exercise. Includes mechanisms for initiating and discontinuing the exercise. Also includes the mechanism for responding to actual emergencies or accidents should they occur during the implementation of an exercise.

## Examples of Role-specific Briefing Materials

- 1** Briefing materials for Players: JASs; details of where, when, and to whom the player(s) should report; exercise identification and identifying clothing
- 2** Briefing materials for Controllers, Observers, and Evaluators: Exercise documentation forms; exercise identification and identifying clothing

# Conducting the Exercise

**T**he actual conduct of the exercise provides opportunity for assessment of agency capacity, participant training, and validation of competency, depending on the goals of the specific event. The components of conducting an exercise consist of these general steps:

- 1** briefings and preparations (distribute badges/clothing and other needed materials or equipment)
- 2** initiate, facilitate, and observe exercise activity
- 3** terminate play
- 4** hot wash/debrief participants

## Advance Steps

While this document has focused on the details of identifying goals, objectives, and criteria in order to assure a focused event that can be evaluated and used for agency improvement, there are other steps that must be taken in advance. The exercise planning group must:

- 1** secure appropriate location with all essential equipment, unless a pre-equipped Emergency Operations Center is to be used
- 2** secure space for management of evaluators and observers, with appropriate communications equipment, orientation materials, identification, and debriefing planned
- 3** secure space for assembling any “victims,” with instructions and transportation to exercise site, if needed
- 4** prepare any special signage to direct individuals to assigned locations
- 5** arrange for equipment specific to the scenario and objectives (e.g., sample collection equipment for an exercise with contaminated water or food; mock medications for a mass prophylaxis exercise)
- 6** secure staff to support the exercise process, including any needed assistance for set up or communications

## Role of the Exercise Facilitator/Controller

Advanced planning sets the stage for the smooth conduct of an exercise. Sample exercise planning checklists are located in Appendix E. It may be useful for the facilitator/controller to refer to this before the exercise is initiated. The facilitator/controller must assume responsibility for the conduct of the exercise. He/she must ensure that the exercise stays on track so that the agreed-upon objectives are tested. The facilitator/controller's job is to

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| <ol style="list-style-type: none"> <li>1. Present the players with the exercise-initiating narrative.</li> <li>2. Announce the first event of the scenario.</li> <li>3. Stimulate player responses, without intervening in a way that assumes control of the play, unless it appears likely that the objec-</li> </ol> | <ol style="list-style-type: none"> <li>tive(s) of the exercise have been side-tracked.</li> <li>3. Manage the flow and pace of the exercise by introducing the remaining events in sequence through the use of control messages (injects).</li> </ol> |
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### 1. Conducting a Discussion-based Exercise

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The participants/players and the facilitator(s) are introduced. The tabletop exercise process and flow are briefly described. Ground rules usually address the exercise objectives, the importance of participating, and issues participants should consider during play, such as time, roles, and assumptions. Special instructions may be provided, such as how participants will respond and if they will break up into discussion groups.

Episodes in the exercise scenario are described as *moves*. Generally, there are three moves to a tabletop. At each move there is a facilitated discussion. The facilitator *moves* the participants through the scenario and participants respond with the decisions and actions they would take given the scenario. Each move takes the participants through the scenario chronologically. The tabletop conduct is concluded with an overall evaluation and findings, presented as the debriefing and an action planning session for improvements.

## 2. Conducting an Operation-based Exercise

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These types of exercises allow actual demonstration of response capabilities and actions. The range and level of complexity depend on the objectives and scenario chosen to exercise.

The exercise begins with the briefings for the different participants who are either actors, players, or data collectors/observers. Briefing manuals are reviewed at this time. Participants are given their assignment locations. Emphasis is on safety, including:

- where and when to report to the location
- whom to report to, and how to communicate with that person.
- how the exercise will be ended or terminated, if necessary

Materials and/or equipment are distributed as necessary including instructions on how and where to return them.

Instructions are given for when and where to report for the hot wash (debriefing), held immediately at the end of the exercise.

Participants report to their assigned location. Exercise play is begun and terminated according to the exercise plan.

# Moving from Observation to Evaluation

With an evaluation plan in place, the evaluation process begins with observing the exercises. Data collectors and evaluators will need to know what to look for, both general and specific. They must be aware of the exercise goals and objectives, the overall scenario, as well as what activities and actions will take place during the exercise. It is helpful if data collectors and evaluators have some subject matter expertise for the activities they will observe. They should also create written records, using a checklist or free-notes, to assist with data collection to ultimately derive the most value from the evaluation (Appendix F).

Evaluation is a common process in the public health sector, so the eight steps recommended by HSEEP, should be familiar.

- 1** Plan and organize the evaluation in advance. All data collectors/evaluators and controllers need a complete briefing on exercise and evaluation materials.
- 2** Observe the exercise and collect data using the materials provided (i.e., observer and data collector logs and workbooks, including the data collector/evaluator handbook).
- 3** Analyze data and assess performance at the task, departmental, discipline-of-function, and mission levels. Reconstruct the exercise events from logs, workbooks, hot wash, and other debriefings. Identify the root causes of differences using critical thinking to determine why things happened as they did.
- 4** Draft the After Action Report (AAR) (See Appendix F, page 53 for details).
- 5** Conduct the exercise debriefing/hot wash (See Appendix F, page 67). Depending on the size and complexity of the event, this process may consist of a single debriefing or a series of debriefings with various subgroups of exercise participants.
- 6** Identify opportunities for improvement and lessons learned. Update the plan accordingly.
- 7** Finalize the AAR, which should include an assessment of strengths and weaknesses. The AAR will in turn guide the development of the Improvement Plan (IP).
- 8** Develop the IP. This converts the lessons learned from the exercise into measurable steps that will result in improved response capabilities. Then track the implementation of the IP (See Appendix F, page 69).

