School of Public Health
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Center for Infectious Diseases & Emergency Readiness

Homeland Security Exercise and Evaluation Program (HSEEP): Quick Reference Guide

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1) Introduction

What are Exercises?

Exercises are activities to train for and practice prevention, vulnerability reduction, response, and recovery capabilities in an environment that is risk free to participants. Exercises are designed to develop, improve or verify an organization's capability to perform one or more functions. Within emergency management, there are discussion and operations-based exercises. Discussion-based exercises do not involve the movement of actual resources. Operations-based exercises involve command centers or the movement of resources (e.g. epidemiological response teams) in the field setting. Additional information on types of exercises is contained in Section 2, Exercise Program Management.

Why do Organizations Conduct Exercises?

Exercises are used by organizations to:

1. Develop, test and validate policies, plans, procedures, training, equipment, and agreements;
2. Clarify and train personnel in roles and responsibilities;
3. Improve individual and team performance;
4. Improve interagency coordination;
5. Identify gaps in resources;
6. Strengthen relationships; and
7. Unfreeze personnel and organizations.

Five Phases of the HSEEP Exercise Cycle

1. **Foundation:** The following activities provide the foundation for an effective exercise: create a base of support (i.e., establish buy-in from the appropriate entities and/or senior officials); develop a project management timeline; identify an exercise planning team; and schedule planning conferences.
2. **Design and Development:** The design and development process focuses on identifying objectives, designing the scenario, creating documentation, coordinating logistics, planning exercise conduct, and selecting an evaluation and improvement methodology.
3. **Conduct:** After the design and development steps are complete, the exercise takes place. Exercise conduct steps include setup, briefings, facilitation/control/ evaluation, and wrap-up activities.
4. **Evaluation:** The evaluation phase for all exercises includes a formal exercise evaluation, an integrated analysis, and an After Action Report/Improvement Plan (AAR/IP) that identifies strengths and areas for improvement of an agency's preparedness, based on exercise performance. Recommendations from evaluation used in improvement planning phase.
5. **Improvement Planning:** During improvement planning, the corrective actions identified in the evaluation phase are assigned, with due dates, to responsible parties; tracked to implementation; and then validated during subsequent exercises.

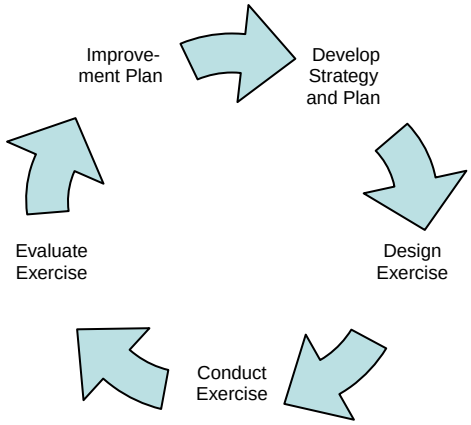
HSEEP Overview

1. Determine the Mission (Prevent, Protect, Respond, and Recover).
2. Determine what capabilities are needed to achieve the mission (from TCL).
3. Determine what activities and tasks are necessary to achieve the capability.
4. Create a scenario, to evaluate the identified capabilities, activities, and tasks.

HSEEP Exercise Process

1. **Threat:** What are the hazards or vulnerabilities?
2. **Targets:** What is your critical infrastructure?
3. **Mission:** What is your mission?
4. **Capabilities:** What do you need to perform your mission?
5. **Training:** What training is needed to perform your mission?
6. **Exercise:** Does your training and equipment meet your mission?
7. **After Action Reporting:** Critique and document the exercise.
8. **Corrective Improvement Plan:** Implement actions to improve the capabilities and the system.

