

Exercises: The Swiss Army Knife of Emergency Preparedness

TRAM 2011

Hope Coffield

Emergency Preparedness and Worker Safety Training Program

Center for Educational Technologies

Wheeling Jesuit University

hope@cet.edu



How do you prepare for
emergency response?

What do the experts say?

“In addition to devising contest problems, MSHA should help operators and teams devise exercise plans that will help them practice all aspects of mine emergency response.”

- Mine Safety Technology and Training Commission, 2006

What do the experts say?

“The performance of miners, mine managers, and responsible persons on the surface should be evaluated during emergency response drills and mock disaster exercises. In addition, actual mine-wide emergency incidents and near-miss events should be analyzed to identify lessons learned.”

- Mine Safety Technology and Training Commission, 2006

What do the experts say?

“Mine operators’ emergency response plans (ERPs) must be treated more than just more paperwork. ERPs should be developed collaboratively . . . and revised based on mine-specific drills and tabletop exercises.”

- West Virginia Governor’s Independent Investigation Panel, 2011

Why should you exercise your emergency response plan?

Individual Training

- Simulate emergency situations to prepare employees for a real event.
- Develop skills to manage complex and stressful situations.
- Identify gaps in your training program.



Why should you exercise your emergency response plan?

System Improvement

- Evaluate procedures and refine plans.
- Pinpoint resource needs.
- Clarify roles and responsibilities.
- Build working relationships among responding agencies.



Exercises can play an important role at any stage in your training program.

- Use ***orientation seminars*** to introduce new plans, concepts, and procedures.
- Implement ***workshops*** to facilitate discussion and training around specific concepts.
- Conduct ***tabletop exercises*** when you want participants to solve specific emergency scenarios using a low-stress discussion format.

Exercises can play an important role at any stage in your training program.

- Integrate **games** and immersive simulation technologies to examine decision making.
- Run **drills** to validate individual function and activities.
- Conduct a **functional exercise** to evaluate coordination, command, and control between multiple agencies or to validate functions at a single site. Command actions are actual, but movement of personnel and equipment is simulated.
- Implement a **full-scale exercise** as a realistic scenario that validates multiple functions across multiple sites. Involves “boots on the ground” response.

Which type of exercise
would you use?

