

CHAPTER 4

EXERCISES: PLANNING, IMPLEMENTATION, AND EVALUATION

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1.0. PURPOSE

Even the simplest exercise takes significant time and research, especially when you are not familiar with planning and developing exercises. This process can be even more arduous when trying to develop an exercise focusing on a non-traditional aspect of human and animal food safety or defense, and often human and animal food regulatory programs do not have access to the same array of resources, experience and expertise as other emergency sectors that are more familiar with exercises (e.g., fire, police, hazmat, forestry services, etc.). It can be quite challenging even if you obtain the help of a planner/facilitator.

Well designed and executed exercises are the most effective means of:

- Assessing and validating Rapid Response Team (RRT) policies, plans, procedures, training, equipment, and interagency agreements;
- Clarifying roles and responsibilities;
- Improving interagency coordination and communications;
- Identifying gaps in resources; and
- Measuring performance and identifying opportunities for improvement.

This chapter provides best practices for exercise planning, the process for scenario development, and implementation of exercises focused on RRT plans, processes, and procedures. While other aspects of exercises may be covered, the **focus will be on the planning, design, implementation, and evaluation of RRT exercises**. The examples in this chapter are based on the Homeland Security Exercise and Evaluation Program (HSEEP) and a collection of experiences from the RRTs. The suggestions may be more useful to fully mature RRTs (in Phase 3 of the RRT Capacity Building Process), but any RRT is encouraged to exercise abilities. We encourage you no matter your level to take the references and examples found within the document to help you develop exercises for your RRT.

Below are key elements included in this chapter:

- Resources and best practices for scenario development and exercise planning:
 - Pre-packaged exercise options: apply best practices to modify pre-packaged exercises
 - Identifying clear objectives and goals; what aspect do you specifically want to test by this exercise (e.g., communication; gathering of Subject

- Matter Experts (SMEs); Incident Command System (ICS) roles/responsibilities, etc.)
- Consider incorporating other elements into your exercise
 - Use of Emergency Operations Center or Department Operations Center
 - Use of the tracking/assignment systems
- Establishing exercise logistics
- List of acronyms commonly encountered in exercises
- Training and exercise plan

2.0. SCOPE

This chapter focuses on exercise planning, design, implementation, and evaluation. These concepts are building blocks that may incorporate a training and exercise plan and will facilitate exercise design, implementation, and evaluation:

- **Defining Roles and Responsibilities for Exercise Implementation:** Identifies exercise roles and responsibilities for planners, facilitators, controllers, evaluators, actors, and players.
- **Building Your Exercise Planning Team:** Describes best practices to assemble an exercise planning team. Include team members that have extensive experience and/or knowledge in organizing or planning response exercises.
- **Exercise Implementation:** Describes best practices and tools to conduct and/or implement a discussion based or functional exercise.
- **Exercise Evaluation:** Describes roles and responsibilities, procedures, and mechanisms to perform exercise evaluations. To be most effective this should be incorporated into the planning process and a Lead Evaluator should be identified to ensure that the evaluation components are captured during the exercise design.

The best practices described in this chapter identify key areas and elements for each of these concepts (exercise planning, design, implementation, and evaluation), but are neither comprehensive nor specific to unique situations. State, local, and federal agencies seeking to improve multi-agency food emergency responses (e.g., States, FDA Office of Inspections and Investigations (OI)) may utilize this chapter to assess and improve their exercise planning, conduct, design, and evaluation capabilities. Agencies with varying responsibilities (e.g., human and animal food regulatory, public health, animal health, law enforcement, and laboratory) and achievement levels may differ in how they customize and apply these best practices.

FEMA provides exercise and preparedness tools which can be found by using the link below.

<https://www.fema.gov/emergency-managers/national-preparedness/exercises/tools>

FREE-B exercise documentation can be found by using the link below.

<https://www.fda.gov/Food/FoodDefense/ToolsEducationalMaterials/ucm295902.htm>

3.0. RESPONSIBILITY

3.1. Exercise Planner

Exercise planner responsibilities include defining the Planning team members/workgroup and exercise participants (all individuals involved in the exercise).

Training should be provided to all exercise participants prior to the start of the exercise. For exercise players, the exact training required will depend on the exercise scenario and objectives. For example, if the exercise focuses on RRT Activation procedures, then all players should have completed appropriate ICS training for the role(s) they will play in the exercise and be familiar with RRT Activation protocols or other applicable procedures. This also includes letting exercise players know what response procedures they may need to reference during the exercise. We strongly encourage exercise implementation members (facilitators, observers, actors, controllers, evaluators, etc.) to participate in role-specific training or instructions, and review SOP or guidance documentation in advance of the exercise to familiarize themselves with the plans, policies, and procedures of the players who will be performing these duties during the exercise.

3.2. Facilitators

Persons responsible for leading or coordinating the work of a group. Responsible for leading discussions, mediating topic points, and keeping the exercise moving forward.

3.3. Observers

Non-participants responsible for testing exercise criteria; views exercise implementation and can provide valuable input during the hotwash sessions.

3.4. Actors

Participants in an action or process. Portrays a role in the scenario to simulate realism.

3.5. Players

Persons who will be participating in the exercise to assess and validate policies, plans, procedures, training, equipment, and interagency agreements.

3.6. Controllers

Persons who administer injects from the Master Scenario Event List (MSEL) and ensure the exercise time scheduled is followed. The scope of the exercise will determine the number of controllers needed.

3.7. Evaluators

Persons who evaluate the actions of the players, decision making touchpoints, review if the players are following their plans, policies, and procedures through observation or direct questioning of exercise players. They also participate in planning for exercise evaluation criteria.

4.0. DEFINITIONS

The following terms are used in this chapter. Full definitions/descriptions of these terms can be found in the January 2020 HSEEP, See Section 2, Exercise Program Management, Discussion-Based Exercises and Operations-Based Exercises (<https://www.fema.gov/sites/default/files/2020-04/Homeland-Security-Exercise-and-Evaluation-Program-Doctrine-2020-Revision-2-2-25.pdf>)

Discussion-based exercises can be used to familiarize players with, or develop new plans, policies, agreements, and procedures. Discussion-based exercises focus on strategic, policy-oriented issues.

- Seminar
- Workshop
- Tabletop Exercise (TTX)
- Games

Operations-based exercises are characterized by actual reaction to an exercise scenario, such as initiating communications or mobilizing personnel and resources.

- Drills
- Functional Exercises (FEs)
- Full Scale Exercises (FSEs)



Diagram taken from the EPA “How to Develop a Multi-Year Training and Exercise Plan”

5.0. BACKGROUND

Conducting exercises is a critical part of preparedness and response planning. Exercises may be conducted to evaluate operational plans/procedures, clarify roles, improve coordination, and find gaps or identify opportunities for improvement. They may also be used to improve teamwork or individual performance prior to responding to an incident or to prepare for non-routine incident response. Ideally, exercises should be conducted using a building block approach that increases in complexity (e.g., starting with conducting a drill or tabletop exercise and building up to a functional or full-scale exercise to fully test plans/procedures and overall response capacity).

The way exercises are conducted can vary widely based on the needs of an RRT. The Exercises chapter will focus on using the best practice or HSEEP approach. Although this is the best practice for conducting an exercise it also takes the most time to plan and conduct, which may be challenging to some RRTs based on available time and resources. Exercises should be planned to meet the needs of the RRT and test plans, procedures, and staff. No matter what type or scale of exercise is conducted, an improvement plan should be developed, and improvements tracked as part of the RRT’s continuous improvement process. Some smaller scale exercise examples are provided in the chapter attachments (G-I) to go along with the HSEEP recommendations described in this chapter.

6.0. SAFETY

Exercise Director, Planners, and Controllers are responsible for ensuring safety of all exercise participants (all roles) throughout the planning, design, implementation, and evaluation phases. Depending on the nature of the exercise, exercise planners may need to specifically designate someone as responsible for addressing safety issues or concerns during exercise implementation. Some items to include when addressing safety include:

- Develop the ground rules and safety provisions of the exercise

- Review safety items during the briefings (discuss with planning team to ensure it is covered)
- Rally Point (make sure you have a sign-in sheet at your exercise; this is important for when you need to account for participants at the rally point — you may not always know your exercise participants in advance, or be able to rely solely on pre-registration data)
- Water (ensure proper hydration during exercises and drills)
- Food (ensure food purchases follow agency per diem purchasing requirements).

7.0. EQUIPMENT/MATERIALS

7.1. Exercise Documentation

Exercise Plan (ExPlan): ExPlans are general information documents that help operations-based exercises run smoothly by providing participants with a synopsis of the exercise. They are published and distributed to the participating organizations following development of most of the critical elements of the exercise. In addition to addressing exercise objectives and scope, ExPlans assign activities and responsibilities for exercise planning, conduct, and evaluation. The ExPlan is intended to be seen by the exercise players and observers; therefore, it does not contain detailed scenario information that may reduce the realism of the exercise. Players and observers should review all elements of the ExPlan prior to exercise participation.

