



# Polk County Emergency Management

---

Planning, Training & Exercises:  
A Preparedness Primer

December 2017

## Contents

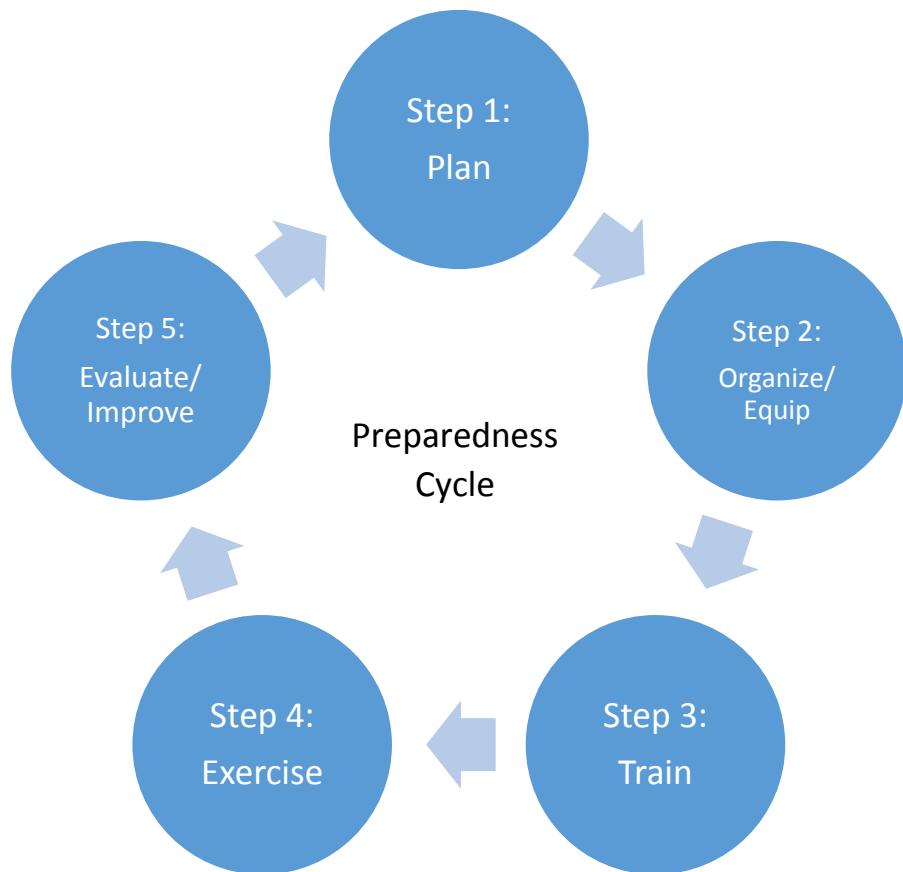
Executive Summary.....	1
Points of Contact (POCs) .....	2
Planning .....	3
Strategic, Operational, and Tactical Planning .....	3
Planning Approaches .....	3
Resources.....	5
Training .....	6
Baseline .....	6
Additional Training (Advanced) .....	7
Position Specific Training .....	7
Training for Elected and Executive Appointed Officials.....	7
Exercises.....	9
Why Exercise? .....	9
Exercise Requirements.....	10
Types of Exercises .....	12
Participant Roles and Responsibilities .....	17
Exercise Documentation .....	18
Exercise Documents.....	18
Starting an Exercise Evaluation Program.....	19
Resources .....	24
Sample or “Off the Shelf” Exercises.....	25

## **EXECUTIVE SUMMARY**

Purpose of the Preparedness Primer: Assist in the establishment and maintenance of a comprehensive planning, training, and exercise program across Polk County.

Expected Outcomes: Local jurisdictions have realistic, tested, and proven plans with policies and procedures that reflect the specific needs of each community while validating the planning process with a comprehensive exercise program.

This document contains a brief overview of planning, for without a plan to validate, there can be no exercise. Likewise, for an exercise to be successful, personnel need to have been trained on their roles within the plan. Next, this document reviews the various aspects of law and policy which may drive individual exercise programs. Background guidance is provided to help with the development of new programs, or the education of individuals who do not have a background in exercise design and/or execution. Recommendations are made for the reader who wishes to expand their knowledge on each topic area and resources are provided for sample exercises that may be tailored to the local jurisdiction or organization as well as “off the shelf” exercises that are ready for implementation with little effort.



## **POINTS OF CONTACT (POCs)**

**Agency Director:**

A.J. Mumm  
Director  
Polk County Emergency Management Agency  
1907 Carpenter Ave  
Des Moines, Iowa 50314  
515-286-2107 (office)  
[AJ.Mumm@PolkCountyIowa.gov](mailto:AJ.Mumm@PolkCountyIowa.gov)

**Exercise Point of Contact:**

Jon Davis  
Deputy Director  
Polk County Emergency Management Agency  
1907 Carpenter Ave  
Des Moines, Iowa 50314  
515-286-2107 (office)  
[Jon.Davis@PolkCountyIowa.gov](mailto:Jon.Davis@PolkCountyIowa.gov)

## **PLANNING**

There are three (3) tiers of planning: Strategic planning, operational planning, and tactical (incident scene) planning. Strategic planning sets the context and expectations for operational planning, while operational planning provides the framework for tactical planning. While the focus of this document is on operational planning, many of the same concepts may be applied to strategic and tactical planning.

### **Strategic, Operational, and Tactical Planning**

**Strategic plans** describe how a jurisdiction, agency or business wants to meet its emergency management or homeland security responsibilities over the long-term. These plans are driven by policy from senior officials and establish planning priorities.

**Operational plans** provide a description of roles and responsibilities, tasks, integration, and actions required of a jurisdiction or its departments and agencies during emergencies. Organizations use plans to provide the goals, roles, and responsibilities that a jurisdiction's departments and agencies are assigned, and to focus on coordinating and integrating the activities of the many response and support organizations within a jurisdiction. They also consider private sector planning efforts as an integral part of community-based planning, and to ensure efficient allocation of resources. Department and agency plans do the same thing for internal elements of those organizations. Operational plans tend to focus more on the broader physical, spatial, and time-related dimensions of an operation; thus they tend to be more complex and comprehensive, yet less defined, than tactical plans.

**Tactical plans** focus on managing personnel, equipment, and resources that play a direct role in an incident response. Pre-incident tactical planning, based upon existing operational plans, provides the opportunity to pre-identify personnel, equipment, exercise, and training requirements. These gaps can be filled through various means (e.g., mutual aid, technical assistance, updates to policy, procurement, contingency leasing).