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# APPENDICES

## **Appendix A**

Exercise Flowchart

## **Appendix B**

Menu of Criteria for Evaluating the Performance of Local Public Health Agency Emergency Drills and Exercises

## **Appendix C**

Acronym Definitions

## **Appendix D**

The Suite of 15 National Planning Scenarios

## **Appendix E**

Exercise Planning Document Templates with Examples of Their Use

## **Appendix F**

Exercise Data Collection/Evaluation Forms with Examples of Their Use

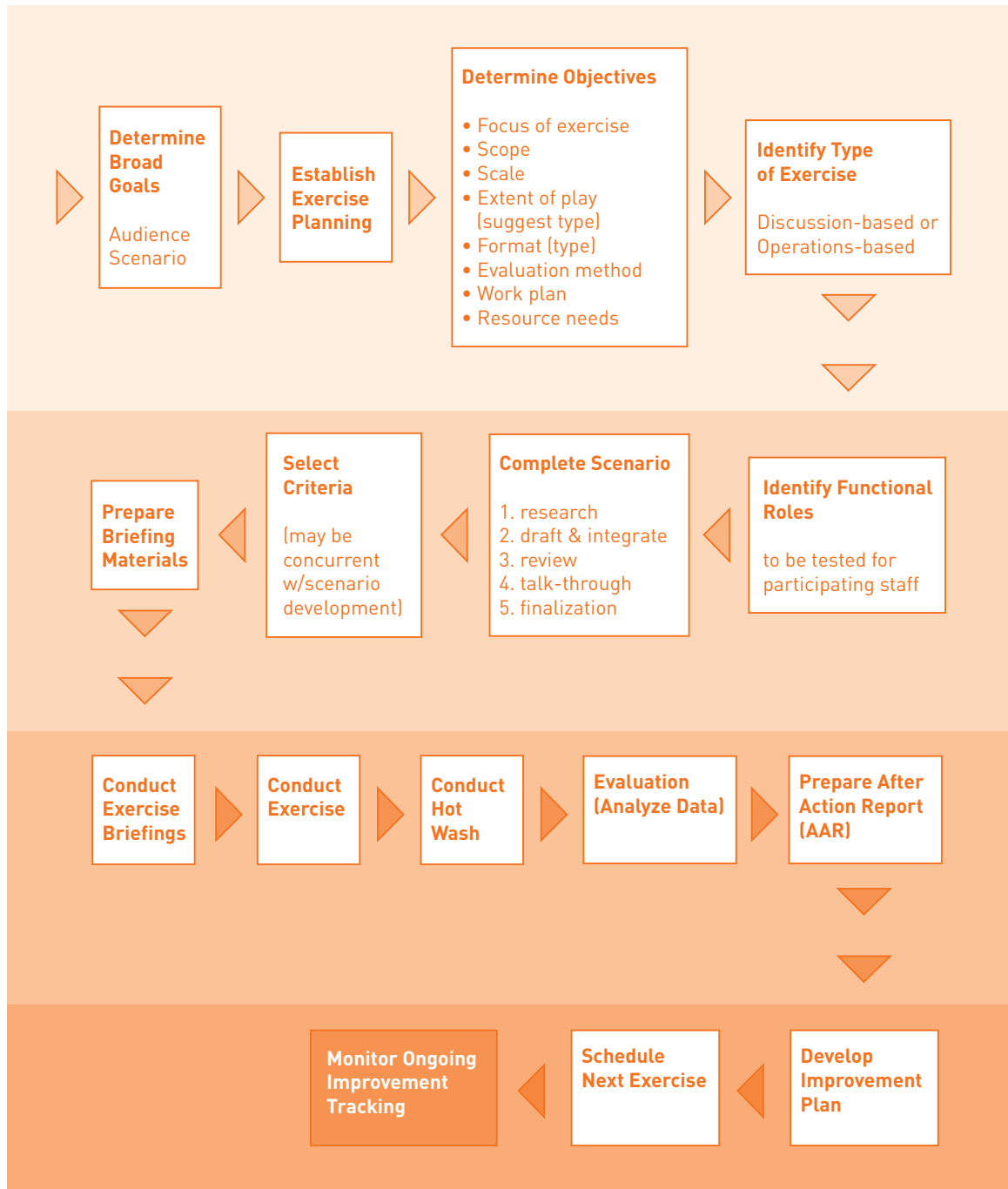
## **Appendix G**

Sample Scenario, Full-scale Exercise Playbook, Tabletop Exercise Schedules, and Facilitator Questions

## Appendix A:

### Exercise Flowchart

The exercise process begins with the selection of the type of exercise to be conducted. The flowchart below illustrates this process.



## Appendix B:

# Menu of Criteria for Evaluating the Performance of LPHA Emergency Drills and Exercises

Note: Select these criteria based on their relevance to the type of exercise you will be conducting. Acronyms are defined in Appendix C.

## Initial Response Command and Control

- 1 Identify health department's internal Incident Commander (IC) immediately upon notification that emergency management will be used in response to an incident.
- 2 Identify and activate\* all health department internal Incident Command System (ICS) positions (e.g., public informational officer, liaison, safety officer, appropriate section chiefs, etc.) within 30 minutes, regardless of time of day (24/7/365).
- 3 Centralize all initial/available/relevant information to agency's ICS Planning Section using a situation board or equivalent within 15 minutes.
- 4 Establish a public health Incident Action Plan (IAP) within 30 minutes following the establishment of the department's EOC, describing primary objectives and overall strategy to be accomplished by the health department in the first 24 hours of the incident.
- 5 Activate appropriate ICS general staff sections within 60 minutes of initial activation of internal ICS.
- 6 Retrieve and make available to ICS command staff portions of state/local public health laws and codes pertaining to the specific emergency.
- 7 Activate plan for operating/closing routine health department operations within 30 minutes of initial activation of internal ICS.

\*activate = notified and in communication, not necessarily on-site.

## Communication

- 1 Establish liaison with the jurisdictional JIC within 15 minutes of notifying the IC that the JIC is operational.
- 2 Draft and approve public information for anticipated phases of response within 2 hours of establishing the agency's EOC.
- 3 Identify key partners (e.g., other health jurisdictions, law enforcement, hospitals, etc.) and convey initial public health information to these partners no later than 1 hour after approval of such information by the agency's IC.
- 4 Establish a schedule to update partners on a regular basis.
- 5 Test backup communications procedures.
- 6 Identify a public health spokesperson whose experience is applicable to the nature of the emergency (e.g., health director, health officer, epidemiologist, etc.).
- 7 Develop and convey SOCO through the ICS structure.
- 8 Update and distribute SOCO (e.g., posted to situation boards) as needed, but at least every 4 hours.

## Early Recognition/Surveillance and Epidemiology

- 1 Establish event-specific surveillance within 60 minutes of establishing the EOC.
- 2 Establish a preliminary case definition.
- 3 Communicate adjustments to surveillance as needed to and from the internal public health IC.
- 4 Implement changes/enhancements in surveillance within 1 hour of approval by the internal public health IC.
- 5 Complete epidemiology investigation plan (including tools and forms) within 2 hours of establishing the agency's EOC.
- 6 Prepare field staff prior to deployment, including PPE if needed.
- 7 Establish time interval(s) for updating epidemiology investigation plan based on reassessment of available information.