An ExPlan typically contains the following sections:

- Exercise scope, objectives, and core capabilities
- Participant roles and responsibilities
- Rules of conduct
- Safety issues, notably real emergency codes and phrases
- Controller responsibilities, prohibited activities, and weapons policies
- Logistics
- Security of and access to the exercise site
- Communications (e.g., radio frequencies or channels)
- Duration, date, and time of exercise and schedule of events
- Maps and directions

7.2. Controller and Evaluator (C/E) Handbook

The C/E Handbook describes the roles and responsibilities of exercise controllers and evaluators and the procedures they should follow. Because the C/E Handbook contains information about the scenario AND about exercise administration, **it is distributed to only those individuals designated as controllers or evaluators.**

The C/E Handbook may supplement the ExPlan or be a standalone document. When used as a supplement, it points readers to the ExPlan for more general

exercise information, such as participant lists, activity schedules, required briefings, and the roles and responsibilities of specific participants. Used as a standalone document, it should include the basic information contained in the ExPlan, and detailed scenario information.

A **C/E Handbook** usually contains the following sections:

- Assignments, roles, and responsibilities of group or individual controllers and evaluators
- Detailed scenario information
- Exercise safety plan
- Controller communications plan (e.g., a phone list, a call-down tree etc.)
- Evaluation instructions

7.3. Master Scenario Events List (MSEL)

A MSEL is typically used during operations-based or complex discussion-based exercises and contains a chronological listing of the events that drive exercise play.

Each **MSEL** entry should contain the following at a minimum:

- Designated scenario time
- Event synopsis
- Controller responsible for delivering the inject, with controller or evaluator special instructions (if applicable)
- Intended player (i.e., agency or individual player for whom the MSEL event is intended)
- Expected participant response (i.e., player response expected upon inject delivery)
- Objective, core capability, capability target, and/or critical task to be addressed (if applicable)
- Notes section (for controllers and evaluators to track actual events against those listed in the MSEL, with special instructions for individual controllers and evaluators)

Scenario timelines listed in a MSEL should be as realistic as possible and based on input from SMEs. If the activity occurs sooner than the MSEL writers anticipated, then controllers and evaluators should note the time it occurred, but **play should not be interrupted.**

Controllers delivering MSEL injects will either be co-located with players in the venue of play, or they will reside in a **SimCell**¹.

Prior to Start of Exercise (StartEx), the mechanism for introducing injects into exercise play should be tested to ensure that controllers are aware of the

¹ A location from which controllers deliver messages representing actions, activities, and conversations of an individual, agency, or organization that is not participating in the exercise but would likely be actively involved during a real incident.

procedures for delivering MSEL injects and that any systems that will be used to deliver them are functioning properly.

The **three types of descriptive MSEL events** that support exercise play include:

- **Contextual injects** introduced to a player by a controller help build the exercise operating environment and/or keep the exercise play moving. For example, if the exercise is designed to test information-sharing capabilities, a MSEL inject can be developed to direct an actor to portray a suspect by behaving suspiciously in front of a law enforcement player.
- **Expected action events** reserve a place in the MSEL timeline and notify controllers when a response action would typically take place. For example, during an FSE involving a chemical agent, establishing decontamination is an expected action that the players will take without the prompting of an inject.
- **Contingency injects** are provided by a controller or simulator to players to ensure play moves forward to adequately evaluate performance of activities. For example, if a simulated secondary device is placed at an incident scene during a terrorism response exercise, but is not discovered, a controller may want to prompt an actor to approach a player and state that he or she witnessed suspicious activity close to the device location. This should prompt the responder to discover the device, resulting in subsequent execution of the desired notification procedures.

7.4. Exercise Evaluation Guides (EEGs)

EEGs are intended to help evaluators collect relevant exercise observations. These documents are aligned to objectives, and document the related core capability, capability target(s), and critical tasks. Each EEG provides evaluators with information on what they should expect to see demonstrated or hear discussed.

7.5. Participant Feedback Form

At the end of an exercise, participants may receive a Participant Feedback Form that asks for input regarding observed strengths and areas for improvement that players identified during the exercise. Providing Participant Feedback Forms to players during the exercise wrap up activities allows them to provide their insights into decisions made and actions taken. A Participant Feedback Form also provides players the opportunity to provide constructive criticism about the design, control, or logistics of the exercise to help enhance the planning of future exercises.

At a minimum, the questions on the Participant Feedback Form solicit the following: **Strengths and areas for improvement** pertaining to the implementation of participating agencies and organizations' policies, plans, and SOPs; and **Impressions** about exercise conduct and logistics.

Information collected from feedback forms contributes to the issues, observations, recommendations, and corrective actions in the After Action Report / Improvement Plan (AAR/IP). Feedback forms can be supplemented by conducting a hotwash

immediately following the exercise, during which facilitators, controllers, and evaluators capture participant perspectives on the key strengths and areas for improvement identified during the exercise.

7.6. Exercise Materials

Exercise materials needed on EXERCISE DAY are an integral part of exercise implementation. See Attachment A for a checklist of items for consideration.

8.0. PROCESS DESCRIPTION

8.1. Building Your Exercise Team

Establishing your planning team is one of the most critical roles in building a successful exercise. You need to select people with the subject matter expertise to aid in crafting an exercise scenario and an understanding of participating agency's plans, policies, and procedures, to include players' functional roles and responsibilities. Identify and select team members based on these criteria. It is also helpful to select individuals from each of the participating agencies to provide this subject matter expertise. The more agencies (how many agencies/multi-state endeavor) you have participating in the exercise, the more people you may need to consider consulting with for subject matter expertise that will contribute to exercise planning and implementation. Trying to find a healthy balance of planning team members is important. It is recommended to limit the number of persons on the planning team for efficiency and effective decision-making.

It is highly recommended that you have the Lead Evaluator identified and involved at planning meetings and exercise documentation development as it helps to identify and craft evaluation criteria that will be performed by the Evaluators at the exercise.

It is preferable that the people selected to participate on the planning team are not going to participate as players. You cannot effectively respond to the exercise scenario when you know the concept of play (exercise conditions); in other words, you are not responding as you would in real life as you have "prepared" your responses. Therefore, it is highly recommended that someone else be identified to perform in a PLAYER role.

Determining the exercise type, level of play, and exercise objectives helps to determine the number of exercise planners and support persons. Establishing a Lead Evaluator as part of the Planning team is recommended.

Table of Planning Team Member Roles

Role	Exercise Skills	Exercise Tools
Exercise Director	Primary point of contact (POC) and has full responsibility and authority to ensure exercise objectives are met, align with agency priorities, and exercise implementation is completed. This may include budgetary accountability (financial responsibility), signatory for contractual agreements with contractors (exercise design and/or evaluation), project timeline development, and final approval (can be verbal) on work documents for exercise play. This individual needs to be a team builder with good communication and project management skills.	
Lead Facilitator	<p>Identify how many facilitators that you need:</p> <ul style="list-style-type: none"> • Lead Facilitator for primary sessions; and/or teleconference communications • Facilitator identified for each room • Are there multiple break out rooms? If so, establish one for each location. <p>Facilitator identified per table:</p> <ul style="list-style-type: none"> • Important to have a realistic player count to ensure you have enough facilitators for each table with the subject matter expertise to provide the feedback/answer any questions to help the table reach the required objectives/work assignment goals). <p>Facilitator skill set(s) include:</p> <ul style="list-style-type: none"> • Subject matter expertise related to exercise scope and objectives • Excellent communication skills • Mediation skills • Able to break the ice and provide fillers if a speaker shows up late/technology breaks down • Non-judgmental and unbiased; optimistic • Ability to develop and elicit responses from players <p>Mediation skills:</p> <ul style="list-style-type: none"> • Identify WHO will handle heated debates. It is important to handle this in advance: The exercise area is supposed to be safe zone where all input is welcome and considered; however sometimes 	<p>Handouts/Reference Materials:</p> <ul style="list-style-type: none"> • White Boards, Flip Charts, Notecards <p>Audio-Visual Aides/Equipment:</p> <ul style="list-style-type: none"> • Important to test these in advance of exercise start time to ensure that they are functioning correctly. • PowerPoint Projector/Screen • Conference Call Line/Dial in number is correct and functions • Speakers/microphones • Video conferencing capabilities functioning • Equipment technician available to assist with malfunctions.

Role	Exercise Skills	Exercise Tools
	discussion/debates can get out of hand. You need someone identified (can be Lead Facilitator and/or Exercise Director) who can help diffuse the situation and address it in a professional non-combative manner. This concept of “safe zone” is to be brought up at the beginning of the actual exercise.	
Lead Controller/ Evaluator	<p>Identify how many controllers and evaluators that you need:</p> <ul style="list-style-type: none"> • Controller identified for each room • Are there multiple break out rooms? If so, establish one for each location. <p>Review Controller Expectations with participants.</p> <ul style="list-style-type: none"> • It is important to develop exercise evaluation requirements early in the design process, as they will guide development of the exercise scenario, discussion questions, and/or MSEL. • Evaluation requirements clearly articulate what will be evaluated during the exercise and how exercise play will be assessed. This information is documented in the Exercise Evaluation Guides (EEGs). 	<p>Handouts/Reference Materials:</p> <ul style="list-style-type: none"> • C/E Handbook, MSEL, Inject Notecards for distribution • Evaluation tools include exercise evaluation forms, like Exercise Evaluation Guides (EEGs), Checklists, Agency SOPs, Guidance documents, etc., that will be utilized by the evaluators to evaluate the exercise. • Good ratio of personnel to operate SimCell to ensure all injects are delivered and tracked according to MSEL. • Clipboard for taking notes • Inject Tracking Device (whiteboard, electronic, etc.)