### **Planning Approaches**

Planners use a number of approaches, either singularly or in combination, to develop plans:

- *Scenario-based planning.* This approach starts with building a scenario for a hazard or threat. Then, planners analyze the impact of the scenario to determine appropriate courses of action. Planners typically use this planning concept to develop planning assumptions, primarily for hazard- or threat- specific annexes to a basic plan. An example of scenario-based planning is a school's tornado plan.
- *Function-based planning (functional planning).* This approach identifies the common functions that a jurisdiction must perform during emergencies. Function-based planning defines the function to be performed and some combination of agencies and departments responsible for its performance as a course of action.
- *Capabilities-based planning.* This approach focuses on a jurisdiction's capacity to take a course of action. A shortfall in scenario-based planning is that it is impossible to identify every possible/potential threat or hazard. Capabilities-based planning answers the question, "Do I have the right mix of training, organizations, plans, people, leadership and management, equipment,

and facilities to perform a required emergency function?" Some planners view this approach as a combination of scenario-and function-based planning because of its "scenario-to-task-to-capability" focus. **The Polk County Comprehensive Emergency Plan is a capabilities-based plan and Polk County Emergency Management encourages the use of capabilities-based planning.**

While many organizations develop plans, integrating them throughout an organization and across others is often overlooked. Understanding the process of planning and how plans are connected allows emergency services organizations the ability to positively impact their communities, provide guidance for improving community health and safety, and ensure that emergency services issues are recognized and addressed throughout the planning process.

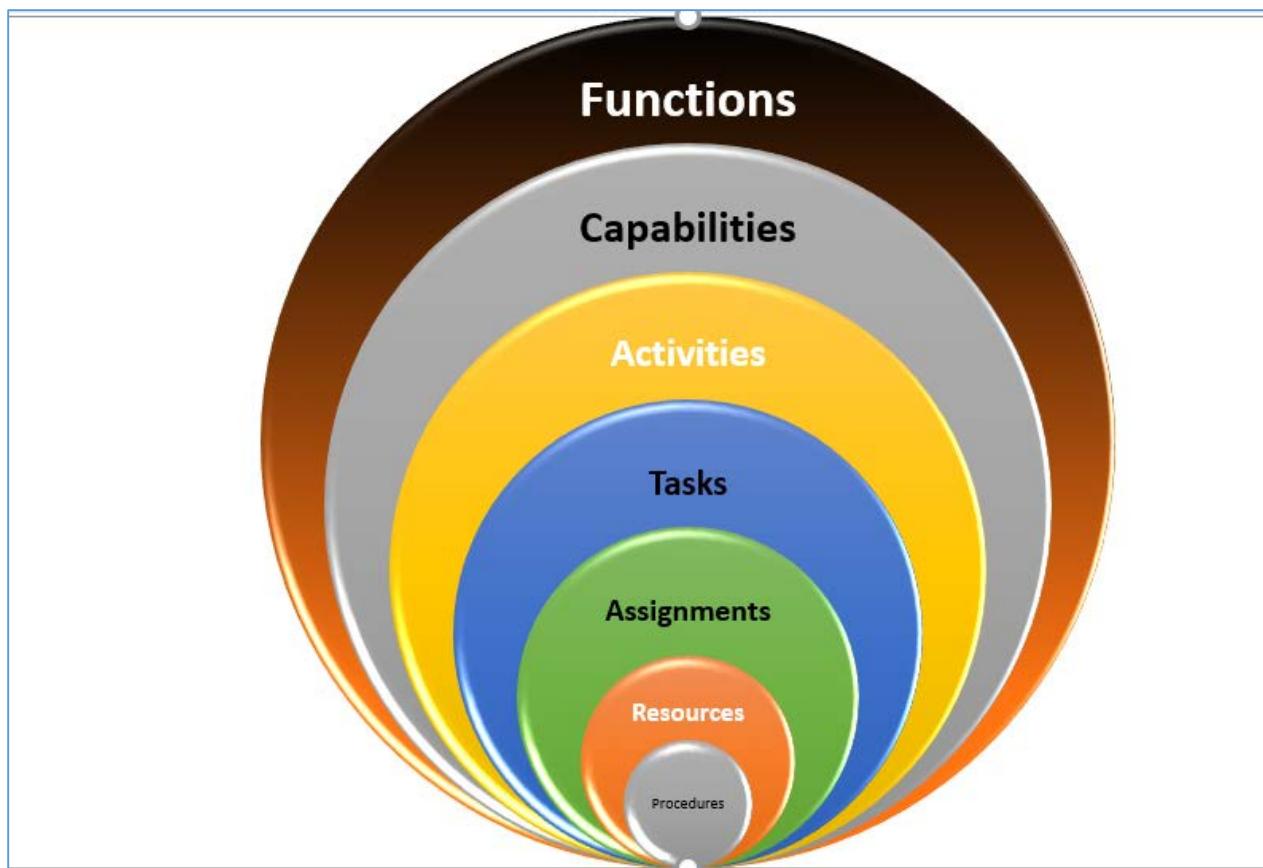
Generally, communities develop a comprehensive plan that all other plans, strategic, agency, program, events, and Incident Action Plans, should align with and support. Organizations must also ensure their plans support and are in agreement with other jurisdictional, regional, state, and federal plans.

Many communities in Polk County choose to utilize the Polk County Comprehensive Emergency Plan instead of creating their own jurisdiction specific plans. This is successful only if the local jurisdiction has procedures in place to implement specific portions of the Polk County Comprehensive Emergency Plan. The Polk County Comprehensive Emergency Plan contains the following Emergency Support Functions (ESF):

- Base Plan
- ESF #1: Transportation
- ESF #2: Communications
- ESF #3: Public Works & Engineering
- ESF #4: Firefighting
- ESF #5: Emergency Management
- ESF #6: Mass Care & Human Services
- ESF #7: Resource Support
- ESF #8: Public Health & Medical Services
- ESF #9: Search & Rescue
- ESF #10: Hazardous Materials
- ESF #11: Agriculture, Natural Resources & Pets
- ESF #12: Energy
- ESF #13: Law Enforcement & Security
- ESF #14: Mitigation & Recovery
- ESF #15: Public Information

Polk County's Comprehensive Emergency Plan addresses:

- Functions – What needs to be done
- Capabilities – Capacity to carry out function
- Activities – Things that need to be done
- Tasks – Specific work that needs to be performed
- Assignments – Person or group charged with achieving the task
- Resources – People, supplies, and equipment required to accomplish the assignment
- Procedures – How to do the work that needs to be done



## Resources

Resources for additional information on developing emergency plans:

- Comprehensive Preparedness Guide (CPG) 101  
<http://bit.ly/2kb10Th>
- FEMA independent study course IS-235.C: Emergency Planning  
<https://training.fema.gov/is/courseoverview.aspx?code=IS-235.c>

## **TRAINING**

After you have developed your plan, you must train your staff on the plan so that they know their roles and how to implement that plan. Successful training will provide staff the knowledge, skills, abilities and experience to implement the plan.