## Sample Testing

- 1 Select laboratory resources and requirements specific to agent/incident.
- 2 **A.** Develop targeted protocols and procedures for collection of samples within 60 minutes of notification of incident by the IC. Protocols and procedures should pertain to the specific emergency.  
**B.** Disseminate developed protocols to involved staff prior to deployment.
- 3 Ensure that case investigators are appropriately prepared and protected (via PPE) prior to deployment.
- 4 Deploy field workers to sites within 60 minutes of final IAP.
- 5 Pack and ship/transport samples in a manner consistent with laboratory requirements.

## Evidence Management

- 1 Confirm evidentiary requirements with relevant agencies through jurisdiction-wide NIMS partners prior to collecting personal or environmental samples/specimens.
- 2 Establish arrangements for maintaining chain of evidence prior to collection of any samples/specimens.

## Mass Prophylaxis, Mass Immunization, and Pharmaceutical Stockpiles

- 1 Adapt generic mass-dispensing strategy to specific event within 60 minutes of notification.
- 2 Staff dispensing site(s) with adequate and appropriate personnel for mass dispensing (including volunteer surge staff) prior to site opening.
- 3 Identify and request any just-in-time training needs (including use of PPE) at least 2 hours prior to site opening.
- 4 Ensure that system is fully in place for restocking supplies throughout duration of site activation.
- 5 Ensure that system is fully in place for rotating and/or relieving staff throughout duration of site activation.
- 6 Prepare and deliver all required record-keeping supplies to site coordinator prior to site opening.

## Mass Patient Care

- 1 Adapt generic mass patient-care strategy to specific event within 60 minutes of notification.
- 2 Staff mass care site(s) with adequate and appropriate personnel (including volunteer surge staff) prior to site opening.
- 3 Identify and request any just-in-time training needs (including use of PPE) at least 2 hours prior to site opening.
- 4 Ensure that system is fully in place for restocking supplies throughout duration of site activation.
- 5 Ensure that system is fully in place for rotating and/or relieving staff throughout duration of site activation.
- 6 Prepare and deliver all required record-keeping supplies to site coordinator prior to site opening.

## Mass Fatality Management

- 1 Identify suitable facility (if needed) prior to dispatching pickup vehicles.
- 2 Develop plan for transporting bodies (including routes and expected time frames) prior to dispatching pickup vehicles.

## Environmental Surety

- 1 Develop/adapt strategy for control of environment rendered hazardous by the event within 30 minutes of site identification.
- 2 Identify specific characteristics of affected areas and report to IC within 30 minutes of arrival on site.
- 3 Establish PPE criteria for staff.



## Appendix C:

### Acronym Definitions

<b>AAR</b>	After Action Report
<b>BDS</b>	Biological Detection System
<b>DHS</b>	Department of Homeland Security
<b>EOC</b>	Emergency Operations Center
<b>FE</b>	Functional Exercise
<b>FSE</b>	Full-scale Exercise
<b>HO</b>	Health Officer
<b>HSEEP</b>	Homeland Security Exercise and Evaluation Program
<b>IAP</b>	Incident Action Plan
<b>IC</b>	Incident Commander
<b>ICS</b>	Incident Command System
<b>IP</b>	Improvement Plan
<b>JAS</b>	Job Action Sheet
<b>JIC</b>	Joint Information Center
<b>LLIS</b>	Lessons Learned Information Sharing
<b>LPHA</b>	Local Public Health Agency
<b>MSEL</b>	Master Scenario Event List
<b>NIMS</b>	National Incident Management System
<b>NRP</b>	National Response Plan
<b>POD</b>	Point of Distribution
<b>PPE</b>	Personal Protective Equipment
<b>ODP</b>	Office of Domestic Protection
<b>SME</b>	Subject Matter Expert
<b>SNS</b>	Strategic National Stockpile
<b>SOCO</b>	Single Overriding Communications Objectives
<b>TTX</b>	Tabletop Exercise

## Terminology Definitions

### After Action Report (AAR)

---

Used to provide feedback on performance during an exercise. It summarizes what happened and analyzes the performance of critical tasks. It includes recommendations for improvements to be addressed in an improvement plan. It uses multiple sources of collected data, including observations and information.

### Actors

---

Volunteers or other members of the LPHA who act as patients or victims.

### Briefing

---

A meeting to inform participants on the ground rules of conduct and their roles and responsibilities. Briefings cover the exercise objectives and scope, the parameters and limits of play, simulations, and how and when the debriefing process will occur. They are held before an exercise begins. Actors, players, observers, and data collectors/evaluators usually attend separate briefings.

### Controllers

---

Monitor the flow of the drill or exercise. Their role is to ensure that the exercise is conducted in accordance with the scenario and the timeline and within established exercise scope and parameters. May or may not be from within the LPHA.

### Data Collectors/Evaluators

---

Observe and record player action during TTX, drills, and exercises, evaluating effectiveness based on defined objectives and evaluation criteria. May or may not be from within the LPHA, depending on the size and scale of the exercise. Usually evaluate an area consistent with their expertise.

### Exercise Play

---

The actual conduct of the exercise from initiation to termination.

### Facilitators

---

Lead TTX group discussions so that all scenario issues and questions are addressed.

### Hot Wash

---

An immediate debriefing session between players and members of the exercise planning team to discuss their preliminary observations. This information will inform the After Action Report.

### Improvement Plan

---

Converts the lessons learned from the exercise into measurable steps that will result in improvements in response capabilities.

## Injects

---

The terms inject and messages are used interchangeably and sometimes together. They are associated with the MSEL and link simulation to action and enhance the exercise. They are formatted and presented to reflect the data that would be observed in a real event. Message injects are instructions to controllers to insert information and/or begin simulations, actions, and contingency messages. **Contingency messages** are injects that are used when expected response actions do not occur. They redirect play so exercise goals can be met.

## Master Scenario Events List (MSEL)

---

A chronological list of all exercise events and designated scenario times, including the event synopsis, expected response, and exercise objective (where applicable). Events from the MSEL are called “moves” and are “injected” sequentially into exercise play by controllers to generate or prompt player actions to ensure that all objectives are met.

## Move

---

A discrete “event” within the exercise scenario (e.g., an emergency generator breaks down during the response).

## Observers

---

Invited guests who have no official role in the conduct of a tabletop, drill, or full-scale exercise, although they may be asked to submit their observations.

## Participants

---

All the people involved in carrying out the exercise. Includes actors, controllers, data collectors/evaluators, facilitators, and players. Does not include observers.