The HSEEP Cycle



Additional Information: www.hseep.dhs.gov

2) Exercise Program Management

Capabilities Based Planning

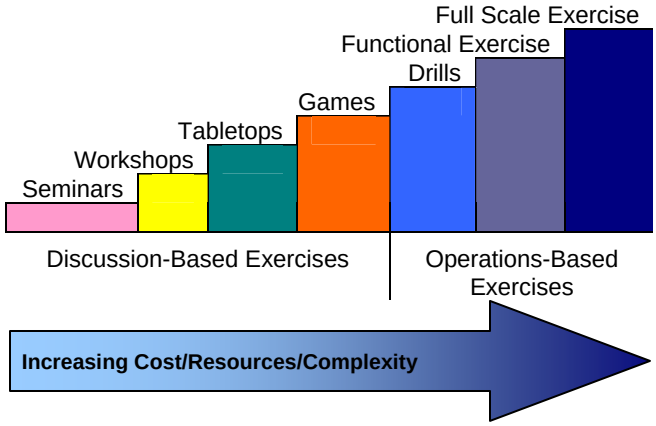
Capability-based planning: Planning to build capabilities suitable for a wide range of threats and hazards, while considering cost and prioritization. The exercise program begins with assessment of agency's threats, vulnerabilities, and capabilities.

1. Identify capabilities and gaps in capabilities.
2. Decide what capabilities are needed to fill gaps.
3. Determine which tasks are needed to achieve capabilities.
4. Design exercises that improve ability to complete tasks.
5. Integrate priorities from Improvement Plans.
6. Prioritize improvements based on National Priorities and local priorities.

Types of Exercises

Discussion-Based Exercises
• **Seminars:** Informal discussion to orient participants to plans, policies, or procedures. Similar to a briefing.
• **Workshops:** Discussion used to build specific products; more structured than a seminar. Two way communication.
• **Tabletop Exercises:** Discussion of simulated scenarios to assess policies, plans, and procedures.
• **Games:** Competitive simulation involving two or more teams.

Operations-Based Exercises
• **Drills:** Coordinated activity to test a single function in a single agency, such as a fire drill at a school.
• **Functional:** Activity to test command and control among coordination centers. No field assets ("Boots on Ground").
• **Full-Scale:** Multi-agency, multi-function evaluation of command and control centers and field assets.



Training and Exercise Plan Scheduling

Training and Exercise Plan Workshop (T&EPW)

- **What:** (Multi-Agency) Annual Workshop to discuss HSEEP accomplishments and future needs. Also used to create or modify Multi-Year Training and Exercise Plan.
- **Who:** Officials from participating agencies.
- **Why:** Agencies review their progress since last T&EPW and identify training needs for next year. Coordinates exercise schedules at State, regional and local levels—avoid duplication.
- **Multi-Year Training and Exercise Plan:** Longer term (usually 3 year) view of training and exercise needs. Plan identifies: program priorities, target capabilities, training courses, and exercises.

3) Exercise Foundation and Scheduling

Exercise Planning Team

What: The team that designs, develops, conducts and evaluates the exercise(s). The team creates exercise objectives, develops scenarios, and evaluation materials. Serves as POC for exercise information.

Organizational Structure: Exercise Planning Teams generally use ICS structure:

- **Command:** Leads overall planning process and successful exercise execution.
- **Operations:** Selects exercise design/capabilities, develops scenario, and identifies exercise controllers.
- **Planning:** Plans and coordinates exercise evaluation. Creates Exercise Evaluation Guides (EEGs). Identifies exercise evaluators.
- **Logistics:** Every agency participates in logistics. Provides/coordinates all exercise support, including actors, supplies, communications, signs, food.
- **Finance:** Manages budget, tracks costs, and seeks reimbursement. Registers VIPs and observers.
- **Subject Matter Experts:** Helps make exercise realistic. Provides technical information.

Exercise Planning Conferences (Meetings)

- **Concept and Objectives (C&O) Meeting:** *Optional meeting,* attended by sponsoring agency, planning team leader, and senior officials. Forum to identify exercise goal, develop exercise capability, and identify planning team members.
- **Initial Planning Conference (IPC):** *Mandatory meeting for all discussion and operations-based exercises.* Forum to design exercise, get input on scope, assumptions, artificialities, scenario variables. May be used to plan evaluation. Team members are assigned to develop documents (e.g. SITMAN, MSEL) and prepare logistics support.
- **Midterm Planning Conference (MPC):** *Optional meeting. Used for complex operations-based exercises.* Forum to discus exercise staffing, documents, timeline, scheduling, and logistics. Review of draft EXPLAN, Controller and Evaluator Handbook, and MSEL.
- **Master Scenario Events List (MSEL) Conference:** *Meeting for Operations-based exercises. Meeting can be incorporated into MPC or FPC.* Forum to review exercise timeline. MSEL is a chronological list that supplements exercise scenario with event synopses, and responses.
- **Final Planning Conference (FPC):** *Mandatory meeting for all discussion and operations-based exercises.* Forum for final review of all exercise processes and procedures. Review and approve final drafts of all exercise materials during FPC.