Training should also be offered when you do the following:

- Develop your initial plan
- Revise or update your plans
- Hire new employees
- Introduce new equipment, materials, or processes

While providing training to staff on internal plans, policies and procedures is vital, it is also important to understand how external partners will respond. The following courses are recommended by the Federal Emergency Management Agency (FEMA) for people who have first responder or emergency management responsibilities. It is imperative that each individual agency ensures staff receive the appropriate orientation, awareness, and/or detailed training based on that staff person's responsibilities at an incident.

### **Baseline**

The following courses are designed to provide a baseline, as they introduce basic National Incident Management System (NIMS) and Incident Command System (ICS) concepts and provide the foundation for higher-level training:

- **IS-700 – National Incident Management System (NIMS), an Introduction.** This course introduces the NIMS concept. NIMS provides a consistent nationwide template to enable all government, private sector, and nongovernmental organizations to work together during domestic incidents.

IS-700 is offered as a free, online, independent study course. The training can be accessed at <https://training.fema.gov/is/courseoverview.aspx?code=IS-700.a>

- **ICS-100 – Introduction to Incident Command System, ICS-100.** This course introduces ICS and provides the foundation for higher level ICS training. It describes the history, features and principles, and organizational structure of the system. It also explains the relationship between ICS and NIMS.

IS-100 is offered as a free, online, independent study course. The training can be accessed at <https://training.fema.gov/is/courseoverview.aspx?code=IS-100.b>

## Additional Training (Advanced)

- **IS-200 – ICS for Single Resources and Initial Action Incidents.** This course is designed to enable personnel likely to assume a supervisory position within the ICS to operate efficiently during an incident or event.  
IS-200 is offered as a free, online, independent study course. The training can be accessed at <https://training.fema.gov/is/courseoverview.aspx?code=IS-200.b>
- **IS-800 – National Response Framework, An Introduction.** This course introduces participants to the concepts and principles of the National Response Framework (NRF). The NRF is a guide to how the Nation responds to all types of disasters and emergencies.  
IS-800 is offered as a free, online, independent study course. The training can be accessed at <https://training.fema.gov/is/courseoverview.aspx?code=IS-800.b>
- **IS-300 – Intermediate ICS for Expanding Incidents.** This course provides training for personnel who require advanced knowledge in the application of ICS principles. IS-300 is only offered in a classroom setting with a course duration of 2-3 days. Polk County Emergency Management routinely offers this training at least once annually.
- **ICS-400 – Advanced ICS for Command and General Staff.** The target audience for this course is senior personnel who are expected to perform in a management capacity in an Area Command or Multi-Agency Coordination Entity. IS-400 is only offered in a classroom setting with a course duration of 1-2 days. Polk County Emergency Management routinely offers this training at least once annually.

## Position Specific Training

Position Specific Training provides advanced level training for personnel responsible for managing incidents of greater complexity than those typically encountered during routine day-to-day operations. This training is designed to provide competencies and behaviors for Command Staff, General Staff, and select Unit Leader positions within an Incident Command Structure.

Position Specific Trainings are only offered in a classroom setting. Polk County Emergency Management strives to host the courses in Polk County as funding allows.

## Training for Elected and Executive Appointed Officials

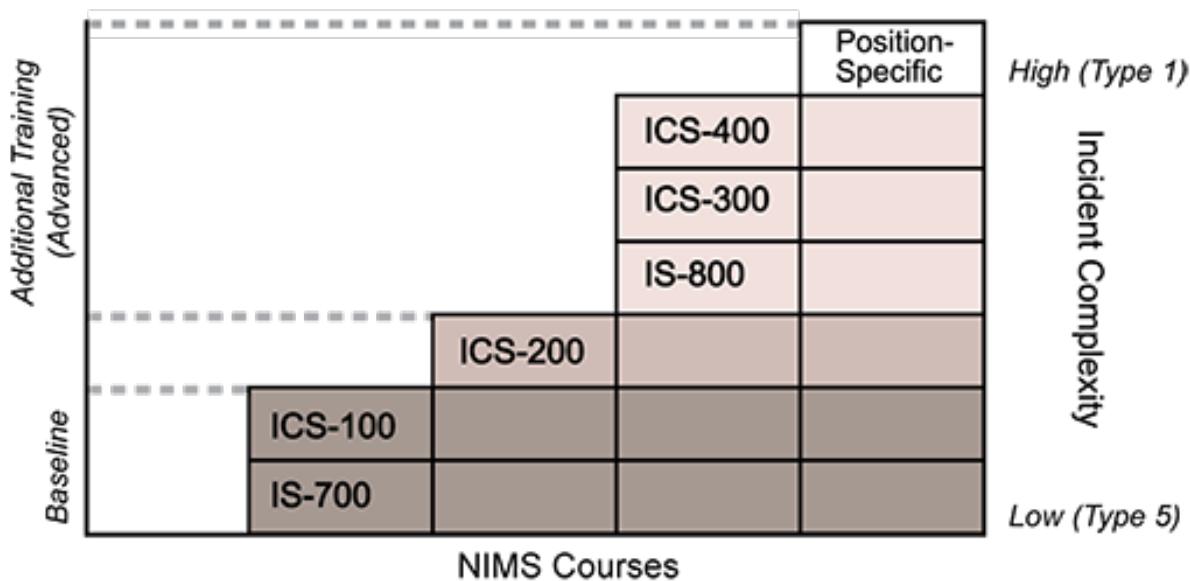
Elected and executive appointed officials should have a clear understanding of their roles and responsibilities for successful emergency management and incident response. To that end, it is vital that elected and executive level appointed officials understand and receive NIMS training. Therefore, FEMA recommends the following training:

- **G-402 – Incident Command System (ICS) Overview for Executives/Senior Officials.** This FEMA course is for elected officials, senior executive, senior managers and agency administrators with a policy responsibility that do not have a specific ICS or Multiagency Coordination System function/role or responsibility. G-402 is only offered in a classroom setting

- **G-191 – Incident Command System/Emergency Operations Center Interface.** This FEMA course reviews ICS and EOC responsibilities and functions and depends heavily on exercises and group discussions to formulate an interface. This course works best when delivered to Incident Command System and Emergency Operations Center personnel from the same community.
- **MGT346 – Operations and Planning for All Hazards.** This Texas A&M Engineering Extension Service (TEEX) course provides personnel who could be assigned to or work in an Emergency Operations Center (EOC) the skills necessary to effectively plan for and manage large-scale incidents by applying and implementing an all-hazards, multi-disciplinary, management team approach. The course places specific emphasis on the planning, resource, and information management processes.