8.2. Establish Expectations Regarding Time Commitment

It is important to relay understanding to all parties that developing an exercise is an intensive time commitment on the behalf of the planning committee members, and serious consideration should be given to accepting this role and responsibility. There is an expectation that all parties will devote the necessary time and provide subject matter expertise in the agreed upon exercise planning, conduct and evaluation roles. Keep in mind that timeframes depend on the type of exercise being conducted (e.g., a TTX requires much less time than an FSE).

There are several meetings held to effectively develop an exercise, it is important to designate someone to take notes/minutes during the meetings:

Initial Planning Meeting (IPM) (see Attachment E for example).

- The Lead Planner for the exercise coordinates the IPM. The purpose of the IPM is to (1) determine exercise scope by establishing the intent and direction from RRT partner agencies and gathering input from the exercise

planning team; and (2) identify exercise design requirements and conditions (e.g., assumptions and artificialities), exercise objectives, participant extent of play, and scenario variables (e.g., time, location, hazard selection). The IPM is also used to develop exercise documentation by obtaining the planning team's input on exercise location, schedule, duration, and other relevant details.

- During the IPM, exercise planning team members are assigned responsibility for activities associated with designing and developing exercise documents, such as the ExPlan and the Situation Manual (SitMan), and coordinating exercise logistics.
- Items to be discussed by the Planning Team at the IPM include:
 - Agreement regarding exercise concept (scope, type, mission area(s), exercise program priorities to be addressed), exercise objectives, and aligned core capabilities
 - Consensus on the target exercise timeframe: When selecting the exercise duration, the planning team should determine how long it will take to address the exercise objectives effectively. Discussion-based exercises and some drills are generally shorter, ranging from a couple of hours to a full day. FEs and FSEs may take longer.
 - Anticipated extent of participation
 - Identification of exercise planning team members
 - Exercise planning timeline with milestones, including the date of the next planning meeting
 - Identification of the intended players/participants for this exercise and their associated role(s)
 - Exercise setting: virtual, face-to-face, or a combination of both
 - Specific requirements for the exercise venue
 - Potential need to develop a back-up plan in the event of bad weather or other unforeseen emergency/circumstances. This could include identification of an alternate/back-up venue, methods for notifying/communicating with participants, and dates for postponing or rescheduling the exercise, if needed.
 - Possible trainings that may be offered in conjunction with the exercise (as part of exercise objectives) or need to be offered prior to the exercise (training on specific procedures or tasks that are being evaluated as part of the exercise).
 - Key concepts that should be a point of discussion at the IPM to ensure you have all the necessary subject matter experts to help craft your exercise are:
 - Clearly defined exercise objectives and aligned core capabilities
 - Evaluation requirements, including EEGs capability targets and critical tasks
 - Relevant plans, policies, and procedures to be tested in the exercise
 - Exercise scenario and modules
 - Modeling and simulation planning

- Materials list for facilitators, observers, participants, evaluators, etc. (may grow as planning continues). See Attachment A for an example list.
- Extent of play for each participating organization
- Optimum duration of the exercise
- Exercise planners' roles and responsibilities
- Local issues, concerns, or sensitivities
- Responsibilities assigned to workgroup members such as responsibility to create the Situation Manual or the PowerPoint presentations, etc.
- Hotwash and AAR/IP. Decide on format and parameters that will be used. May add specific questions based on your exercise. Decide who is responsible for the completion of these documents.
- Consensus regarding the date, time, and location for the next meeting
- Contractors – Discussion should take place if you want the services of a contractor to perform planning and exercise conduct duties.
- Contractors' duties and responsibilities should be spelled out in a Statement of Work or Scope of Work (SOW). This will largely depend on what the sponsoring agency decides to do themselves versus what they would like the contractor to do (documented in SOW). This may include the following information or expectations:
 - Project cycle begin and end dates
 - Identification of venue for conducting the exercise, including deadlines for securing the venue
 - Schedule planning calls
 - Develop meeting minutes and track action items from planning calls
 - Expectations for printing of exercise materials
 - Specify that all products should be provided to the exercise lead upon completion of project in electronic format
 - Documents the contractor is responsible for may include:
 - Exercise plan/Situation manual
 - Controller and Evaluator handbook
 - Master scenario and Events List
 - Exercise evaluation forms
 - Participant feedback forms
 - After Action Report
 - Hotwash minutes/notes
 - Summary of findings
 - Improvement plan

- When defining a SOW, spell out contents of work performance and associated deliverables. Have costs itemized for deliverables, meetings, etc. with total contracted costs. Consult with other RRT exercise designers on additional items to consider.
- Participant travel costs should be written into the SOW if the contract is expected to cover the cost.

Mid-Term Planning Meeting(s) (MPM)

- Provides an additional opportunity to settle logistical and organizational issues that may arise during exercise planning and track progress to date. MPM tools include, but are not limited to: An agenda, IPM minutes, draft scenario timeline, draft documentation (e.g., ExPlan, C/E Handbook), and other selected documentation needed to illustrate exercise concepts and provide planning guidance. Discuss who will be acquiring and assembling all supplies needed for the exercise.
- Providing hard copies of exercise documents and materials is the responsibility of the Exercise Director, Lead Planner, and the Lead Evaluator. Discussion regarding these items should be addressed during MPMs. Discussion should include printing and distribution to ensure the materials arrive at the exercise venue in a timely manner. If a contractor will be printing all the exercise materials the deadline and expense should be written into their SOW.
- It is important to note that several MPM may occur during the exercise design phase. Sub-Committee meetings (ancillary meetings) with subject matter experts can/should occur to arrive at fine tuning documents, performing required research, procedural clarifications, etc., to help achieve desired outcomes. The results of such meetings will be brought out at the next scheduled mid-term planning meeting.
- The following outcomes are expected from the MPM:
 - Fully reviewed SitMan or ExPlan
 - Draft Facilitator Guide or C/E Handbook, including EEGs
 - A fully reviewed exercise scenario timeline, which is typically the MSEL (if an additional MSEL Meeting will not be held)
 - Well-developed scenario injects (imperative if an additional MSEL Planning Meeting is not scheduled)
 - Confirm the exercise site and modes of communication with other sites/locations if needed
 - Finalization of date, time, and location of the MSEL Planning Meeting and/or Final Planning Meeting (FPM)
 - Exercise documentation (work products), may include evaluation criteria

Final Planning Meeting (FPM)

- An FPM should be conducted for all exercises to ensure that all elements of the exercise are ready for implementation. Prior to the FPM, the exercise

- planning team receives final drafts of all exercise materials. **No major changes to the exercise's design, scope, or supporting documentation should take place at or following the FPM.** The FPM ensures that all logistical requirements have been met, outstanding issues have been identified and resolved, and exercise products are ready for printing.
- The following items are addressed during the FPM:
 - Conduct a comprehensive, final review and approve all remaining draft exercise documents (e.g., SitMan, MSEL, C/E Handbook, EEGs) and presentation materials.
 - Resolve any open exercise planning issues and identify last-minute concerns.
 - Review all exercise logistical activities (e.g., schedule, registration, attire, special needs).
 - Once planning members and Exercise Director have given final approval to all exercise documentation at the FPM, **there will be no additional changes to any work products on exercise day. Ensure that someone is responsible for any outstanding tasks that still need to be completed and a deadline is associated with each task.**

Documentation

- Anticipate and plan for the time needed to finalize all the exercise documentation, including who will be responsible for creating this documentation (e.g., contractor, exercise planner). For complex, HSEEP-compliant exercises, this may take 5-15 days, but could take more or less time depending on the scale of the exercise.

Venue Selection (paid vs. unpaid)

- Recommend booking the venue (paid or unpaid) at least 3-6 months in advance of the exercise dates. Some venues may need to be booked a year or more in advance.
- Unpaid-minimal time involved (just securing location reservation). Notify site location coordinator in timely fashion for unpaid venues so that you can book the site, free venues tend to get booked quickly.
- Paid venues: expect at least 30 days and possibly longer depending on the procurement process used by the funding agency/organization, to solidify agreement (includes contract negotiations and signatures per established agency guidelines). Expect that a contractor will be able to execute this more quickly than a government agency. If tasked to a contractor, it is recommended that a deadline for securing a venue be included in the SOW.
- It is necessary for a facility walkthrough at all venue sites before committing to ensure it has all the logistical requirements to perform exercise/training, such as adequate seating arrangements, audio/visual equipment, phone conference line if needed, break out rooms are available if needed, etc.
- Important to clean-up site after exercise at all venues (increases likelihood of being able to use the venue again). Leave it better than you found it!