## Player

---

An individual or member of the response organization (LPHA personnel) who is playing a defined functional role during an exercise under the incident command system (ICS)/National Incident Management System (NIMS) model.

## Scope and Extent of Play

---

Establishes the parameters within which the exercise activity will be conducted; defines the duration, players’ involvement, level of detail and simulation, and extent of mobilization; informs whether exercise time and date will be announced or unannounced.

## Simulation/Simulation Cell

---

An umbrella term that refers to artificially produced conditions that replicate real-life emergencies. The cell is responsible for artificially duplicating or role playing response activities.

## Time Keeper/Recorder

---

Notes critical events and times during exercise.

## Appendix D:

### The Suite of 15 National Planning Scenarios

This suite of scenarios for use in national, federal, state, and local exercise activities is available from the federal Homeland Security Exercise and Evaluation Program (HSEEP) program. These scenarios represent a range of potential natural disasters or deliberately caused events and are expected to be the basis of the National Exercise Program. Use of these scenarios can facilitate cross-agency collaboration or evaluation.

#### The Suite of 15 National Planning Scenarios

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

Each of these scenarios follows the same general outline.

#### 1. Scenario Overview

---

- |  |                            |
|--|----------------------------|
| a. General description   | • Assumptions              |
| • Detailed scenario depicting various types of intentional events (e.g., biological, chemical, radiological, and other types of attacks) and natural disasters (e.g., hurricane, earthquake, etc.) | • Mission areas activated  |
| b. Planning considerations   | c. Implications            |
| • Geographical considerations/description  | • Secondary hazards/events |
| • Timeline/events dynamics   | • Fatalities/injuries      |
| • Meteorological conditions (when applicable)  | • Property damage          |
|  | • Service disruption       |
|  | • Economic impact          |
|  | • Long-term health issues  |

#### 2. Mission Areas

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- |                                   |                               |
|-----------------------------------|-------------------------------|
| a. Prevention/deterrence          | f. Hazard mitigation          |
| b. Infrastructure protection      | g. Evacuation/shelter         |
| c. Preparedness                   | h. Victim care                |
| d. Emergency assessment/diagnosis | i. Investigation/apprehension |
| e. Emergency management/response  | j. Recovery/remediation       |

## **Appendix E:**

- 1. Planning Checklist—Full-scale Exercise**  
with Example of Use
  
- 2. Planning Checklist—Tabletop Exercise**  
with Example of Use
  
- 3. Planning Template—Tabletop Exercise**  
with Example of Use
  
- 4. Assignment and Location Form**  
with Example of Use
  
- 5. Job Action Sheet (JAS)**  
with Example of Use

## Appendix E:

# 1. Exercise Planning Checklist—Full-scale Exercise

## Purpose

A list of items or tasks that must be addressed during the planning phase

## How to use

Fill in dates, names, and materials to be used for your specific exercise. Planning timeframe is dependent on the scale of exercise.

## Sample Planning Checklist— Full-scale Exercise

1. PLANNING TEAM				
Lydia Cook, John Gilbert, Odalis Diaz, Marion Bell, Ken Gricell				
Exercise Development Steps	Start Date	End Date	Assigned Staff	Status
Identify need for exercise	2/01/06		L. Cook	complete
Determine structure of planning team	2/01/06	2/03/06	J. Gilbert	complete
Develop work plan and schedule	2/03/06	2/10/06	O. Diaz	complete
Develop exercise evaluation plan	2/14/06	2/21/06	M. Bell	complete
Develop public information plan	2/14/06	2/21/06	K. Gricell	complete
2. EXERCISE DESIGN				
Identify overarching goals	2/03/06	2/10/06	Cook, Gilbert	complete
Establish purpose	2/01/06		Cook, Gilbert	
Establish scope and scale			Cook, Gilbert, Diaz	
Define extent of play			Diaz	
Develop objectives			Bell	
Determine exercise type (format, e.g., TTX, FSE, etc.)			Cook, Gilbert	
Develop exercise scenario narrative summary			Diaz	
Develop concept of operations				
Define exercise assumptions, artificialities				
Develop security plan (exercise safety)			Gricell	
Develop exercise timeline, master scenario events list, injects, and simulations				
Finalize scenario				
Define resource requirements and logistics plan				

# Planning Checklist—Full-scale Exercise

1. PLANNING TEAM				
Exercise Development Steps	Start Date	End Date	Assigned Staff	Status
Identify need for exercise				
Determine structure of planning team				
Develop work plan and schedule				
Develop exercise evaluation plan				
Develop public information plan				
2. EXERCISE DESIGN				
Identify overarching goals				
Establish purpose				
Establish scope and scale				
Define extent of play				
Develop objectives				
Determine exercise type (format, e.g., TTX, FSE, etc.)				
Develop exercise scenario narrative summary				
Develop concept of operations				
Define exercise assumptions, artificialities				
Develop security plan (exercise safety)				
Develop exercise timeline, master scenario events list, injects, and simulations				
Finalize scenario				
Define resource requirements and logistics plan				

## Planning Checklist—Full-scale Exercise (cont'd)

Exercise Development Steps	Start Date	End Date	Assigned Staff	Status
Develop briefing materials (exercise handbooks and forms):				
Controller/facilitator				
Evaluator/data collector				
Note taker/scribe				
Player				
Observer guidelines				
Exercise roster				
<b>3. CONDUCT THE EXERCISE</b>				
Conduct senior management pre-exercise briefings				
Conduct controller/facilitator, data collector/evaluator, observer, player training				
Conduct data collector/evaluator, observer, player pre-exercise briefing				
Conduct exercise				
<b>4. EVALUATE THE EXERCISE</b>				
Conduct participant hot wash				
Conduct controller, data collector/evaluator critique				
Collect exercise observation/data collection forms (notes)				
Develop initial after action report (AAR)				
Coordinate and evaluate findings				
Conduct senior management post-exercise briefing				
Prepare final AAR				
<b>5. POST EXERCISE</b>				
Develop improvement plan				
Track corrective actions				
Share lessons learned				



## Appendix E:

# 2. Exercise Planning Checklist—Tabletop Exercise

### Purpose

A list of items or tasks that must be addressed during the planning phase

### How to use

Fill in dates, names, and materials to be used for your specific exercise. “X” indicates steps needed for tabletop exercise.