The G-402, G-191, and MGT346 classes are only offered in a classroom setting. Polk County Emergency Management strives to host the courses in Polk County on a regularly recurring basis.

Additional NIMS training requirements are determined by Incident Complexity



## **EXERCISES**

### **Why Exercise?**

- Evaluate and validate plans, policies, procedures, and capabilities
- Highlight strengths
- Reveal planning weaknesses and gaps
- Improve coordination, collaboration, and communications
- Clarify roles and responsibilities
- Meet regulatory, statutory, and grant-funded requirements
- Foster successful responses to real life disasters

Before you begin planning for an exercise, you must have a plan. Exercises are used to evaluate and validate plans and training. **If you do not have a plan, or have not trained your staff on the plan, your exercise is baseless and will not succeed.**

The concept behind an exercise program is based on one important premise that exercises and evaluations are worth the effort. Experience and data show that exercises and evaluations are practical, efficient and cost effective ways for jurisdictions to prepare for unusual events.

Next to an actual occurrence, exercising can be an effective means for examining preparedness levels. Exercises are developed for federal departments and agencies, state and local governments, volunteer organizations, and private sector partners to examine and improve upon capabilities in relationship to emergency, disaster, and homeland security situations.

No community is exempt from risk. Many people hope that “it will never happen here”, but history shows differently. When catastrophic events take place the populace relies heavily on community leaders and services. Exercises can serve as a key tool to ensure that delivery of services will meet expectations. The way in which we are able to respond will have an impact – positive or negative – to the following areas:

- Reputation
- Political
- Physical
- Financial

Long before September 11, 2001, those involved in emergency response recognized the importance of practicing and planning to respond to disasters. It is important that everyone realizes the importance and potential impact a well-defined, executed and evaluated exercise will have on detection, prevention, protection, mitigation, and preparedness, response, and recovery efforts.

Evaluation holds a key role in the exercise process. It allows learning from issues that arise during an exercise and focuses energy and efforts on capabilities that need improvement.

## Exercise Requirements

### Iowa Code

Iowa Administrative Code sets the foundation for The Polk County Emergency Management Agency's exercise program. Section 29C states the following:

j. Exercises

- (1) The commission shall ensure that exercise activities are conducted annually in accordance with local, state, and federal requirement
- (2) Exercise activities should follow a progressive five-year plan that is designed to meet the needs of the jurisdiction
- (3) Local entities assigned to an exercise should actively participate and support the role of the entity in the exercise
- (4) Local entities assigned to an exercise should actively participate in the design, development, implementation, and evaluation of the exercise activity

### The National Incident Management System (NIMS)

The National Incident Management System (NIMS) is a systematic, proactive approach to guide departments and agencies at all levels of government, nongovernmental organizations, and the private sector to work together seamlessly and manage incidents involving all threats and hazards—regardless of cause, size, location, or complexity—in order to reduce loss of life, property and harm to the environment. The NIMS is the essential foundation to the National Preparedness System (NPS) and provides the template for the management of incidents and operations.

The NIMS specifies that all exercises:

- Should include multi-disciplinary, multi-jurisdictional incidents
- Include participation of private sector and nongovernmental organizations
- Cover aspects of preparedness plans, including activating mutual aid and assistance agreements
- Contain a mechanism for incorporating corrective actions

### Homeland Security Exercise and Evaluation Program (HSEEP)

The Homeland Security Exercise and Evaluation Program (HSEEP) is a capabilities and performance-based exercise program that provides a standardized methodology and terminology for exercise design, development, conduct, evaluation, and improvement planning.

The Homeland Security Exercise and Evaluation Program (HSEEP) constitutes a national standard for all exercises. Through exercises, the National Exercise Program supports organizations to achieve objective assessments of their capabilities so that strengths and areas for improvement are identified, corrected, and shared as appropriate prior to a real incident.

The HSEEP is maintained by the Federal Emergency Management Agency's National Preparedness Directorate, Department of Homeland Security.

### **Environmental and Historic Preservation**

Agencies that conduct exercises that are funded by, or used for compliance in receiving federal funds need to make themselves aware of the National Historic Preservation Act (NHPA) of 1966, and the National Environmental Policy Act (NEPA) of 1969. These two laws may impact your exercise program, and they could have significant impact on the funding for your exercise program. These laws direct federal agencies to thoroughly assess the environmental and historic consequences of their funding. Depending upon how an exercise is conducted it may be affected by the guidance set forth in these requirements. Please consult your funding entity to ensure that your programs are in compliance with these laws. Many Operational Exercises will be required to undergo a review. An Environmental and Historic Preservation Screening form may need to be submitted during the planning phases of your exercise, and a clearance may be needed prior to the start of your exercise.

### **Grant exercise requirements**

Many preparedness grants have exercise requirements to evaluate readiness. While not meant to be an exhaustive list, below are some examples of grants that have exercise requirements.

- Emergency Management Performance Grant (EMPG)
- Homeland Security Grant Program (HSGP)
- Office of the Assistant Secretary for Preparedness and Response (ASPR)
- Public Health Emergency Preparedness (PHEP)
- Hospital Preparedness Program (HPP)
- City Readiness Initiative (CRI)

### **Accreditation exercise requirements**

Accreditation is the certification of competency, authority, or credibility. The process is generally conducted by a third party and are themselves accredited, meaning that they are competent, behave ethically and employ suitable quality assurance. While not meant to be an exhaustive list, below are some examples of accreditation that have exercise requirements.

- Det Norske Veritas and Germanischer Lloyd (DNV GL)
- Joint Commission (JCO)
- Emergency Management Accreditation Program (EMAP)

## Types of Exercises

There are seven (7) types of exercises. Each type of exercise build on previous exercises, using more sophisticated simulation techniques or requiring more preparation time, personnel, and training.