Hotwash and AAR/IP

- The hotwash should occur immediately following the exercise/event. Hotwash and debriefings should occur at every site location and with each exercise participant providing feedback. Ask for general feedback and specific questions based on your exercise goals and objectives.
- Plan on taking approximately 30 days to complete the AAR documentation, and realize it can take longer when drafting and finalizing the AAR involves multiple agencies. Decide on format and parameters that will be used. Decide who is responsible for the completion of these documents.

8.3. The Eight Steps of the Exercise Planning Cycle (Exercise Design and Development)

This section describes the Exercise Planning Cycle, exercise design, and development. The exercise planning team members decide the type and number of planning activities needed to successfully plan a given exercise, based on its scope and complexity. When arranging meeting and exercise site locations, the planning team should take into consideration those individuals who require assistance or accommodations during attendance.

The exercise planning meetings serve as the principal mechanism for executing the major steps of exercise design. The eight core components of design include creating a needs assessment, establishing the scope of the exercise, creating the purpose of the exercise, setting exercise objectives, creating an exercise scenario/narrative, developing major/minor events, developing expected actions, and creating messages. Association items that accompany this process include exercise documentation and evaluation criteria.

The culmination of the Eight Steps of Exercise Design helps to develop the exercise goals, objectives, and setting the stage of exercise play by providing a formalized structure and methodology for implementation. This information is then translated into the development of exercise documentation for players and exercise conduct members.

Needs Assessment (Creating Exercise Purpose)

- An exercise is an instrument to train for, assess, practice, and improve performance in prevention, protection, mitigation, response, and recovery capabilities in a risk-free environment. Exercises can be used for testing and validating policies, plans, procedures, training, equipment, and interagency agreements; clarifying and training personnel in roles and responsibilities; improving interagency coordination and communications; improving individual performance; identifying gaps in resources; and identifying opportunities for improvement. Determining your needs and creating your exercise purpose is the first step.

Defining Exercise Scope

- Scope is an indicator of extent of the exercise. The key elements in defining exercise scope include exercise type, participation level, exercise duration, exercise location, and exercise parameters. Determining exercise scope enables planners to “right-size” an exercise to meet the objectives while staying within the resource and personnel constraints of the exercising organizations. Defining the number of functions to be exercised and/or the depth to which the functions are examined (e.g., Prevention and control and/or containment) are additional items to consider.
- Some of these elements are determined, or initially discussed, through program management activities or grant requirements. However, the exercise planning team finalizes the scope based on the exercise objectives. Alterations to the scope are reviewed with the exercise objectives in mind; planners must consider whether a change in the scope will improve or impede the ability of players to meet the objectives.
- To this end, it is recommended that planners consider the unique benefits of holding the exercise in either a virtual or face-to-face setting. A virtually based exercise may promote everyday realism with participants located at their normal duty stations but may lack casual networking and communication opportunities among the participants.

Creating Clear Objectives/End Goals

- Based on direction from applicable agency officials, program management, and grant requirements the exercise planning team selects one or more exercise program priorities on which to focus an individual exercise. These priorities drive the development of exercise objectives, which are distinct outcomes that an organization wishes to achieve during an exercise. Exercise objectives should incorporate applicable agency officials, program management, and grant requirements intent and guidance, and exercise participants’ plans and procedures, operating environment, and desired outcomes. Generally, planners should select a reasonable number of specific, measurable, achievable, relevant, and time-bound (SMART) exercise objectives to facilitate effective scenario design, exercise conduct, and evaluation.
- Objectives are the distinct outcomes an organization wishes to achieve during an individual exercise. Objectives should reflect the specific needs, environment, plans, and procedures of the sponsoring agency/program, while providing a framework for scenario development and a basis for evaluation. Planners should create objectives that are SMART and should limit the number of exercise objectives to enable timely exercise conduct, facilitate reasonable scenario design, and support successful evaluation.

The table on the next page depicts guidelines for developing SMART objectives.

SMART Guidelines for Exercise Objectives	
Specific	Objectives should address the five Ws- who, what, when, where, and why. The objective specifies what needs to be done with a timeline for completion.
Measurable	Objectives should include numeric or descriptive measures that define quantity, quality, cost, etc. Their focus should be on observable actions and outcomes.
Achievable	Objectives should be within the control, influence, and resources of exercise play and participant actions.
Relevant	Objectives should be instrumental to the mission of the organization and link to its goals or strategic intent.
Time-bound	A specified and reasonable timeframe should be incorporated into all objectives.

- The Target Capabilities List (TCL) defines and provides the basis for assessing preparedness. It also establishes national guidance for preparing the Nation for major all-hazards events, such as those defined by the National Planning Scenarios. The TCLs serve as a framework to guide operational readiness planning, priority-setting, and program implementation at all levels of government.
- The target capabilities list can be found at <http://www.fema.gov/pdf/government/training/tcl.pdf>

Training and Exercise Planning Workshop (TEPW)

- A TEPW should be a coordinated effort attended by RRT member agencies and should be conducted on an annual or recurring basis to address training needs and requirements.
- An exercise program should be based on a set of strategic, high-level priorities selected by applicable agency officials, program management, and grant requirements. These priorities guide the development of exercise objectives, ensuring that individual exercises build and sustain preparedness in a progressive and coordinated fashion. Exercise program priorities are developed at the TEPW.
- The purpose of the TEPW is to use the guidance provided by applicable agency officials, program management, and grant requirements to identify and set exercise program priorities and develop a multi-year schedule of exercise events and supporting training activities to meet those priorities.

The following table outlines items for consideration at the TEPW:

Threats and Hazards	<ul style="list-style-type: none">• National threats and hazards• Jurisdictional threats and hazards• Hazard vulnerability analysis
Areas for Improvement/ Capabilities	<ul style="list-style-type: none">• Real-world incident corrective actions• Exercise corrective actions• Identified and/or perceived areas for improvement
External Sources Requirements	<ul style="list-style-type: none">• Industry reports• State or national preparedness reports• Homeland security strategies
Accreditation Standards/ Regulations	<ul style="list-style-type: none">• Accreditation standards and/or requirements• Grants or funding-specific requirements• Occupational Safety and Health Administration regulations

- A training and exercise plan is developed at the TEPW. A progressive, multi-year exercise program enables organizations to participate in a series of increasingly complex exercises, with each successive exercise building upon the previous one until mastery is achieved. Regardless of exercise type, each exercise within the progressive series is linked to a set of common RRT program priorities and designed to test associated capabilities.
- A link to the Homeland Security Exercise and Evaluation Program (HSEEP) Training and Exercise Planning Workshop (TEPW) from the Arizona Department of Health Services:
<https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.azdhs.gov%2Fdocuments%2Fpreparedness%2Femergency-preparedness%2Ftraining-exercise-resources%2Ftraining-exercise-planning-workshop-user-guide.docx&wdOrigin=BROWSELINK>
- The Homeland Security TEPW User Guide is:
<https://www.hsdl.org/?view&did=778041>

Narrative

- Developing your exercise narrative helps to set the stage for exercise play; it also helps to prompt player's action implementation and response. When developing the narrative, planners should try to bring as much realism into the scenario as possible to encourage and help facilitate player response.

Major/Minor Events

- When building the scenario, it is also important to develop major and minor events to help set the stage and continue the development of exercise play. These events should prompt triggers for player actions, responses, or expected results. (e.g., finding *Listeria monocytogenes* in a frozen food product is the major event to set off exercise play; minor events would then be the investigation, laboratory results, recall, etc.).

Expected Actions

- Expected actions are used in functional based exercises to define what the C/E should be expecting from the players based upon the injects provided. Expected actions spell out the response item that is covered in the policies, procedures, and or guidance material being exercised (e.g., National Incident Management System (NIMS), Environmental Sampling, Communications, etc.). Examples of expected actions include: “RRT Public Information Officer (PIO) will ensure accurate and timely messaging to the community and the media;” or “RRT will coordinate with lab manager and/or request resources to meet needs of sampling response.”

Messages

- Messages are crafted by the planners and can come in the form of handwritten notes, press releases or other written communications that are utilized in plans, policies, and procedures. They can also be presented in the form of a press briefing by the PIO and/or a pre-recorded or live television presentation.

8.4. Exercise Evaluation

Exercise evaluation helps capture and describe what went well and what problems occurred during an exercise. Examining and recording what went well validates plans, systems, and training. By gathering information about responses to an exercise, evaluation also helps participants learn what, how and where responses could improve.

Exercise evaluation begins early in the exercise design process. Exercise designers should always be thinking about how an exercise will test response plans and capabilities and how that can be measured. If possible, a lead evaluator should be appointed to assure that evaluation is considered throughout the exercise design process. A lead evaluator can work to develop tools and materials to assist and guide the evaluation team, such as an evaluation plan and EEGs.