### Sample Planning Checklist—Tabletop Exercise

1. PLANNING TEAM	FILL IN NAMES			
Exercise Development Steps	Start Date	End Date	Assigned Staff	Status
Identify need for exercise	2/01/06		Add Names	complete
Determine structure of planning team	2/01/06	2/03/06		complete
Develop work plan and schedule	2/03/06	2/10/06		complete
Develop exercise evaluation plan				complete
Develop public information plan				complete
2. EXERCISE DESIGN				
Identify overarching goals				
Establish purpose				
Establish scope and scale				
Define extent of play	n/a			
Develop objectives				
Determine exercise type (format, e.g., TTX, FSE, etc.)	2/16/06			
Develop exercise scenario narrative summary				
Develop concept of operations	n/a			
Define exercise assumptions, artificialities				
Develop security plan (exercise safety)	n/a			
Develop exercise timeline, master scenario events list, injects, and simulations				
Finalize scenario				
Define resource requirements and logistics plan				

## Sample Planning Checklist— Tabletop Exercise (cont'd)

Exercise Development Steps	Start Date	End Date	Assigned Staff	Status
Develop briefing materials (exercise handbooks and forms):				
Controller/facilitator	X			
Evaluator/data collector				
Note taker/scribe	X			
Player	X			
Observer guidelines				
Exercise roster	X			
<b>3. CONDUCT THE EXERCISE</b>				
Conduct senior management pre-exercise briefings	X			
Conduct controller/facilitator, data collector/evaluator, observer, player training	X			
Conduct data collector/evaluator, observer, player pre-exercise briefing				
Conduct exercise	X			
<b>4. EVALUATE THE EXERCISE</b>				
Conduct participant hot wash	X			
Conduct controller, data collector/evaluator critique				
Collect exercise observation/ data collection forms (notes)	X			
Develop initial after action report (AAR)				
Coordinate and evaluate findings				
Conduct senior management post-exercise briefing	X			
Prepare final AAR	X			
<b>5. POST EXERCISE</b>				
Develop improvement plan	X			
Track corrective actions	X			
Share lessons learned	X			

# Planning Checklist—Tabletop Exercise

<b>1. PLANNING TEAM</b>				
Exercise Development Steps	Start Date	End Date	Assigned Staff	Status
Identify need for exercise				
Determine structure of planning team				
Develop work plan and schedule				
Develop exercise evaluation plan				
Develop public information plan				
<b>2. EXERCISE DESIGN</b>				
Identify overarching goals				
Establish purpose				
Establish scope and scale				
Define extent of play				
Develop objectives				
Determine exercise type (format, e.g., TTX, FSE, etc.)				
Develop exercise scenario narrative summary				
Develop concept of operations				
Define exercise assumptions, artificialities				
Develop security plan (exercise safety)				
Develop exercise timeline, master scenario events list, injects, and simulations				
Finalize scenario				
Define resource requirements and logistics plan				

## Planning Checklist—Full-scale Exercise (cont'd)

Exercise Development Steps	Start Date	End Date	Assigned Staff	Status
Develop briefing materials (exercise handbooks and forms):				
Controller/facilitator				
Evaluator/data collector				
Note taker/scribe				
Player				
Observer guidelines				
Exercise roster				
<b>3. CONDUCT THE EXERCISE</b>				
Conduct senior management pre-exercise briefings				
Conduct controller/facilitator, data collector/evaluator, observer, player training				
Conduct data collector/evaluator, observer, player pre-exercise briefing				
Conduct exercise				
<b>4. EVALUATE THE EXERCISE</b>				
Conduct participant hot wash				
Conduct controller, data collector/evaluator critique				
Collect exercise observation/data collection forms (notes)				
Develop initial after action report (AAR)				
Coordinate and evaluate findings				
Conduct senior management post-exercise briefing				
Prepare final AAR				
<b>5. POST EXERCISE</b>				
Develop improvement plan				
Track corrective actions				
Share lessons learned				

## Appendix E:

### 3. Planning Template—Tabletop Exercise

#### Purpose

This preset format is used to guide the planning process.

#### How to use

Fill in dates, names, and materials as required for your specific exercise.

#### Sample Planning Template—Tabletop Exercise

Tabletop Exercise Exercise Anytown Flood		
Date Scheduled: November 10, 20xx	Initiation Time: 10 AM	Duration of Exercise: 4 hours
Facilitator: John Smith		Site: 3rd floor Conference Room
<p><b>Purpose:</b> The purpose of this exercise is to give the participants an opportunity to evaluate their current emergency response plans and capabilities for responding to a flood in Anytown. This exercise will focus on key local public health emergency responder coordination, critical decisions, and the integration of other response sectors necessary to protect the public's health and save lives following a [type of disaster/emergency] event.</p> <p><b>Scope:</b> The scope of this exercise will focus on Anytown Health Department's role in response to the potential consequences of a flood emergency. More important than minute details are processes and decision making. The emphasis should be on coordination, integration, problem identification, and problem resolution.</p>		
<p><b>Objectives:</b> Participants will demonstrate the ability to:</p> <ol style="list-style-type: none"><li>1. Identify priorities and responsibilities</li><li>2. Reorder priorities based on new information</li><li>3. Develop priorities in response to unexpected events</li></ol>		
<p><b>Players:</b> Health Officer, Public Health Nurse, Epidemiologist</p>		
<p><b>Narrative:</b> On Monday afternoon, after two weeks of rainy weather, Anytown's rivers are at high levels. Weather forecasters are indicating that a strong storm front is rapidly approaching the region. Heavy rains are predicted to start by Tuesday early morning.... Write opening narrative for scenario here.</p>		
<p><b>Scenario Development (Move I)</b> By 11 AM on Tuesday, the Anytown river begins to overflow its banks.... The scenario and the chronological events continue here.</p>		

## Sample Planning Template— Tabletop Exercise (cont'd)

Tabletop Exercise	
<p><b>Problem Statements:</b> These are questions that the facilitator can verbally present which are then discussed, one at a time, by the group. Or written detailed events (messages) and related discussion questions can be given to individuals to answer from the perspective of their own organization and role, and then discussed in the group. (example)</p>	<p>A. Public health nursing What are your priorities and responsibilities? What are the time constraints you face?</p> <p>B. Health Officer As Incident Commander, what are your priorities and responsibilities?</p>
<p><b>Scenario Development (Move II)</b> At 12 noon on Tuesday, floodwaters reach the Anytown waste treatment facility.... The scenario and the chronological events continue here.</p>	
<p><b>Problem Statements:</b> Health Officer How will you adjust your priorities based on this new information?</p>	
<p><b>Scenario Development (Move III)</b> By Tuesday morning, shelters are operating in two regional high schools. However, at around 1 PM, rapidly rising floodwaters overtake a bus headed for a shelter, filled with patients from the Anytown Rehabilitation Centre. Before rescuers can reach the bus, several elderly and immunocompromised evacuees are exposed to contaminated floodwater.... The scenario and chronological events continue here.</p>	
<p><b>Problem Statements:</b> Epidemiologist What are your priorities in response to this exposure?</p>	

# Planning Template—Tabletop Exercise

Tabletop Exercise		
Date Scheduled:	Initiation Time:	Duration of Exercise:
Facilitator:		Site:
Purpose:		
Scope:		
Objectives:		
Players:		
Narrative:		
Scenario Development (Move I)		

## Planning Template—Tabletop Exercise (cont'd)

### Tabletop Exercise

Problem Statements:

Scenario Development (Move II)

Problem Statements:

Scenario Development (Move III)

Problem Statements:



## Appendix E:

### 4. Assignment and Location List

#### Purpose

Used to develop an assignment list and locations for exercise participants—that is, role players, controllers, and evaluators.