Focus	Type	Characteristics	Purpose	Recommended Planning Time
Discussion based	Seminars	<ul style="list-style-type: none"> <li>- Low Stress</li> <li>- Informal</li> <li>- No time constraints</li> <li>- Effective for large or small groups</li> </ul>	<ul style="list-style-type: none"> <li>- Provide overview of strategies, plans, policies, procedures, protocols, etc</li> </ul>	
Discussion based	Workshops	<ul style="list-style-type: none"> <li>- Create a product</li> <li>- Low stress</li> <li>- No fault</li> <li>- Work Group sessions</li> <li>- No time constraints</li> </ul>	<ul style="list-style-type: none"> <li>- Test new ideas</li> <li>- Collecting/Sharing information</li> <li>- New/different perspectives</li> <li>- Team Building</li> </ul>	
Discussion based	Tabletop (TTX)	<ul style="list-style-type: none"> <li>- Problem solving</li> <li>- Brainstorming</li> <li>- Constructive discussion</li> <li>- Address problem areas around multi-agency issues</li> <li>- Narrative</li> <li>- "What if?"</li> <li>- Minimum stress</li> </ul>	<ul style="list-style-type: none"> <li>- Replay of an actual occurrence</li> <li>- Not restricted to real-time play</li> <li>- Clarify conflicting roles</li> <li>- Evaluate plans and procedures</li> </ul>	4 to 6 months
Discussion based	Games	<ul style="list-style-type: none"> <li>- Simulation of operations</li> <li>- Realism</li> <li>- Two or more teams</li> <li>- Competitive</li> <li>- Decision-making process</li> </ul>	<ul style="list-style-type: none"> <li>- Analysis of existing plans</li> <li>- Develop new plans</li> <li>- Motivation</li> <li>- Clarification</li> </ul>	
Operations based	Drills	<ul style="list-style-type: none"> <li>- Single function test</li> <li>- Actual field response</li> </ul>	<ul style="list-style-type: none"> <li>- Provide training</li> <li>- Maintain or assess skills/procedures</li> <li>- Test new equipment</li> </ul>	
Operations based	Functional (FE)	<ul style="list-style-type: none"> <li>- Simulation to the maximum degree</li> <li>- Real time</li> <li>- Stressful</li> <li>- Messages</li> <li>- "Do" vs. "talk"</li> </ul>	<ul style="list-style-type: none"> <li>- Evaluation of any function or complex activity</li> <li>- Test seldom used resources</li> </ul>	9 to 12 months
Operations based	Full Scale (FSE)	<ul style="list-style-type: none"> <li>- Mobilization of personnel and resources</li> <li>- Multiple functions</li> </ul>	<ul style="list-style-type: none"> <li>- Test coordinated response</li> <li>- Public Awareness</li> </ul>	12 – 18 months

## **Discussion-Based Exercises**

Discussion-based exercises typically focus on strategic policy-oriented issues while operations-based exercises focus more on tactical response-related issues. Discussion-based exercises are normally used as starting points in the progressive approach to the cycle, mix, and range of exercises. Discussion-based exercises include seminars, workshops, tabletop exercises (TTXs), and games. These types of exercises typically highlight existing plans, policies, mutual-aid agreements, and procedures. Thus, they are exceptional tools for familiarizing agencies and personnel with current or expected jurisdictional capabilities. Facilitators and/or presenters usually lead the discussion, keeping participants on track while meeting the objectives of the exercise.

### **Seminars**

Seminars are generally used to orient participants or provide an overview of authorities, strategies, plans, policies, procedures, protocols, response resources, or concepts and ideas. Seminars provide a good starting point for jurisdictions that are developing or making major changes to their plans and procedures. They offer the following attributes:

- Informal discussions led by a seminar leader
- Lack of time constraints caused by real-time portrayal of events
- Low-stress environment employing a number of instruction techniques such as lectures, multi-media presentations, panel discussions, case study discussions, expert testimony, and decision support tools
- Proven effectiveness with both small and large groups

### **Workshops**

Workshops represent the second tier of exercises in the Homeland Security Exercise and Evaluation Program (HSEEP) progressive exercise approach. Although similar to seminars, workshops differ in two important aspects: participant interaction is increased, and the focus is on achieving or building a product (such as a plan or a policy). Workshops provide an ideal forum for the following:

- Building teams
- Collecting or sharing information
- Obtaining consensus
- Obtaining new or different perspectives
- Problem solving of complex issues
- Testing new ideas, processes, or procedures
- Training groups in coordinated activities

In conjunction with exercise development, workshops are most useful in achieving specific aspects of exercise design such as the following:

- Determining evaluation elements and standards of performance
- Determining program or exercise objectives
- Developing exercise scenario and key events listings

A workshop may be used to produce new standard operating procedures (SOPs), Emergency Operations Plans (EOPs), mutual aid agreements, Multi-Year Exercise Plans, and Improvement Plans (IPs). To be effective, workshops must be highly focused on a specific issue, and the desired outcome or goal must be clearly defined. Potential relevant topics and goals are numerous, but all workshops share the following common attributes:

- Effective with both small and large groups
- Facilitated, working breakout sessions
- Goals oriented toward an identifiable product
- Information conveyed employing different instructional techniques
- Lack of time constraint from real-time portrayal of events
- Low-stress environment
- No-fault forum
- Plenary discussions led by a workshop leader

**Table Top Exercises (TTX)**

TTXs involve senior staff, elected or appointed officials, or other key personnel in an informal setting, discussing simulated situations. This type of exercise is intended to stimulate discussions of various issues regarding a hypothetical situation. It can be used to assess plans, policies, and procedures or to assess types of systems needed to guide the prevention of, response to, and recovery from a defined incident. TTXs are typically aimed at facilitating understanding of concepts, identifying strengths and shortfalls, and/or achieving a change in attitude. Participants are encouraged to discuss issues in depth and develop decisions through slow-paced problem solving rather than the rapid, spontaneous decision making that occurs under actual or simulated emergency conditions.

In contrast to the scale and cost of operations-based exercises and games, TTXs can be cost-effective tools when used in conjunction with more complex exercises. The effectiveness of a TTX is derived from the energetic involvement of participants and their assessment of recommended revisions to current policies, procedures, and plans.

TTX methods are divided into two categories: basic and advanced. In a basic TTX, the scene set by the scenario materials remains constant. It describes an event or emergency incident and brings discussion participants up to the simulated present time. Players apply their knowledge and skills to a list of problems presented by the facilitator, problems are discussed as a group, and resolution is generally agreed upon and summarized by the leader. In an advanced TTX, play focuses on delivery of pre-scripted messages to players that alter the original scenario. The exercise facilitator usually introduces problems one at a time in the form of a written message, simulated telephone call, videotape, or other means. Participants discuss the issues raised by the problem, using appropriate plans and procedures. TTX attributes may include the following:

- Achieving limited or specific objectives
- Assessing interagency coordination
- Conducting a specific case study
- Examining personnel contingencies

- Familiarizing senior officials with a situation
- Participating in information sharing
- Practicing group problem solving
- Testing group message interpretation

### **Games**

A game is a simulation of operations that often involves two or more teams and uses rules, data, and procedures to depict an actual or assumed real-life situation. The goal of a game is to explore decision-making processes and the consequences of those decisions. A game does not require use of actual resources, and the sequence of events affects, and is in turn affected by, decisions made by players.

With the evolving complexity and sophistication of current simulations, opportunities to provide enhanced realism for game participants have increased. Computer-generated scenarios and simulations can provide a more realistic and time-sensitive method of introducing situations for analysis. Planner decisions can be input into realistic models to show the effects of decisions made during a game. Internet-based, multi-player games offer many additional benefits, such as saving money by reducing travel time, offering more frequent training opportunities, and taking less time away from primary functions. They also provide a collaborative environment that reflects realistic occurrences.