Exercise Evaluation Tools and Options

- **Exercise Evaluation Guides (EEGs)** include evaluator notes and observations.

- **Hotwash:** An opportunity for all participants to voice their opinions on the exercise and lessons learned. It is helpful to list objectives and or remind participants of exercise objectives when soliciting input. A hotwash is typically held immediately following an exercise. An AAR is largely the same as a hotwash, only it may be conducted later. An AAR is more commonly held after a real-life incident, since it is unlikely that all responders are co-located and able to do a hotwash immediately upon the conclusion of the incident response.
- **Participant Feedback Form:** Provided at the end of an exercise, this form asks for input regarding observed strengths and areas for improvement that players identified during the exercise. It also provides players the opportunity to provide constructive criticism about the design, control, or logistics of the exercise to help enhance the planning of future exercises.
- **Personal Learning Inventory/action items sheet:** A document for exercise participant to notate action items or areas for improvement that they can take back to their agency or organization for implementation.
- **Debriefing:** A more formal forum for planners, facilitators, controllers, and evaluators to review and provide feedback on the exercise. It may be held immediately after or within a few days following the exercise.
- **After Action Report (AAR):** A document that is a compilation of the lessons learned, areas that went well, and areas for improvement. The AAR provides recommendations for corrective actions and improvement planning with associated points of contact. **The tools provided above all help to develop a robust and data driven AAR.**

Choosing Evaluators

- Choose a lead evaluator, and depending on the number of exercise participants, additional evaluators may be warranted. Smaller discussion-based exercises conducted at a single site may only need a single evaluator. Larger full-scale exercises may have multiple sites requiring their own evaluator at each site. A lead evaluator and members of the evaluation team should have experience and subject matter expertise in the areas they are assigned to examine. It is also beneficial for evaluators to have knowledge regarding policies, procedures and plans being tested.

EEGs Documents

- EEGs provide a consistent guide that tells evaluators key elements exercise designers want responders to accomplish during an exercise. During the exercise design process, planners will develop objectives based on core capabilities and determine critical tasks that show responders can accomplish objectives. Critical tasks may be obtained from Standard Operating Procedures (SOPs), organizational operating plans or discipline specific standards.
- The HSEEP provides EEG templates. An HSEEP EEG sample can be found by searching the Homeland Security Digital Library for “Exercise Evaluation

Guide”.² These templates are customizable so the guides can meet specific needs.

- See template on the next page.

²

<https://www.hsd1.org/?search=&searchfield=&all=exercise+evaluation+guide&collection=public&tabsection=Templates&fct=&submitted=Search>

Federal Emergency Management Agency HSEEP Blank EEG Template
Exercise Evaluation Guide Form

<i>Exercise Name:</i> <i>Exercise Date:</i>	<i>Organization/Jurisdiction:</i>	<i>Venue:</i>
<i>Exercise Objective:</i>		
<i>Core Capability:</i>		
Organizational Capability Target 1: <i>Critical Task:</i> <i>Critical Task:</i> Source(s):		
Organizational Capability Target 2: <i>Critical Task:</i> <i>Critical Task:</i> Source(s):		
Organizational Capability Target 3: <i>Critical Task:</i> <i>Critical Task:</i> Source(s):		

Organizational Capability Target	Associated Critical Tasks	Observation Notes and Explanation of Rating	Target Rating
Final Core Capability Rating			

Ratings Key
P – Performed without Challenges S – Performed with Some Challenges M – Performed with Major Challenges U – Unable to be Performed

- The HSEEP EEG Format is designed to present the following evaluation requirements to evaluators:
 - **Core Capabilities:** The distinct critical elements necessary to achieve a specific mission area (Prevention, Protection, Mitigation, Response, and/or Recovery).
 - **Capability Target(s):** The performance thresholds for each core capability; they state the exact amount of capability that exercise participants aim to achieve. Capability targets are typically written as quantitative or qualitative statements.
 - **Critical Tasks:** The distinct elements required to perform a core capability; they describe how the capability target will be met. Critical tasks generally include the activities, resources and responsibilities required to fulfill capability targets. Capability targets and critical tasks are based on operational plans, policies, and procedures to be tested during the exercise.
 - **Performance Ratings:** The summary description of performance against target levels. Performance ratings include both Target Ratings, describing how exercise participants performed relative to each capability target, and Core Capability Ratings, describing overall performance relative to the entire Core Capability. Performance Ratings are described as P-performed without challenges; S-performed with some challenges; M-performed with major challenges; and U-unable to be performed).
- When briefing evaluators about using EEGs, be sure to tell them not to use the EEG simply as a checklist. In other words, you do not want them to mark a check when something is completed and left blank when it is not accomplished. It is vital that evaluators take notes and describe as much as possible. Problems encountered during an exercise lead to improvements that are based on the quality of information gathered about what happened. The more quality information gathered, the better solutions will be developed. Evaluators should not only be able to describe what happened, but why it happened.
- As evaluators work to document information during an exercise through their notes and EEGs, there are some key factors that evaluators should be aware of describing as they observe:
 - **If and how** quantitative and qualitative targets or objectives were met.
 - **Actual time** required for exercise participants to complete critical tasks.
 - **How** a target was met or not met.
 - **Decisions** made and information gathered to make a decision.
 - **Requests** made and how requests were handled.
 - **Resources** utilized.
 - **Plans, policies, procedures, or statutory authority used** or implemented
 - **Challenges** that arose during the exercise and how they were addressed
 - **Any other factors** that contributed to outcomes.

- EEGs may be included in the Facilitator Guide used for discussion-based exercises. EEGs may also be included in a stand-alone Evaluation Plan, or an Evaluation Plan included in the C/E Handbook.
- In the case of the Facilitator Guide and the Evaluation Plan and the C/E Handbook, evaluators will need instructions about:
 - Where they report to and to whom.
 - Contact information for the Lead Evaluator and other evaluators
 - Instructions, locations, and times regarding pre-exercise briefing and training, as well as post-exercise debriefing (hotwash) locations, times and expectations
 - EEGs
 - In the case of larger exercises, a copy of the MSEL that shows inject times, inject sources, and expected actions.
 - How to report their completed notes and EEGs.
- It is advisable to provide evaluators with guidance documents ahead of an exercise, so they have at least several days to read the documents before the exercise and any pre-exercise briefings. In a large, FSE, the documentation can present a considerable amount of reading that includes the C/E Handbook, the MSEL and the EEGs.
- It is important to have a briefing with evaluators prior to an exercise to assure that they know what is expected of them, discuss exercise documents, and answer remaining questions.
- The ExPlan, which is distributed to exercise participants, should emphasize how important feedback is from exercise participants. Any other opportunity to stress the importance of feedback from exercise participants should be made before and after an exercise. Feedback is especially important for the exercise debriefing or hotwash at the end of an exercise.
- It is vital to conduct a hotwash/debriefing of the exercise participants. The debriefing should occur as soon after the exercise as possible, so events are fresh in peoples' minds. Ideally, the hotwash should happen immediately after an exercise. In fact, exercise planners should block out a time at the end of an exercise to allow for a hotwash. In a large exercise, it might be necessary to conduct the hotwash the very next day, but time and costs can be a factor if the debriefing is held the next day. Someone will be needed to facilitate the hotwash and someone else (such as the Lead Evaluator/Scribes) should be available to take notes. If possible, it is desirable to have more than one note taker to capture as much information as possible. Evaluators should attend the hotwash, so if there are questions or explanations that need clarification, evaluators can still ask questions of the participants.
- A simple way of structuring a hotwash debriefing is to ask participants what went well first. Once participants have described strengths from the simulated response, the facilitator would then ask participants to describe problems encountered that should be considered areas for improvement. The facilitator may have someone record a list of strengths and areas for improvement on a dry erase board so everyone can track key issues during the debriefing.
- The Lead Evaluator should take time to talk with the evaluation team about what they documented were important strengths and areas for improvement.

The Lead Evaluator should assure that all the EEGs and evaluator notes are collected. If the Lead Evaluator is tasked with writing the AAR, he or she will want to be sure to gather as much information as possible from the evaluation team members. There may also be supplemental information that can be collected after an exercise including records produced by automated systems, logs and message forms.

Writing Recommendations: The “Whos”, “Whats” and “Whens”

TIPS FOR WRITING RECOMMENDATIONS

- 1 (Who) should prepare/revise _____ plan to (correct what) by (when)?
- 2 (Who) should prepare/revise _____ policy or procedure to (correct what) by (when)?
- 3 (Who) will conduct training for (group) in (what) so that _____ by (when)?
- 4 (Who) will obtain _____ equipment/facilities so that _____ by (when)?
- 5 (Who) will conduct _____ study/analysis to (action required) so that _____?
- 6 (Who) will convene a working group of (people/agencies) to (action required) so as to (what)?

After Action Reports/Improvement Plans

- The Homeland Security Exercise Evaluation Program AAR format uses the description “Organization Point of Contact” (POC) to name the person responsible for completing improvements in the table located on the following page to describe and track improvements.