Pre-Exercise Planning Meetings*		
	Discussion-Based	**Operations-Based**
C&O Meeting	---	Large or series of exercises
IPC	3 months	6 months
MPC	---	3 months
MSEL Conference(s) (1 or more)	---	Large or complex exercise
FPC	6 weeks	6 weeks
***** Months/days denote the recommended time before the exercise that the meeting should occur.		

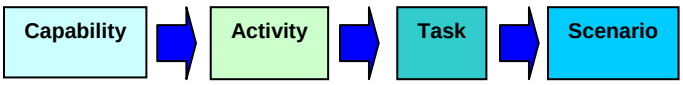
Simple Project Management Principles

1. **Establish a Project Timeline**
   Identify project milestones such as meeting dates, document deadlines, deliverables, and post-exercise meetings and documents.
2. **Assign Responsibilities**
   Identify team members' responsibilities. Task team members with responsibilities consistent with their skill set and capabilities. Track progress of team members, based on project timeline.
3. **Maintain Exercise Budget**
   Track labor costs of planning team, consultants, players, and backfill costs. Track travel and other direct costs.
4. **Maintain Document Control**
   Track document changes by revision number/date produced. Implement a peer review process for all documents. Protect document confidentiality—documents may be FOUO (for official use only) or other restricted distribution.

4) Common Exercise Design Components

Exercise Design

1. Select capabilities from the Target Capabilities List (TCL) based on type, scope, and participant agencies.
2. Based on capability chosen, identify subordinate activities and tasks for evaluation.
3. Design an exercise scenario to facilitate the evaluation of the identified capability.



Developing an Exercise Scenario

- The Exercise Scenario drives the exercise play. The scenario should be risk-based, realistic, challenging, and include conditions that allow players to demonstrate proficiency and competency.
- The scenario should include technical details credible enough to allow players to suspend disbelief.
- Tailor the exercise to the local jurisdiction
- Involve local agencies and facilities.
- Determine the threat/hazard to be used.
- Select an appropriate venue for the hazard.
- Consider previous real-world incidents and exercises.

Exercise Participants

Discussion-Based Exercises		
	Operations-Based Exercises	
X	**X**	**Players:** Discuss the agency's role and respond to the scenario presented. Perform their regular role during operations-based exercises.
X		**Facilitators:** Introduce or present modules, lead discussions, and coordinate issues among groups.
	X	**Controllers:** Plan and manage the exercise. Assure conduct is appropriate. Role is joined with facilitator in discussion exercises. Role is distinct in operation-based exercises.
X	**X**	**Evaluators:** Observe and record player discussions and actions. Analyze data, and help draft the After Action Report (AAR).
X	**X**	**Observers/VIPs:** Observe, but do not take active part in, exercise.
X		**Recorders:** Record data as directed by facilitators. Do not interact with players.
	X	**Actors:** Volunteers who simulate specific roles during exercise play, making scenario more realistic.

5) Evaluation and Improvement Process

Process Overview

1. Plan and organize the evaluation.
- Identify and train evaluators.
- Define evaluation requirements and how information will be collected.
- Prepare the information evaluation processes including developing Exercise Evaluation Guides EEGs).

2. Observe the exercise and collect data.
- Observe and record player discussion and action during the exercise relative to policies, procedures, and best practices.

3. Analyze data.
- Data includes EEGs and other data sources identified above.
- Evaluators contribute to hot wash and Controller/Evaluator debrief.
- Hot wash is facilitated meeting with players, evaluators, controllers, observers, and evaluators to self-assess exercise play. It provides a general assessment of an organization's performance in an exercise, and provides an opportunity to clarify points or collect missing information.

4. Develop the draft After Action Report (AAR).
- An After Action Report is a record of exercise actions used to implement changes and improve capabilities.
- AAR minimally includes: 1) Executive Summary; 2) Exercise Overview; 3) Exercise Design Summary; 4) Analysis of Capabilities; 5) Conclusion; and, 6) Appendix A - Improvement Plan.