### **Operations-Based Exercises**

Operations-based exercises are used to validate the plans, policies, agreements, and procedures solidified in discussion-based exercises. Operations-based exercises include drills, functional exercises, and full-scale exercises (FSEs). They can clarify roles and responsibilities, identify gaps in resources needed to implement plans and procedures, and improve individual and team performance. Operations-based exercises are characterized by actual response, mobilization of apparatus and resources, and commitment of personnel, usually over an extended period of time.

### **Drills**

A drill is a coordinated, supervised activity usually used to test a single specific operation or function in a single agency. Drills are commonly used to provide training on new equipment, develop or test new policies or procedures, or practice and maintain current skills. Typical attributes include the following:

- A narrow focus, measured against established standards
- Instant feedback
- Performance in isolation
- Realistic environment

### **Functional Exercises (FE)**

The Functional Exercise, also known as a Command Post Exercise (CPX), is designed to test and evaluate individual capabilities, multiple functions or activities within a function, or interdependent groups of functions. Functional exercises generally focus on exercising the plans, policies, procedures, and staffs of the direction and control nodes of the Emergency Operations Center (EOC), Incident Command System (ICS) and Unified Command. Generally, incidents are projected through an exercise scenario with event updates that drive activity at the management level. Movement of personnel and equipment is simulated.

The objective of the Functional Exercise is to execute specific plans and procedures and apply established policies, plans, and procedures under crisis conditions, within or by particular function teams. A functional exercise simulates the reality of operations in a functional area by presenting complex and realistic problems that require rapid and effective responses by trained personnel in a highly stressful environment. Attributes of a functional exercise include the following:

- Evaluating EOC, headquarters, and staff
- Evaluating functions
- Examining inter-jurisdictional relationships
- Measuring resource adequacy
- Reinforcing established policies and procedures

### **Full Scale Exercises (FSE)**

FSEs are multiagency, multi-jurisdictional exercises that test many facets of emergency response and recovery. They include many first responders operating under the ICS or Unified Command to effectively and efficiently respond to and recover from an incident. An FSE focuses on implementing and analyzing the plans, policies, and procedures developed in discussion-based exercises and honed in previous, smaller, operations-based exercises. The events are projected through a scripted exercise scenario with built-in flexibility to allow updates to drive activity. It is conducted in a real-time, stressful environment that closely mirrors a real incident. First responders and resources are mobilized and deployed to the scene where they conduct their actions as if a real incident had occurred (with minor exceptions). The FSE simulates the reality of operations in multiple functional areas by presenting complex and realistic problems requiring critical thinking, rapid problem solving, and effective responses by trained personnel in a highly stressful environment. Other entities that are not involved in the exercise, but that would be involved in an actual incident, should be instructed not to respond.

An FSE provides an opportunity to execute plans, procedures, and mutual aid agreements in response to a simulated live incident in a highly stressful environment. Typical FSE attributes include the following:

- Activating personnel and equipment
- Allocating resources and personnel
- Analyzing memorandums of understanding (MOUs), SOPs, plans, policies, and procedures

- Assessing equipment capabilities
- Assessing inter-jurisdictional cooperation
- Assessing organizational and individual performance
- Demonstrating interagency cooperation
- Exercising public information systems
- Testing communications systems and procedures

The level of support needed to conduct an FSE is greater than needed for other types of exercises. The exercise site is usually extensive with complex site logistics. Food and water must be supplied to participants and volunteers. Safety issues, including those surrounding the use of props and special effects, must be monitored.

FSE controllers ensure that participants' behavior remains within predefined boundaries. Simulation Cell (SimCell) controllers continuously inject scenario elements to simulate real events. Evaluators observe behaviors and compare them against established plans, policies, procedures, and standard practices (if applicable). Safety controllers ensure all activity is executed within a safe environment.

## Participant Roles and Responsibilities

The term *participant* encompasses many groups of people, not just those playing in the exercise. Groups of participants involved in the exercise, and their respective roles and responsibilities, are as follows:

- **Players.** Players are personnel who have an active role in discussing or performing their regular roles and responsibilities during the exercise. Players discuss or initiate actions in response to the simulated emergency.
- **Controllers.** Controllers plan and manage exercise play, set up and operate the exercise site, and act in the roles of organizations or individuals that are not playing in the exercise. Controllers direct the pace of the exercise, provide key data to players, and may prompt or initiate certain player actions to ensure exercise continuity. In addition, they issue exercise material to players as required, monitor the exercise timeline, and supervise the safety of all exercise participants.
- **Simulators.** Simulators are control staff personnel who role play nonparticipating organizations or individuals. They most often operate out of the Simulation Cell (SimCell), but they may occasionally have face-to-face contact with players. Simulators function semi-independently under the supervision of SimCell controllers, enacting roles (e.g., media reporters or next of kin) in accordance with instructions provided in the Master Scenario Events List (MSEL). All simulators are ultimately accountable to the Exercise Director and Senior Controller.
- **Evaluators.** Evaluators evaluate and provide feedback on a designated functional area of the exercise. Evaluators observe and document performance against established capability targets and critical tasks, in accordance with the Exercise Evaluation Guides (EEGs).
- **Actors.** Actors simulate specific roles during exercise play, typically victims or other bystanders.
- **Observers.** Observers visit or view selected segments of the exercise. Observers do not play in the exercise, nor do they perform any control or evaluation functions. Observers view the exercise from a designated observation area and must remain within the observation area during

the exercise. Very Important Persons (VIPs) are also observers, but they frequently are grouped separately.

- **Media Personnel.** Some media personnel may be present as observers, pending approval by the sponsor organization and the Exercise Planning Team.
- **Support Staff.** The exercise support staff includes individuals who perform administrative and logistical support tasks during the exercise (e.g., registration, catering).

## Exercise Documentation

Why is it important to document the exercise activity that you and your jurisdiction participate in? For one, it demonstrates the need for your job's existence not only to your peers, but also to the elected officials and taxpayers who help to ensure you are compensated.

Exercise documentation can also be used to help support funding efforts for specialized equipment or resources you need to provide protection to the people of your community. As mentioned previously, we must now show those who provide us with funds some evidence that we are improving. It will also allow you to show that your jurisdiction is supporting efforts to fulfill the requirement of instituting the National Incident Management System (NIMS) in all your response activities.

## Exercise Documents

### Situation Manual (SitMan):

Used for Tabletop Exercises, the Situation Manual (SitMan) provides exercise participants with all the necessary tools for their roles in the exercise. Some exercise material is intended for the exclusive use of exercise planners, facilitators, and evaluators, but players may view other materials that are necessary to their performance. All exercise participants may view the SitMan.