#### How to use

During the exercise planning phase, fill in as illustrated. Use as a reference for conducting the exercise.

#### Sample Assignment and Location Form

Location Name	Response Site	Assignment	Contact and Phone
POD Site	EOC	Controller	Elaine Morrow Cell 5-6786
	Anytown HS	POD Manager	Doug Weiss Nextel 5-7845
	EOC/HS	Transport	Rodolfo Delano Nextel 5-3423
	Anytown HS	Greeter	Norma Markson Contact through POD manager
		POD Registration Section Chief	
		POD Evaluation Section Chief	
		POD Distribution Section Chief	

## Assignment and Location Form

Location Name	Response Site	Assignment	Contact and Phone

## Appendix E:

### 5. Job Action Sheet

#### Purpose

A written statement listing the elements of a particular functional role in the exercise. Include this form in exercise manuals for role players.

#### How to use

Job action sheets are developed for the various functional roles played in an exercise. They list the elements of a particular job or occupation (e.g., purpose, duties, equipment used, qualifications, training, physical and mental demands, working conditions).

#### Sample Job Action Sheet

Job Action Sheet		
<b>Role:</b> POD Site Manager		
<b>You Report to:</b> Edwin Lewis, County Administrator		
<b>Qualifications:</b> General knowledge of ICS and community resources		
<b>Mission:</b> Provide overall site command for POD location. Assure communication is maintained with the County Administrator, Anytown Situation Room, and local EOC.		
<b>Location Assigned:</b> Anytown High School Auditorium		
<b>Immediate Actions:</b> Report to Edwin Lewis Clarify role and functions		
<b>Task</b>	<b>Completed</b>	<b>Time</b>
Review Job Action Sheet.		8:25 AM
Meet with command staff officers to review plans and activities.		8:30
Meet with chiefs from each of the four sections to review plans and activities.		9:00
Communicate with safety officer and section chiefs on an ongoing basis.		Schedule every 2 hours

## Job Action Sheet

Role:

You Report to:

Qualifications:

Mission:

Location Assigned:

Immediate Actions:

Task	Completed	Time

## Appendix F:

### Data Collection/Evaluation Forms with Examples of Their Use

1. Data Collector Observation Log
2. Role Evaluation Checklist with Example for Role of Clinic Manager (Flu Scenario)
3. Station-Specific Throughput Timesheet
4. Actor-Specific Throughput Timesheet
5. Participant Feedback Form
6. Hot Wash/Debriefing
7. After Action Report
8. Tracking Improvement Checklist

## Appendix F:

# Data Collection and Evaluation Forms

## Purpose

These sample forms can be used to collect the data required to evaluate the exercise and to create an improvement plan.

## How to Use These Forms

### 1. Data Collector Observation Log

---

Used to collect the observations in the field during the exercise. Player action is observed. The data collector determines if the criteria selected by the planning team were met or not met, not observed, or not applicable during their observation. Observation methods are Look, Listen, and Ask (but do not interfere with operations being conducted during the exercise). Data collectors record when, where, and what is happening.

Step 1. Data collector fills out his/her name and contact information (important if he/she must be contacted for clarification). The planning team should complete both the location/site (where the data collector is assigned) and LPHA contact information in advance.

Step 2. Data collector fills out the date of the exercise, the time he/she started observing, and the time he/she stopped observing.

Step 3. The list of criteria and expected actions is periodically reviewed and checked as completed, met, not met, not observed, or not applicable.

Step 4. The last page of the evaluation form is used for comments or to document specific observations about problems encountered by the exercise participants and suggestions or solutions for improvement.

### 2. Role Evaluation Checklist

---

Used by the data collector or evaluator to document their observations during the exercise.

### 3. Station-Specific Throughput Timesheet

---

For use at a Mass Care or Point of Distribution (POD) Exercise. The sheet is utilized at each station to note the time of arrival and departure from that particular

station. It helps to determine if there are problems related to moving patients through the established mass care facility or POD.

### 4. Actor-Specific Throughput Timesheet

---

Intended for use at a Mass Care or POD Exercise. The sheet is carried by each patient actor to note the time of arrival and departure as they travel from station to station in the mass care facility or POD. It documents

the time required for a “patient” to travel through the site, if he/she was directed properly, and helps to gauge site capacity.

## 5. Participant Feedback Form

---

Used to gather specific feedback from exercise participants. This feedback data is analyzed for improving future exercises.

## 6. Hot Wash/Debriefing

---

Used after the exercise to capture the results from players and participants to improve future exercises. The hot wash is conducted by a facilitator and guided by discussion points. The proceedings are documented by a note-taker or recorded, then analyzed by the exercise team.

## 7. After Action Report

---

Used to document the outcome of an exercise. This is the responsibility of the exercise team (or consultant if one is used). This is a standard format for organizing evaluation data that has been collected and analyzed.

## 8. Tracking Improvement Checklist

---

Catalogues items or tasks to be considered for improving the emergency preparedness plan based on the After Action Report.

## Appendix F:

### 1. Data Collector Observation Log

#### Sample Data Collector Observation Log

Data Collector Observation Log	
Date:	Location: EOC
Name: Renata F.	Assignment: Command
Time	Event Description/Assessment
8:00 AM	Phone call received from Hospital A of unusual death from flu-like symptoms. Call received by (name/role of staff member).
8:15 AM	Health director/officer makes decision to activate the departmental EOC.
8:20 AM	Departmental IC notifies state department of health.