5. Conduct an After Action Conference.
- Purpose is to agree on exercise findings and components of the Improvement Plan.
- Agency representatives must have authority to commit their agency to corrective actions.
- Exercise Planning Team, evaluators, and controllers also attend.
- Held no later than 4 weeks after exercise.

6. Identify improvements for implementation.
- Corrective action planning should consider the current operational picture, including staffing, funding, and resources.
- Develop detailed corrective action timeline, including short and long-term goals, and completion date.
- Each goal/objective is assigned to specific position within an organization.

7. Finalize the AAR/IP (Improvement Plan).
- The AAR/IP details corrective actions and the agency(s) responsible for the correction.
- The AAR/IP should be distributed to all participating agencies no more than 60 days after the exercise.

8. Track implementation of the IP.
- Exercise Program Manager tracks completion of corrective actions in the AAR/IP.
- Agencies' leadership provides regular updates to Exercise Program Manager.

Exercise Evaluation Guide Content

- **Capability Description:** Overview description of capability to be evaluated.
- **Capability Outcome:** Description of the desired outcome of the correctly-performed capability.
- **Activity Description:** Description of the activity to be evaluated. The activity is subordinate to and an element of the capability described.
- **Tasks Observed:** Detailed listing of tasks that must be completed to demonstrate the activity and capability. This includes an area to record the observed performance v. the target performance.
- Exercise Evaluation Guides available at: https://hseep.dhs.gov/pages/1002_EEGLi.aspx

6) Discussion-Based Exercises

Documentation for Discussion-Based Exercises

- **Situation Manual (SITMAN):** A SITMAN is a document that includes an overview of the exercise and the scenario. It contains the following sections:
  - *Introduction:* Includes agenda, goals, exercises rules, and capabilities.
  - *Scenario Modules:* Organizes scenario into names and time-stamped modules.
  - *Participant Questions:* Focused questions on plans and procedures.
- **Multimedia Presentations:** Provide a slide presentation to support the SITMAN that concisely summarizes information. May include audio and visual elements to increase realism.
- **Exercise Evaluation Guides (EEGs):** Used to guide evaluators to document exercise activities based upon capabilities.
- **After Action Report/Improvement Plan (AAR/IP):** An AAR is a record of exercise actions, used to implement changes and improve capabilities. IP details corrective actions and the agency(s) responsible for the correction.
- **Media Releases:** Media releases are optional. Can inform public of an exercise, and raise awareness of jurisdiction's efforts to prepare. Develop an exercise-specific media policy.

Logistical Considerations for Discussion-Based Exercises

Logistical considerations for discussion-based exercises include: facilities, refreshments, audio/visual requirements, supplies, badges, name tags, table tents, and registration materials.

- Verify acoustics in the room before the exercise.
- Test all electronic equipment before the exercise. If possible, have system redundancies.

Facility/Room Setup

Facilities should be large enough to accommodate all participants and free from distraction. Recommended room setups, identified by exercise type, include:

- **Conference:** Use a U-shaped table format with facilitator standing near the open end of the U.
- **Seminar:** Use a classroom style setup with the facilitator in at the front of the room.
- **Workshop:** Set up tables to accommodate breakout groups. The facilitator can roam around the room.
- **Models, Simulations, and Games:** Layout must facilitate computer connection to a network.
- **Tabletop Exercise:** Tables can be arranged by functional area, agency or geographic area. Layout should facilitate inter-table communication.