Templates for all exercise documents are available on the website <https://hseep.preptoolkit.org>

### Exercise Plan (ExPlan):

The Exercise Plan (ExPlan) gives elected and appointed officials, observers, media personnel, and players from participating organizations information they need to observe or participate in the exercise. Some exercise material is intended for the exclusive use of exercise planners, controllers, and evaluators, but players may view other materials that are necessary to their performance. All exercise participants may view the ExPlan. Exercise Plans are generally used for Functional and Full Scale exercises.

### Master Scenario of Events List (MSEL):

A MSEL is a chronological listing of scripted events and injects that generate activity in specific functional areas in support of exercise objectives. The MSEL is the primary document used by Controllers to manage the exercise and provides the framework for monitoring and managing the flow of exercise activities. There is no standard MSEL format. The use of a MSEL can facilitate any type of exercise.

**Controller/Evaluator Handbook (C/E Handbook):**

The Controller/Evaluator (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 specifically designated as controllers or evaluators; it should not be provided to exercise players. The C/E Handbook may supplement the Exercise Plan (ExPlan) or be a standalone document. The C/E is generally only used for Functional and Full Scale exercises.

**Exercise Evaluation Guide (EEG):**

Exercise Evaluation Guides help evaluators document exercise activities and determine if objectives are met. Generally, one EEG is used for each objective or core capability being evaluated. EEGs may be used for all types of exercises.

**After-Action Report/Improvement Plan: (AAR/IP):**

The After-Action Report/Improvement Plan (AAR/IP) is a retrospective analysis of the exercise. The AAR is intended to serve as an aid to performance evaluation and improvement by registering situation-response interaction, analyzing critical procedures, determining effectiveness and efficiency, and proposing adjustments and recommendations. AAR/IPs should be completed for all types of exercises.

## Starting an Exercise Evaluation Program

### 1. Assess the jurisdiction's capability to conduct an exercise

Before launching an exercise, it is important to find out what skills, equipment, resources, personnel, facilities, and support systems are available. Shortfalls in any of these areas will have to be considered in the exercise design process.

Questions to be asked:

- Is there an up-to-date plan in place?
- Have personnel been adequately trained in the plan?
- When was the last exercise, what kind was it and what did we test?
- What were the outcomes?
- Have the planning and training improvement actions been taken?
- What exercise experience is available in the community?
- How much preparation time can be allocated to exercise development?
- What personnel can/will be devoted to exercise development?
- What skills and perspective can these people provide?
- What facilities will be available for operational support?
- What communications systems will be used?
- What is the expected attitude of the chief elected official to an exercise?
- What is the expected attitude of the disciplines that need to be involved?
- How is new training going to impact your existing planning and training program?
- How will new equipment be used in your exercise?
- How will the results be evaluated and used to improve our response capability?

## **2. Address costs and liabilities**

Both costs and liabilities are issues that will eventually share center stage, whether it is an exercise or an actual disaster occurrence. No matter what the situation, addressing these issues early will help minimize their impacts.

A problem inherent in some exercises is the possibility of personal injury or damage to equipment. Early in the planning process, you must become familiar with the jurisdiction's insurance coverage and mutual aid agreements.

Costs, both obvious and hidden, are incurred during every stage of the exercise development process. These costs may include staff salaries, equipment and supplies, contract services, printing, postage, and other related miscellaneous expenses. Cost incurred for staff training, planning, and exercising should be recognized by chief officials and budgeted for accordingly.

## **3. Identify barriers**

Often we find that exercises do not happen because of limitations within and amongst those agencies and participants involved. Lack of time and apathy are commonly referred to as reasons for not conducting exercises.

If a comprehensive exercise & evaluation program is going to have any longevity, barriers must be identified and confronted early on. Once barriers are fully brought into the open, it becomes a major responsibility and duty of the exercise design team to develop an exercise that will create opportunities for new learning and thus, make the time invested in the effort worthwhile.

## **4. Gain support for a comprehensive exercise & evaluation program**

It is essential to gain support for an exercise program and to establish authority from the beginning. Whether elected or appointed, the chief executive official can establish priority and importance. Without that, developing and conducting exercises can be difficult.

## **5. Determine the appropriate exercise level(s)**

Knowing when, what and why to exercise are extremely important. It is also important to understand at "what level" to exercise. It is important for the participants to gain as much from each exercise activity as they can. Sometimes rushing the exercise process will open the door to potential failures. It is best to begin at an exercise level that equals the readiness level within the community. Too much too soon will cause more harm than good.

Timing of exercises is also crucial in determining program success. As subsequent exercises should increase in complexity, each one will require more preparation time, more personnel and more planning than the proceeding one. Allowing the appropriate time to prepare for an exercise is extremely important.

Remember:

- The focus should always be on locating and eliminating the gaps and problems in performance before an actual emergency occurs
- We must eliminate the mindset that making mistakes during an exercise warrants penalties. It is not a “zero tolerance” environment but a learning process
- Exercises are intended to evaluate the plan, not test the people. Before we exercise, people should be trained on the plan
- The most successful exercise is not one where all went well, but one that forces an honest look at capabilities and leads to improvement in a variety of areas

## **6. Organize a design team**

Because planning an exercise requires a multitude of tasks, it is most beneficial to organize an exercise design team with a wide variety of experiences to draw from to assist with the development process.

Ideally, the exercise design team could/should:

- Have varied backgrounds to support coordination and creativity
- Include representation from each department participating in the exercise as well as key local response and support agencies
- Consist of members who are familiar with the local emergency operations plan and possess some level of authority to make certain planning and evaluation decisions
- Have members with knowledge or experience in the exercise design process
- Assess training needs to enhance mission success
- Team members are considered “trusted agents” since they have information about the scenario, timeline and events. Because of this, they should not be players in the exercise.

## **7. Use the exercise design process to develop your exercise:**

### **A. Assess needs**

The best way to determine whether you need an exercise – and what kind of exercise is needed – is to conduct an exercise needs assessment. An exercise needs assessment defines problems, establishes reasons to do an exercise, and identifies capabilities that need to be exercised.

A good place for you to start your needs assessment is your plan. Does a plan exist? What hazards are identified in the plan? What plans and procedures are in place? Is staff trained on the plans and procedures?

**B. Define the scope**

Defining the scope helps set realistic limits on the exercise. Factors that help define the scope may include:

- Expense
- Availability of personnel and other resources
- Seriousness of the problem
- Capacity of the exercise to address the problem
- Planning team's skills and experience
- Exercise length

Scope includes:

- Type of emergency/hazard
- Location
- Capabilities
- Participants
- Exercise type
- Duration

**C. Write a statement of purpose**

A purpose statement is a broad statement of the exercise goal. The purpose statement:

- Governs objectives, which determines subsequent steps
- Clarifies reasons for the exercise
- Is useful for communicating with media and the community

**D. Define objectives**

Every exercise must have defined objectives. Exercise objectives are a description of the capabilities and expected actions that should occur. In other terms, the objectives are what the exercise is intended to accomplish. Objectives are essential for the design process, exercise conduct, evaluation, and improvement planning. They should be clear, concise, and focused on performance. Each objective should contain:

- Action, stated in observable terms
- The entity (agency/jurisdiction) performing that action
- Conditions under which the action will be performed
- Standards (or level) of performance
- Who does what, under what conditions, according to what standard(s)

To help you remember the items that should be included in an objective, remember the mnemonic S.M.A.R.T.