## Appendix F:

### 2. Role Evaluation Checklist

#### Sample Role Evaluation Checklist

Role Evaluation Checklist					
Role Being Evaluated: Clinic Manager (Exercise Scenario-FLU)					
Incident: Mass prophylaxis point of distribution (POD)					
Outcome: Protection			Location: Anytown High School		
Response Element: PH staff and volunteers			Jurisdiction: Anytown Municipal District		
Evaluator: John Smith			LPHA Contact: Site Commander		
Date of Exercise: 4/14/06		Start Time: 8:00 AM		End Time: 4:00 PM	
Part I. For each criterion, check the appropriate column and add comments as appropriate.					
LPHA Criteria	Met	Not Met	Not Observed	N/A	Comments/ Recommendations
1. Generic mass-dispensing strategy adapted to specific event within 60 minutes of notification.		X			Exceeded limit within "exercise time frame"
2. Dispensing site(s) staffed with adequate and appropriate personnel for mass dispensing (including volunteer surge staff) prior to site opening time.	X				
3. Just-in-time training (including use of PPE) identified and requested at least 2 hours prior to site opening.		X			Took more than time allotted
4. System in place to restock supplies throughout duration of site activation.		X			Restocking delayed due to transport not able to get through
5. System in place to rotate or relieve staff throughout duration of site activation.	X				
6. All required record-keeping supplies prepared and delivered to site coordinator prior to site opening.	X				

## Sample Role Evaluation Checklist (cont'd)

Role Evaluation Checklist					
Job Action Sheet (JAS) Criteria: Clinic Manager (Flu Scenario)					
Part II. Job Action Evaluation					
Mission: Oversee all POD functions.	Met	Not Met	Not Observed	N/A	Comments/ Recommendations
1. Read entire JAS.	X				
2. Obtained briefing from mass care unit leader.	X				
3. Obtained list of assigned staff and site location.	X				Noted and recorded
4. Ensured that all assigned staff were present at work site.	X				All staff were in attendance.
5. Briefed all POD staff on the current situation; communicated the Incident Action Plan (IAP).	X				
6. Assigned JAS and tasks to the POD staff.	X				
7. Ensured that all necessary paperwork and supplies were in place at work site in advance.	X				
8. Received and forwarded all requests for additional personnel, equipment, supplies, and transportation.	X				
9. Continually reassessed work flow and patient flow.	X				

## Sample Role Evaluation Checklist (cont'd)

Role Evaluation Checklist					
Job Action Sheet (JAS) Criteria: Clinic Manager (Flu Scenario)					
Part II. Job Action Evaluation					
Mission: Oversee all POD functions.	Met	Not Met	Not Observed	N/A	Comments/ Recommendations
10. Ensured that time and attendance were communicated to mass care unit leader using appropriate forms.	X				
11. Maintained written log of all activities and communications.		X			Fell behind in this
12. Briefed the assistant clinic managers—clinical services and logistics—on POD issues on a periodic basis.	X				
13. Ensured that issues of concern were related to mass care unit leader ASAP.	X				
14. Monitored staff for signs of stress and fatigue.		X			
15. Monitored supplies.		X			Resulted in failure of supply chain
16. Prepared end-of-shift report for mass care director and incoming clinic manager.	X				
17. Planned for the possibility of extended deployment.	X				

# Sample Role Evaluation Checklist (cont'd)

Role Evaluation Checklist
Part III. Please provide additional comments here, including problems identified:
There was insufficient information coming to the clinic manager from operations staff. The EOC was slow to help in contacting operations staff.





## Role Evaluation Checklist (cont'd)

PART III. Please provide additional comments here, including problems identified:







**5. Participant Feedback**

Name of Exercise:

Participant Name:

Agency:

Role:  Player  Observer  Facilitator      Date:

Part I. Recommendations and Action Steps

1. Based on today's exercise and tasks identified, list important issues and/or areas for improvement.

Empty lines for writing responses to question 1.

2. Identify the steps needed to address the identified issues. For each one, rate it is a high, medium, or low priority.

Empty lines for writing responses to question 2.

3. What action steps should be taken in your area of responsibility?

Empty lines for writing responses to question 3.

4. What policies, plans, and procedures should be reviewed, revised, or developed? List in order and indicate the priority level for each.

Empty lines for writing responses to question 4.



## Appendix F:

### 6. Hot Wash/Debriefing

#### Sample Hot Wash/Debriefing Format

Hot Wash/Debriefing Format
<b>OVERVIEW</b>
<ul style="list-style-type: none"><li>• <b>Date/Location:</b> [Jurisdiction] hosted a [Type of Exercise] on [Date]. Attendees included representatives from: [List Attendees].</li></ul>
<ul style="list-style-type: none"><li>• <b>Hot Wash:</b> After the exercise's conclusion, exercise planners met briefly to discuss the exercise conduct and planning process. Discussion primarily focused on three aspects: expectations, after-action items, and the planning process.</li></ul>
<b>DISCUSSION POINTS</b>
<ol style="list-style-type: none"><li>1. <b>Expectations:</b></li></ol>
<ol style="list-style-type: none"><li>2. <b>After Action Items:</b> Planning group members emphasized the following issues as critical to the After Action Report/Improvement Plan's success:</li></ol>
<ol style="list-style-type: none"><li>3. <b>Exercise Design:</b> Exercise planners noted the following about the exercise planning process:</li></ol>
<ol style="list-style-type: none"><li>4. <b>Other:</b> The planning group also noted the following:</li></ol>

## Appendix F:

### 7. After Action Report

#### Sample After Action Report Format

After Action Report Format
1. Executive Summary:
2. Exercise Overview: (who participated, including departments, agencies, jurisdictions; dates of play; location, etc.)
3. Exercise Goals and Objectives:
4. Synopsis of the Events:
5. Analysis of Outcomes:
6. Analysis of Critical Task Performance:
7. Conclusion (including Improvement Plan):

## Appendix F:

# 8. Tracking Improvement Checklist

## Sample Tracking Improvement Checklist

1. PLANNING TEAM:	COMMAND	OPERATIONS	LOGISTICS	PLANNING	FINANCE/ ADMIN	
ITEMS FOR ACTION						CORRECTIVE ACTIONS
Improve communication with EOC	P			O		Steps taken to purchase new cell phones
Improve POD plan layout		O	P	C		Medical evaluation section will be moved to improve flow
Improve methods for maintaining chain of evidence			C	P		Training scheduled for 4/1/06
Improve mechanism of delivery of supplies		S	C		P	Revise contracts with delivery vendors
Improve site selection			P	O		Meet with community members for selection of future sites

P = Primary Responsibility    S = Secondary/Support    O = Oversight    C = Coordination Role