HSEEP Improvement Plan Template

APPENDIX A: IMPROVEMENT PLAN

This IP has been developed specifically for [Organization or Jurisdiction] as a result of [Exercise Name] conducted on [date of exercise].

Core Capability	Issue/Area for Improvement	Corrective Action	Capability Element ¹	Primary Responsible Organization	Organization POC	Start Date	Completion Date
Core Capability 1: [Capability Name]	1. [Area for Improvement]	[Corrective Action 1]					
		[Corrective Action 2]					
		[Corrective Action 3]					
	2. [Area for Improvement]	[Corrective Action 1]					
		[Corrective Action 2]					

¹ Capability Elements are: Planning, Organization, Equipment, Training, or Exercise

- Considerations when writing or planning to write an AAR:
 - AARs show concrete preparedness benefits generated by exercise activity and provide accountability for improvement planning implementation.
 - AARs are used to provide feedback to the participating entities on their performance during the exercise.
 - AARs summarize exercise events and analyze performance of the tasks identified as important during the planning process.
 - AARs evaluate achievement of the selected exercise objectives using the EEGs
 - AARs analyze data collected from the hotwash, debriefing, Participant Feedback Forms, and other sources.
 - AAR Meeting: assignment of improvement actions/items to be performed by whom and by when. It specifically details the actions that the participating agency will take to address each recommendation presented in the AAR/IP, who or what agency will be responsible for taking the action, creating benchmarks and deadlines for completion, and the timeline for completion for the listed improvements.
 - When working with a contracted evaluation team it is important to have a contract or Statement of Work that covers the duties, responsibilities and outcomes expected of the Contracted Evaluation Team.

9.0. DESIRED OUTCOMES (ACHIEVEMENT LEVELS)

9.1. Achievement Levels

Level	Description
1	No formal written Training and Exercise Plan (TEP).
2	Formal written TEP which properly identifies all relevant partners.
3	All parties included in the TEP know the plan exists, have identified a key POC that knows the exercise specifics, its location, and clearly understand their respective roles as they are explained in the plan.
4	The exercise planning process is incorporated into exercises and exercise conduct has a building approach.
5	The exercise plan includes a formal review and update process. AARs are utilized after exercises and “lessons learned” are incorporated into improvement plans, RRT SOP updates, and/or exercise design.

9.2. Process Overview

Level 1: No formal written “Training and Exercise Plan (TEP).”

- Identify TEP schedule.
 - Has your RRT developed a training and exercise schedule?
 - Has your RRT conducted a TEPW or participated in a TEPW with other agencies?

Level 2: Formal written TEP has been developed which properly identifies all relevant partners.

- All partnering agencies have been identified and included in the TEP.
References include:
 - RRT membership.
 - Human and animal food partner/support agencies.
- Lead person(s) for training and exercises for each partner agency have been identified and contact information is current.
- TEP has been shared with home agency contacts to help facilitate exercise implementation.

Level 3: All parties included in the SOP know the TEP exists, know how to access the plan, and clearly understand their respective roles as they are explained in the plan.

- The SOP adequately describes the roles and responsibilities of partners and properly references other documents for this purpose. Examples:
 - Exercise Lead
 - Exercise Controller
 - Exercise Facilitator(s)
 - Exercise Evaluator

- Players
- Scribes and Runners
- A/V Tech
- Exercise Timelines (discussion vs. operational)
- Other exercise guidance documents
- Members of the RRT have been trained on the exercise facilitation roles.
 - Facilitator
 - Controller
 - Evaluator
 - Observer
- Training sessions are developed and scheduled to include training partners in the exercise roles.
- Lead planner is identified for each agency to help participate in exercise design.

Level 4: The exercise planning process is incorporated into exercises and exercise conduct has a building approach.

- The exercise planning process is understood by pre-identified RRT members and utilized in exercise design process.
- The RRT has identified individuals or POCs to perform exercise roles (e.g., Facilitator, Controller, Evaluator, Observer).
- The exercise has a “Crawl, Walk, Run” approach: exercises build from discussion based exercises to functional (operational) exercises that test RRT SOPs identified by the RRTs and/or in the RRT Best Practice manual.

Level 5: The TEP includes a formal review and update process. AARs are developed post exercise and can be referenced/utilized in the exercise design process.

- A timeframe is established for review of the TEP.
- A procedure exists for incorporating after action reporting into the exercise implementation.
- A process to ensure the AARs are referenced and/or utilized in the exercise design process is incorporated.

10.0. RELATED DOCUMENTS

- RRT Best Practices Manual, US Food and Drug Administration, 2017
- Council to Improve Foodborne Outbreak Response (CIFOR). Guidelines for Foodborne Disease Outbreak Response. Atlanta: Council of State and Territorial Epidemiologists, 2009
- Voluntary National Food Retail Food Regulatory Program Standards
- Manufactured Food Regulatory Program Standards (MFRPS)
- Food Related Emergency Exercise Bundle (FREE-B)

11.0. REFERENCES AND OTHER RESOURCES

- Manufactured Food Regulatory Program Standards (MFRPS)
<https://www.fda.gov/media/131392/download>
- Voluntary National Retail Food Regulatory Program Standards
<https://www.fda.gov/food/guidanceregulation/retailfoodprotection/programstandards/ucm245409.htm>
- National Association of State Departments of Agriculture Food Emergency Response Plan Guidance
<http://www.nasda.org/cms/7193/14352/32504.aspx>
<https://www.nasda.org/wp-content/uploads/2024/04/FERP-Supplemental-Information.pdf>
- Council to Improve Foodborne Outbreak Response *Guidelines for Foodborne Disease Outbreak Response* and related resources:
 - Guidelines <http://www.cifor.us/>
 - Toolkit <https://cifor.us/products/toolkit>
 - Clearinghouse <https://cifor.us/clearinghouse>
 - Crosswalk
<https://cifor.us/search/searchClearinghouseResults?q=crosswalk>
- FoodSHIELD <https://www.foodshield.org/>

12.0. ATTACHMENTS

- Attachment A – Exercise Materials Checklist
- Attachment B – Exercise Logistics Checklist
- Attachment C – Final Exercise Task Considerations
- Attachment D – Exercise Scenario Development
- Attachment E – Initial Planning Meeting (IPM) Worksheet—RRT Exercise Program
- Attachment F – Glossary & Acronyms
- Attachment G – Resources for Planning and Executing Large Scale Exercises, MI RRT
- Attachment H – Example Exercise & Materials (Small), WA RRT, “The Crisis of Spices”
- Attachment I – Example Exercise & Materials (Complex/HSEEP), IN RRT, “Insider Addition at the Campus Café”

13.0. DOCUMENT HISTORY

Version #	Status*	Date	Author
1.0	I	5/26/2017	RRT Exercises WG (FL**, GA**, MO, TX, FDA FDECS, FDA OCM/EPEES)
2.0	R	3/1/2023	ORA/OP-AFDO Compiled Revisions
3.0	R	12/1/2024	ODP-AFDO Compiled Revisions

*Status Options: Draft (D), Initial (I), Revision (R), or Cancel (C)

**Workgroup Lead

Change History

Special thanks to the inaugural Exercise Chapter Workgroup participants who helped to make this document a success! For additional questions, you can reach out to committee members to tap into their expertise in exercise conduct and design.

Exercise Workgroup Members

FL Dept. of Ag & Consumer Services	Rita Johnson
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	Bob Durkin
FDA Office of Crisis Management/Emergency Planning, Exercises and Evaluation Staff	Harry Koerner
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Attachment A – Exercise Materials Checklist

- ☐ Exercise Documentations (SitMan, ExPlan, MSEL, Controller/Evaluator/Facilitator documentation, maps, etc.)
- ☐ Q&A for SitMan if you don't want to hand out all at one time
 - Strongly Recommend that you color code the distribution of documentation so that they don't get distributed in the incorrect order
- ☐ Participant List (master copy with Exercise Director or Lead Planner)
- ☐ Sign-In Sheet(s); need to have sign-in sheet for each exercise location
- ☐ Notepads for player participants to take notes
- ☐ Pens or pencils for note taking
- ☐ Notecards (for questions/comments)
- ☐ Flip Charts; Markers (Dry-Erase/White Board)
- ☐ Easels
- ☐ Evaluation Materials: (notecards, player evaluations, Exercise Evaluation Guides (EEGs); Hotwash material/presentation
- ☐ Audio-Visual Requirements
 - Does the facility provide or do you need to bring your own (power point projector, speakers)?
 - What is the cost for A/V charges?
- ☐ Share host code with at least 2 conduct individuals to have redundancy measures in place; test dial in capabilities in advance of StartEx
 - Host Code: _____
 - Guest Code: _____
- ☐ Actor Supplies and/or Equipment
- ☐ Vests to designate participant roles
- ☐ Name Badges (order lanyards/table tents in advance to ensure time for printing; have printer on site if possible, presentation is everything)
- ☐ Signage to get to exercise location (if using a large facility, or multiple floors within a building(s); Plan on utilizing signage to guide participants to exercise location(s) (yard signs, signs to post on doors, placard signs, etc.)
- ☐ Maps of exercise site(s) that indicate entry and exit points; add main identifying roads, if available
- ☐ Thumb Drive with all exercise material
- ☐ Caterer Contact Information and establish delivery point(s)
- ☐ Beverage Location (water at a minimum is recommended, especially in extreme heat conditions); need to have ice/coolers for beverages
- ☐ Restrooms identified (do you have enough facilities for number of participants? Should you order portable units due to remote facility location?)
- ☐ Food: Fed participants are happy participants; consider dining locations as they impact exercise schedule and timing of meal(s)