- Specific
- Measureable
- Achievable
- Relevant
- Time-bound

An example of a “good” SMART objective is:

“Within 15 minutes after the evacuation notice is given, members of the EOC will complete notification procedures to school administrators.”

**E. Compose a narrative**

The narrative provides a brief description of the scenario events that have occurred up to the beginning of the exercise.

- Sets participant interest
- Provides information that sets the stage for later action

A good narrative

- Is located in the Situation Manual (SitMan)
- Is usually divided up into modules that represent time
- Is very specific
- Is phrased in present tense
- Is written in short sentences
- May develop the situation chronologically (event with warning time)
- May emphasize the emergency environment

**F. Write major and detailed events**

Major and detailed events are occurrences that take place after, and as a result of, the emergency described in the narrative.

The goal is to provide a structure that will:

- Link the simulated event to the actions you want players to take
- Provide unity to the exercise

**G. List expected actions**

List the responses, actions, or decisions that you want participants to have or carry out to demonstrate competence. Not only will this help drive your design of the exercise, but provides evaluators a list of actions they should expect and therefore look for during their observation and evaluation of the exercise.

H. Prepare message/injects

Messages or injects are used to communicate detailed events to exercise participants to evoke a response.

8. As part of the exercise design process, incorporate evaluation planning as an integral part. Immediately after the exercise is complete, conduct an information/feedback gathering session (commonly referred to as a “Hot Wash”). With this information, coupled with the evaluator feedback, an After Action Report can be developed. Using the After Action Report, an Improvement Plan can be developed. The Improvement Plan includes: what the issue or concern is; what steps need to be taken to correct the problem; who is responsible to get them accomplished and within what timeframe they can be completed.

After the Improvement Plan is written, follow up needs to be done to ensure that the improvement actions are being done in a timely manner. Improvements need to be implemented and will form a basis for your next exercise.

## Resources

There are multiple opportunities to participate in training programs related to exercise and evaluation. All of the courses described/defined below are available to you.

- IS-120.a – An Introduction to Exercises  
Independent Study online  
<https://training.fema.gov/is/courseoverview.aspx?code=IS-120.a>
- IS-130 – Exercise Evaluation and Improvement Planning  
Independent Study online  
<https://training.fema.gov/is/courseoverview.aspx?code=IS-130>
- L0146: Homeland Security Exercise and Evaluation Program Training Course  
Emergency Management Institute Course  
<https://www.firstrespondertraining.gov/frt/npccatalog/EMI>
- K0146: HSEEP Basic Course  
Emergency Management Institute Course  
<https://www.firstrespondertraining.gov/frt/npccatalog/EMI>
- E0131: Exercise Evaluation and Improvement Planning  
Emergency Management Institute Course  
<https://www.firstrespondertraining.gov/frt/npccatalog/EMI>

- E0132: Discussion-Based Exercise Design and Evaluation  
Emergency Management Institute Course  
[https://www.firstresponertraining.gov/frm/npccatalog/EMI](https://www.firstrespondertraining.gov/frm/npccatalog/EMI)
- E0133: Operations-Based Exercise Design and Evaluation  
Emergency Management Institute Course  
<https://www.firstresponertraining.gov/frm/npccatalog/EMI>
- E0136: Master Exercise Practitioner Capstone Course  
Emergency Management Institute Course  
<https://www.firstresponertraining.gov/frm/npccatalog/EMI>
- Master Exercise Practitioner  
Emergency Management Institute Course  
<https://www.firstresponertraining.gov/frm/npccatalog/EMI>

## Sample or “Off the Shelf” Exercises

The following exercises have already been developed and may be tailored to the local jurisdiction for implementation with little effort. Exercises should be chosen based on objectives and not by scenario.

This list is not exhaustive and is subject to continual change. To obtain the exercise documents, contact The Polk County Emergency Management Agency.

### Prevention Tabletop Exercises:

- Active shooter tabletop for schools
- Active shooter tabletop for the workplace

### Response Tabletop Exercises:

- Active shooter tabletop for schools
- Active shooter tabletop for malls
- Airplane Crash
- Blizzard Emergency
- Flash Flood-Public Information
- Flood
- Hazardous Material Accident – Ammonia leak from train car
- Hazardous Material Accident – Leak from fixed facility
- Hazardous Material Accident – Facility Sulfur Dioxide leak
- Hazardous Material Accident – Motor vehicle crash with spill
- Hazardous Material Accident – Truck crash with biological agent exposure
- Hazardous Material Accident – Truck crash with Potassium Phosphide leak
- Hazardous Material Accident – Truck crash with unknown liquid
- Hazardous Material Accident – Truck Explosion with Pesticide and secondary explosion

- Ice Storm – Mass casualties
- Mass care & sheltering
- Mass casualty incident
- Public Health – Monkey Pox
- Terrorist – Anhydrous Ammonia Pipeline Explosion
- Terrorist – Anthrax release
- Terrorist – Chemical release at plane crash
- Terrorist – Contagious Bovine Pleuropneumonia Exposure
- Terrorist – Corn seed blight
- Terrorist – Dirty bomb
- Terrorist – Dog food tampering
- Terrorist – Food processing plant explosion
- Terrorist – Hazmat exposure and sniper
- Terrorist – Hostages and explosions
- Terrorist – Nerve agent release
- Terrorist – Plague release
- Terrorist – Plane hijacking with explosives
- Terrorist – Plant contamination
- Terrorist – Radiological Explosion #1
- Terrorist – Radiological Explosion #2
- Terrorist – Sarin release
- Terrorist – Smallpox exposure
- Terrorist – Stem Rust of Wheat contamination
- Terrorist – Unknown agent exposure in courthouse
- Terrorist – Unknown agent exposure in post office
- Tornado – City
- Tornado – Trailer Park
- Tornado – Town
- Wildfire – Rural

Response and recovery Tabletop Exercises:

- Active shooter tabletop for schools
- Active shooter tabletop for school sporting event
- Active shooter tabletop for government buildings
- Active shooter tabletop for hospitals
- Active shooter tabletop for outdoor venues

Recovery Tabletop Exercises

- Active shooter tabletop for schools.
- Active shooter tabletop for hospitals