7) Operations-Based Exercises

Documentation for Operations-Based Exercises

- **Exercise Plan (EXPLAN):** An EXPLAN summarizes the exercise and addresses broad objectives. Used by players and observers. It does not contain detailed scenario information. It contains the following standardized sections:
  - *Purpose, scope and objectives*
  - *Background*
  - *Duration*
  - *Date and time of exercise*
  - *Exercise Planning Team Organization*
  - *Roles and Responsibilities*
  - *Rules of conduct*
  - *Safety Issues/Weapons Policies*
  - *Logistics*
  - *Security and access*
  - *Communications*
  - *Schedule of events*
  - *Maps and directions*
- **Controller and Evaluator (C/E) Handbook:** Used by Controllers and Evaluators only. Contains information in EXPLAN, and:
  - *Detailed scenario information*
  - *Roles and responsibilities of functional areas*
  - *Controller communication plan*
  - *Evaluator observation forms (optional)*
  - *Exercise Evaluation Guides*
- **Master Scenario Events List (MSEL):** Chronological listing of events that generate player activity. MSEL injects include:
  - *Designated scenario time*
  - *Event synopsis*
  - *Controller responsible for delivering injects*
  - *Expected action*
  - *Intended Player*
  - *Capabilities to be demonstrated*
- **Briefings:** There are numerous briefings for operations-based exercises, based on the scope and scenario of the exercise. They include:
  - *Controller and Evaluator Briefing*
  - *Hospital Briefing*
  - *Actor Briefing*
  - *Observer Briefing*
  - *Post Exercise Debriefings*
    - *Player Hot Wash*
    - *C/E Debrief*
- **Exercise Evaluation Guides:** Used to guide evaluators to document exercise activities based upon capabilities.
  - *EEGs are a guide to assist in evaluation and to determine if exercise objectives are met.*
  - *Generally, one EEG packet for each of the capabilities in the TCL (Target Capabilities List).*

- **After Action Report/Improvement Plan (AAR/IP):** An AAR is a record of exercise actions, used to implement changes and improve capabilities. IP details corrective actions and the agency(s) responsible for the correction.

Operations-Based Exercise Venue Considerations

The exercise venue should be selected based on the exercise's goals and capabilities. It should provide minimal disruption to traffic and the public.

- Weather conditions may be real-world or simulated. Wind direction and speed may be simulated.
- The exercise date and time affects exercise play. Weekday v. weekend, and day v. night changes play, e.g. traffic flow.

Exercise Site Areas

Parking: Ensure parking areas are clearly marked.
Registration: Assure registration site is clearly marked. Separate Actor registration from other registrations. Players check in at the assembly area.
Assembly Area: Should be close to exercise site. Should be organized to receive players and their resources. Area managed by assembly controllers. Players and Resources should be organized in order of response to play.
Response Route: Route established before exercise. Provide map to players.
Response Area: Most exercise play occurs here. Large area, mapped, marked and suitable for emergency operations. Access restricted to responders, controller, and evaluators.
Observer/Media/VIP Area: Used for safely viewing exercise play. Each area must be clearly marked and staffed by a PIO. Maintain sufficient distance from sensitive or dangerous operations.
Simulation Cell (SIMCELL): Control point used to receive player request and send responses for non-participating agencies that would realistically be involved in the actual emergency simulated in the exercise.

8) Homeland Security Exercise and Evaluation Program Online

HSEEP Toolkit

The HSEEP Toolkit is the US Department of Homeland Security's interactive, on-line system for exercise scheduling, design, development, conduct, evaluation, and improvement planning. *Organizations desiring to have their exercise recognized by DHS or to have their exercise costs reimbursed by DHS must enter the exercise into the HSEEP Toolkit.*

The HSEEP Program and HSEEP Toolkit can be found at: https://hseep.dhs.gov/ Individuals can self-register for HSEEP Toolkit access at this location.

The HSEEP Toolkit includes the following:

- **National Exercise Schedule System:** This online tool facilitates scheduling, deconfliction, and synchronization of all National-level, federal, state, and local exercises and events.
- **Design and Development System:** A project management tool and tutorial for the design, development, conduct, and evaluation of exercises. The DDS provides appropriate templates and for developing timelines, planning teams, and exercise documentation.
- **Exercise Evaluation Guide (EEG) Builder:** Allows users to create customized EEGs inside the Toolkit and through the website by selecting which Activities from a given Capability will be evaluated during an exercise.
- **Master Scenario Events List (MSEL) Builder:** Allows exercise Lead Planners to create customized MSEL formats by selecting from a list of data fields.
- **Corrective Action Program (CAP) System:** A web-based application that enables users to prioritize, track, and analyze improvement plans developed from exercises and real-world events.

9) UC Berkeley Center for Infectious Diseases and Emergency Readiness

The UC Berkeley CIDER assists local and state governmental agencies in designing, developing, conducting, evaluating, and improvement planning of HSEEP-compliant, discussion and operations-based exercises.

The UC Berkeley CIDER also provides technical consulting services to local and state governments, assisting in the creation and development of emergency preparedness and response plans, policies, and procedures. The Center can be contacted at:

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