Attachment B – Exercise Logistics Checklist

Exercise Venue/Facility

- ☐ Document Exercise Venue(s) _____
 - Meetings, briefings, and exercises should be conducted in facilities that are appropriate for the exercise scope and attendance
- ☐ Determine Exercise Participant Number and verify the facility can accommodate number of participants safely and for logistical set-up
 - How many people are participating? _____
- ☐ Verify there are enough tables and chairs for each participant
- ☐ Determine table arrangement (e.g., U-shaped layout for exercises requiring facilitation and participant interaction)
 - Consider assigned seating for participants (e.g., seating at each table or group composed of persons from different agencies and experiences) to facilitate cross-agency or cross-program discussion and learning.
- ☐ Access/select a facility with room acoustics that facilitate ease of discussion
- ☐ Select a facility with accessibility of parking and restrooms for all participants
- ☐ Provide map of the exercise sites(s). Include this material in the briefings

Exercise Duration & Lodging

- ☐ Determine how many days the exercise will take place? _____
- ☐ Obtain lodging for multi-day events

Exercise AV & Communication Needs

- ☐ Document how are you communicating with the controllers, evaluators & facilitators?
- ☐ Perform Communications Check
- ☐ Have you tested the A/V hook-ups? Determine your Plan B if they fail?
- ☐ Web conferencing test/check (Important to get to the site early to ensure that your telecommunications are working properly)
- ☐ SimCell site technology and communications check/technology requirements before exercise to ensure ready for exercise play. Have you identified a Plan B if this fails to help ensure the exercise is still a go?

Exercise Materials

- ☐ Additional Participant Needs (water, snacks, meals, sun block, restroom identification, etc.)
- ☐ Determine who, _____, will be responsible for getting the exercise documents to the site(s)? (These include the Situation manuals, PowerPoints, leader's guide, Participant Feedback Forms, etc.)
- ☐ Determine who, _____, will be responsible for collecting the exercise evaluation material?
- ☐ Determine where, _____, the exercise materials will be delivered to?

Attachment C – Final Exercise Task Considerations

- ☐ Exercise planning team should visit the site at least 1 day prior to the event to set up the site
- ☐ On the day of the exercise, the planning team members should arrive several hours before the scheduled start to handle any remaining logistical or administrative items pertaining to set-up and to arrange for registration
- ☐ Exercise Briefing sites should be selected and a walk-through performed prior to exercise start
- ☐ Verify A/V & multi-media presentations are on site and ready for exercise play (Discussion based exercises typically include a multi-media presentations to present the scenario and accompany the SitMan)
- ☐ Verify Briefing presentations are loaded and working (Operations based exercises will include briefings for controllers/evaluators, actors, players, and observers/media. These briefing should be utilized to distribute exercise documentation, provide necessary instructions and administrative information to include safety instructions, and answer any outstanding questions)
- ☐ Discussion Based exercises: layout is extremely important, final walk-through check may entail changing the room layout to facilitate discussion
- ☐ Operations Based exercises: planners should consider the assembly area, response route, response operations area, parking, registration, observer/media accommodations, and the Simulation Cell (SimCell)
- ☐ Other accommodations: restrooms and water must be available to all participants, observers, and actors
- ☐ Provide Identification to participants (badge, vest, etc.). A form of identification should be provided for the individuals permitted at the exercise site
- ☐ Perimeter security and site safety during setup and conduct are essential and should be considered

Attachment D – Exercise Scenario Development

1. Developing the exercise scenario

A scenario is an outline or model of the simulated sequence of events for the exercise. It can be written as a narrative or depicted by an event timeline. For discussion-based exercises, a scenario provides the backdrop that drives participant discussion, and is contained in a **SitMan**. For operations-based exercises, a scenario provides background information about the incident catalyst(s) of the exercise. The overall scenario is provided in the **C/E Handbook**, and specific scenario events are contained in the **MSEL** (Master Series Event List).

Exercise planners should select and **develop scenarios that enable an exercise to assess objectives and achievement levels**. All scenarios should be realistic, plausible, and challenging; however, designers must ensure the scenario is not so complicated that it overwhelms players.

A scenario consists of three basic elements:

- (1) The general context or comprehensive story;
- (2) The required conditions that will allow players to demonstrate proficiency and competency in conducting critical tasks, demonstrating core capabilities, and meeting objectives; and
- (3) The technical details necessary to accurately depict scenario conditions and events. The exercise planning team ensures that the design effort is not characterized by a fixation on scenario development; rather, **the scenario facilitates assessment of exercise objectives and core capabilities**. Because of this, exercise planners should refrain from developing the scenario until after the scope and objectives of the exercise have been clearly defined.

2. Storyline that drives the exercise

It is extremely important the scenario be as plausible and realistic as possible. This requires the involvement of subject matter experts on the planning team who can help to provide this realism based upon real-world and/or prior experiences as well as knowledge of plans, policies and procedures. Utilizing individuals with human and animal food expertise from your RRTs, the National Weather Service, law enforcement, academia, and emergency management backgrounds will collectively add to the realism of the event. To provide a higher level of realism, exercise planners may choose to develop additional details to infuse into the scenario if necessary. These details may also be useful if participants begin to fight the scenario.

The storyline that emerges is the backdrop to your players responding or reacting to the scenario to meet the objectives and critical tasks identified early on in the initial exercise planning. The storyline should include dates, locations, and events that occur that should help to drive play (a response) from the player participants. At times you have to nationalize (spell out events that would occur, maybe by the player participants but because of the condensed time line, you drive responses by

including actions in the scenario development itself, that the players then need to respond to.

3. Determining the type of threat or hazard to be used in an exercise

The first step in designing a scenario is determining the type of threat or hazard on which the exercise will focus. Each type of emergency has its own strengths and weaknesses when it comes to evaluating different aspects of prevention, protection, mitigation, response, and recovery found in the [National Response Framework](http://www.fema.gov/national-response-framework)³.

The exercise planning team should choose a threat or hazard that best assesses the objectives and core capabilities on which the exercise will focus. This should be a realistic representation of potential threats and hazards faced by the exercising entity.

4. Realistically stress the resources and staff

It is important when designing an exercise that the exercise planning team is conscientious of how and if the players can realistically perform these actions/the required response/task(s). It is critical that the planning team take a building block approach: crawl, walk, and run by building from discussion based exercises to operational ones.

The planning team should design the scenario to test, but not overwhelm, the player participants performing/responding to the human or animal food event.

³ <http://www.fema.gov/national-response-framework>

Attachment E – Initial Planning Meeting (IPM) Worksheet— RRT Exercise Program

This worksheet summarizes the information gathered during the initial planning meeting (IPM)

When filling out, you will want to focus on RRT tasks (**how task will be performed**), conditions (**under what conditions**), and standards (**to the RRT standards outlined in the National or state specific Best Practice Manual(s)**). The core capabilities and capability targets in this form are gathered from the National Preparedness Goal (2011).

Final Exercise Core Capability and Objectives	
Core Capability: Planning (All Mission Areas)	
Capability Target: <ol style="list-style-type: none"> 1. Develop RRT food safety and food defense operational plans that adequately identify critical objectives based on the planning requirement, provide a complete and integrated picture of the sequence and scope of the tasks to achieve the objectives, and are implementable within the time frame contemplated in the plan using available resources. 	
FINAL EXERCISE OBJECTIVES	
Final Exercise Core Capability and Objectives	
Core Capability: Operational Coordination (All Mission Areas)	
Capability Target: <ol style="list-style-type: none"> 1. Mobilize all critical RRT resources and establish command, control, and coordination structures within the affected community and other coordinating bodies in surrounding communities and maintain as needed throughout the duration of the incident. 2. Enhance and maintain National Incident Management System (NIMS)—compliant command, control, and coordination structures to meet basic human needs, stabilize the incident, and transition to recovery. 	
FINAL EXERCISE OBJECTIVES	
Final Exercise Core Capability and Objectives	
Core Capability: Public Information and Warning (All Mission Areas)	
Capability Target: <ol style="list-style-type: none"> 1. Inform all affected segments of society by all means necessary, including accessible tools, of critical lifesaving and life-sustaining information to expedite the delivery of emergency services and aid the public to take protective actions. 2. Deliver credible messages (press releases, recall notices, etc.) to inform partner agencies and the public about protective measures and other life-sustaining actions and facilitate the transition to recovery. 	
FINAL EXERCISE OBJECTIVES	