## Tracking Improvement Checklist

1. PLANNING TEAM:	COMMAND	OPERATIONS	LOGISTICS	PLANNING	FINANCE/ ADMIN	
ITEMS FOR ACTION						CORRECTIVE ACTIONS

P = Primary Responsibility    S = Secondary/Support    O = Oversight    C = Coordination Role



## Appendix G:

### **Exercise Playbook and Scenario**

1. Sample Scenario

2. Sample Full-scale Exercise Playbook

3. Tabletop Exercise  
Suggested Schedule

4. Tabletop Exercise  
Sample Facilitator Guidance/Questions/Problem Statements

## Appendix G:

### 1. Sample Scenario

At [Hospital name]’s emergency department, a doctor sees his first patient, a 22-year-old male student. The patient’s father states he has been complaining of weakness and chills and developed a temperature of 105°F. The father adds that during the past two days, the patient has experienced increased difficulty breathing and has a past medical history of severe asthma. Nothing in the patient’s recent history accounts for this sudden illness. The father thinks he may have caught a “bug” from one of his friends. The patient is admitted, but is unresponsive to medications.

The male student admitted to the hospital earlier in the day develops severe respiratory complications and dies just after [time of day]. Hospital officials notify the medical examiner’s office. An autopsy is scheduled to determine the cause of his death.

Due to the rapidly increasing number of patients presenting with unusual symptoms, some of whom have died, notifications of such have taken place within the emergency response, medical, and public health communities.

Many of the patients do not seem to respond to decongestants, analgesics, antibiotics, or antiviral medication therapy. The lack of response to the initial treatment regimens and growing number of patients prompt physicians to seek advice and consultation from the public health department. The local health department alerts the state department of health.

By late [time], approximately [number] patients have reported to area hospitals and clinics with this severe, flu-like syndrome. The most severe cases have been hospitalized; however, there are many more waiting in emergency rooms. Some hospitals have gone on diversion status. Some patients have died since admission. As a result, the medical examiner’s office has been called in to perform a growing number of autopsies.

A story reporting the increase in flu-like illnesses and related deaths appears in the local news. Public health department officials and their public information officers (PIOs) begin meeting to develop their public information strategy.

## Appendix G:

### 2. Sample Full-scale Exercise Playbook

Sample components have been included. These will vary by the role of the player or participant.

**Name**

**Date**

**Site of Exercise**

**Player** (e.g., POD Site Manager) or **Participant** (e.g., Data Collector)

#### Purpose

The purpose of this exercise is to give the participants an opportunity to evaluate their current emergency response plans and capabilities for responding to a [type] event in the [your health department/community's name]. This exercise will focus on key local public health agency emergency response coordination, critical decisions, and the integration of other response sectors as necessary to protect the public's health and save lives following a [type of disaster/emergency event].

#### Scope

The scope of this exercise will focus on [your agency's name] role in response to the potential consequences of a [type of disaster/emergency event]. More important than minute details are processes and decision making. The emphasis should be on coordination, integration, problem identification, and problem resolution.

#### Objectives

The exercise will focus on the following objectives:

- Increase bioterrorism awareness
- Assess level of emergency preparedness in the health department and its ability to respond during a public health emergency
- Identify triggers for activating the incident command system (ICS)
- Evaluate effectiveness of ICS policies, procedures, and staff roles
- Update and revise the emergency management plan from lessons learned during the full-scale exercise.

#### Roles and Responsibilities

**Players** respond to the situation presented based on expert knowledge of response procedures and current plans and procedures in place in their agency or their community.

**Observers** support the exercise and its planning team by offering insight; however, they do not participate in the exercise.

**Data Collectors/Evaluators** are involved in drills and exercises as well as TTX. They are responsible for observing player action and evaluating effectiveness based on defined objectives and evaluation criteria. They may or may not be from within the LPHA, depending on the size and scale of the exercise. They usually evaluate an area consistent with their expertise and will record and note the actions of the players.

## Assumptions

Assumptions and artificialities may be necessary to complete play in the time allotted. During this exercise, the following apply:

- The scenario is plausible, and events occur as they are presented.
- Everyone receives information at the same time.
- Local exercise players will concentrate on the local response, assuming that federal and state responders have their own plans, procedures, and protocols in place and operating.

## Simulations and Artificialities

Fill in the mechanisms used to artificially simulate events, activities, or actions within the scenario to allow for further exercise response.

## Rules of Conduct and Safety Information

This should include vitally important information that provides for the safe conduct and protection of **all persons** involved in the exercise. Include mechanisms for initiating and discontinuing the exercise. Also include the mechanism for responding to actual emergencies or accidents should they occur during the implementation of an exercise. In addition, it should include the following information for exercise players:

- Respond based on your own knowledge and training of your LPHA's current plans and capabilities; use only existing assets.
- Make decisions based on the circumstances presented.
- Assume the cooperation and support of other exercise players/responders and agencies.
- The written material (including simulations or injects provided by the controller) should serve as the basis for discussion.

## Appendix G:

### 3. Tabletop Exercise

#### Suggested Schedule 1

[Time]	Welcome and introduction
[Time]	Player and participant briefings
[Time]	Exercise begins
[Time]	Lunch
[Time]	Exercise ends. Submit any exercise materials to [specify name]
[Time]	Hot wash begins—report to: [site]
[Time]	Closing comments

#### Suggested Schedule 2

[Time]	Welcome and introduction
[Time]	<b>Module I</b> Situation briefing Facilitated discussion
[Time]	<b>Module II</b> Initial response Situation update Breakout groups
[Time]	Lunch
[Time]	<b>Module III</b> Response and recovery Situation update Breakout groups Facilitated discussion
[Time]	Review and conclusion
[Time]	Closing comments

## Appendix G:

### 4. Tabletop Exercise

#### Sample Facilitator Guidance/Questions/Problem Statements

1. If the number of cases escalates, what actions will be taken to manage the increase in cases, given a scenario in which the scale of the public health emergency has not yet been defined?
2. What epidemiological and environmental expertise is needed to identify and contain the source of this public health emergency? Where and from whom would you seek assistance? Who will coordinate information?
3. When would clinical or environmental samples be collected? When would you expect to have the results back and how would you track them?
4. Are the area laboratories adequate to identify suspected biological agents? If not, where would you seek assistance? Who will coordinate this information?
5. Have you anticipated the kind of inquiries expected from the public and the media?
6. Identify your agency's established method of health surveillance. What other agencies will be involved in this effort?
7. Are there provisions for collecting data on new cases from private practice physicians and community health care agencies? How will this information be shared with the medical community?