Final Exercise Core Capability and Objectives	
Core Capability: Intelligence and Information Sharing (Protection Mission Area)	
Capability Target: <ol style="list-style-type: none"> 1. Anticipate and identify emerging and/or imminent threats through the intelligence cycle. 2. Share relevant, timely, and actionable information and analysis with Federal, state, local, private sector, and international partners and develop and disseminate appropriate classified/unclassified products. 3. Ensure Federal, state, local, and private sector partners possess or have access to a mechanism to submit terrorism-related information and/or suspicious activity reports to law enforcement. 	
FINAL EXERCISE OBJECTIVES	
Final Exercise Core Capability and Objectives	
Core Capability: Screening Search and Detection (Protection Mission Area)	
Capability Target: <ol style="list-style-type: none"> 1. Screen cargo, conveyances, mail, baggage, and people using information-based and physical screening technology and processes. 2. Detect WMD, traditional, and emerging threats and hazards of concern using: <ol style="list-style-type: none"> a. A laboratory diagnostic capability and the capacity for food, agricultural (plant/animal), environmental, medical products, and clinical samples b. Bio-surveillance systems c. CBRNE detection systems d. Trained healthcare, emergency medical, veterinary, and environmental laboratory professionals. 	
FINAL EXERCISE OBJECTIVES	
Final Exercise Core Capability and Objectives	
Core Capability: Supply Chain Integrity and Security (Protection Mission Area)	
Capability Target: <ol style="list-style-type: none"> 1. Screen cargo, conveyances, mail, baggage, and people using information-based and physical screening technology and processes. 2. Detect WMD, traditional, and emerging threats and hazards of concern using: <ol style="list-style-type: none"> a. A laboratory diagnostic capability and the capacity for food, agricultural (plant/animal), environmental, medical products, and clinical samples b. Bio-surveillance systems c. CBRNE detection systems d. Trained healthcare, emergency medical, veterinary, and environmental laboratory professionals. 	
FINAL EXERCISE OBJECTIVES	

[illegible]

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins or other markings on the paper.

[illegible]

Final Exercise Dates, Locations and Durations:

Dates	
Locations	
Addresses	
Durations <i>(Give reasonable timeframes if not established in the plan)</i>	Number of Days Established for Exercise Play: <u>Exercise Day Schedule</u> Registration: Safety Briefing: Start Ex: End Ex: Hotwash*: C/E De-Brief: Next Day Brief:

Data Collection Forms: Separate forms will be provided for players and C/E participants. Forms will be collected immediately after each day of the exercise so player and C/E information can be incorporated into the after action report (AAR). If a multi-day exercise, data should be collected each evening and a briefing should occur with C/E members.

*Hotwashes should occur at each location of exercise play to obtain feedback from exercise participants.

Logistics:

Logistics	Agency/POC	Due Date
Coordinator		Ongoing
Notify Participants		
Develop Scenario		
Develop Exercise Documents and Coordinate Exercise Activities		
Secure Exercise Logistics		
Coordinate Refreshments		
Coordinate Registration (Badges and Sign-In Rosters)		
Identify and Procure Exercise Materials		
Facilitate Registration		
Exercise Lead Facilitator		
Exercise Lead Evaluator		
Print Exercise Documents and Stage Exercise Materials		
Develop After Action Report		

Project Schedule:

Mid-Term Planning Meeting	
Date	
Location	
Final Planning Meeting	
Date	
Location	
Draft AAR Due	
Date	
After Action Meeting	
Date	

Attachment F – Glossary & Acronyms

Glossary

TERM	Definition
Actors	A participant in an action or process
Drills	A coordinated, supervised activity usually employed to validate a specific function or capability in a single agency or organization
Exercise	An instrument to train for, assess, practice, and improve performance in prevention, protection, mitigation, response, and recovery capabilities in a risk-free environment.
Facilitator	A person responsible for leading or coordinating the work of a group.
Full Scale Exercises (FSE)	FSEs are typically the most complex and resource-intensive type of exercise. FSEs are usually conducted in a real-time, stressful environment that is intended to mirror a real incident. FSEs often include many players operating under cooperative systems such as the Incident Command System (ICS).
Functional Exercise (FE)	FEs are typically focused on exercising plans, policies, procedures, and staff members involved in management, direction, command, and control functions
Game	A simulation of operations that often involves two or more teams, usually in a competitive environment, using rules, data, and procedures designed to depict an actual or hypothetical situation.
Hotwash	A performance review, particularly after a training exercise. The hotwash is an opportunity for all participants to voice their opinions on the exercise and lessons learned.
Injects	Specific scenario event that prompt players to implement the plans, policies, procedures, and protocols that require testing during the exercise, as identified in the capabilities-based planning process
Observers	Non-participants in testing exercise criteria
Operational-based Exercises	Operations-based exercises are characterized by actual reaction to an exercise scenario, such as initiating communications or mobilizing personal and resources.
Scope	An indicator of extent of the exercise. The key elements in defining exercise scope include exercise type, participation level, exercise duration, exercise location, and exercise parameters.

TERM	Definition
Seminar	Seminars generally orient participants to, or provide an overview of, authorities, strategies, plans, policies, procedures, protocols, resources, concepts, and ideas.
SimCell	A location from which controllers deliver messages representing actions, activities, and conversations of an individual, agency, or organization that is not participating in the exercise but would likely be actively involved during a real incident.
Tabletop Exercise	A tabletop exercise (TTX) is intended to generate discussion of various issues regarding a hypothetical, simulated emergency.
Target Capabilities List	The Target Capabilities List (TCL) defines and provides the basis for assessing preparedness. It also establishes national guidance for preparing the Nation for major all-hazards events, such as those defined by the National Planning Scenarios.
Workshop	A meeting at which a group of people engage in intensive discussion and activity on a particular subject or project.

Acronyms

Acronym	Term
AAR	After Action Report
A/V	Audio/Visual
C/E	Controller and Evaluator
EEG	Exercise Evaluation Guides
ExPlan	Exercise Plan
FE	Functional Exercise
FPM	Final Planning Meeting
FSE	Full Scale Exercise
ICS	Incident Command Systems
IPM	Initial Planning Meeting
MPM	Mid-term Planning Meeting
MSEL	Master Scenario Event List
POC	Point of Contact
RRT	Rapid Response Team
SitMan	Situation Manual
SMART	Specific, Measurable, Achievable, Relevant, and Time-bound
SMEs	Subject Matter Experts
SOPs	Standard Operating Procedures
StartEx	Start of Exercise
TCL	Target Capabilities List
TEP	Training and Exercise Plan
TEPW	Training and Exercise Planning Workshop
TTX	Tabletop Exercise

Attachment G – Resources for Planning and Executing Large Scale Exercises, MI RRT

Electronic copies can be obtained by going to FoodSHIELD or emailing ODP.Feedback@fda.hhs.gov.

FoodSHIELD website information: <https://www.foodshield.org/>, RRT Program Workgroup, Folder: Examples and Sharing, Subfolder: Exercise, Training & Meeting Materials, File name: MI RRT Exercise Planning Kit Resource List 2016.doc.

Note that access to these documents is limited to personnel participating in the RRT Program.

Attachment H – Example Exercise & Materials (Small), WA RRT, “The Crisis of Spices”

- Attachment H-1: Participant Manual
- Attachment H-2: Initial Briefing Presentation
- Attachment H-3: Incident Briefing
- Attachment H-4: Incident Action Plan
- Attachment H-5: After Action Report

Electronic copies can be obtained by going to FoodSHIELD or emailing ODP.Feedback@fda.hhs.gov.

FoodSHIELD website information: <https://www.foodshield.org/>, RRT Program Workgroup, Folder: Examples and Sharing, Subfolder: Exercise, Training & Meeting Materials, Subfolder: July 2016 WA RRT Exercise Materials.
Note that access to these documents is limited to personnel participating in the RRT Program.

Attachment I – Example Exercise & Materials (Complex/HSEEP), IN RRT, “Insider Addition at the Campus Café”

- Attachment I-1: Controller-Evaluator Handbook
- Attachment I-2: Exercise Plan
- Attachment I-3: Situation Manual
- Attachment I-4: Master Scenario Events List
- Attachment I-5: Food Handler Actor Script
- Attachment I-6: Case Definition
- Attachment I-7: Complaint Interview Evaluation
- Attachment I-8: Group Exercise Generating Hypothesis
- Attachment I-9: Blueberry Crisp Recipe
- Attachment I-10: Campus Café Buffet Menu
- Attachment I-11: Invoice
- Attachment I-12: Shellfish Tags
- Attachment I-13: Completed Complaint Form 1
- Attachment I-14: Completed Complaint Form 2

Electronic copies can be obtained by going to FoodSHIELD or emailing ODP.Feedback@fda.hhs.gov.

FoodSHIELD website information: <https://www.foodshield.org/>, RRT Program Workgroup, Folder: Examples and Sharing, Subfolder: Exercise, Training & Meeting Materials, Subfolder: IN RRT 2015 Exercise Materials - Insider Addition at the Campus Cafe.

Note that access to these documents is limited to personnel participating in the RRT Program.