Seminar

Workshop

Tabletop

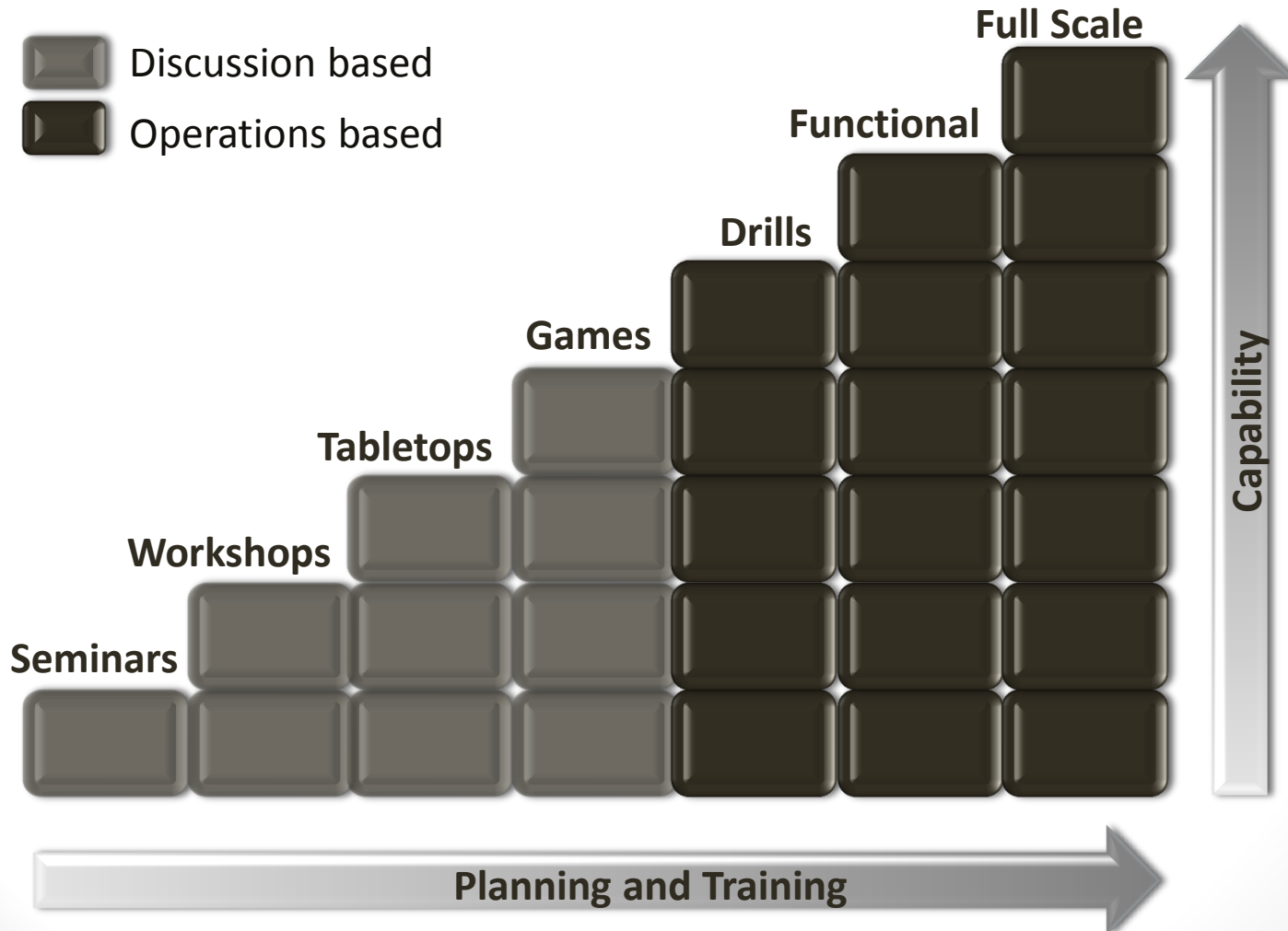
Game

Drill

Functional

Full-scale

Exercises increase in complexity, each building on the previous until mastery is achieved.



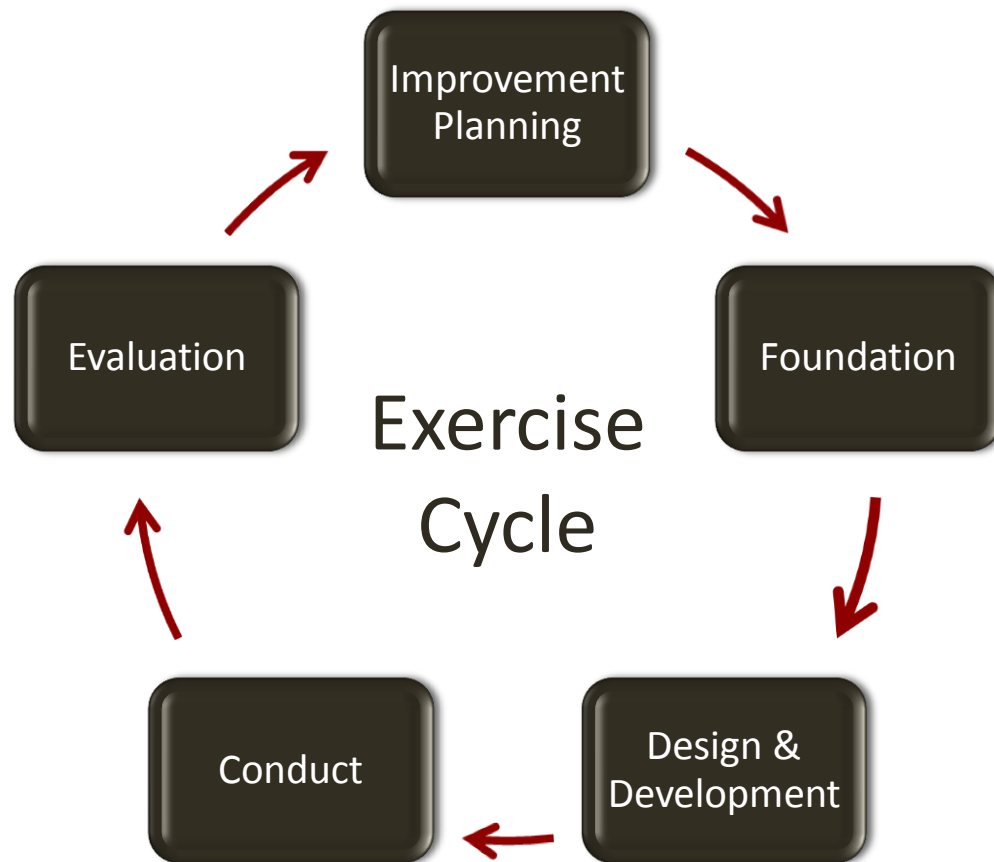
Homeland Security Exercise and Evaluation Program (HSEEP) provides guidance, sample documentation, and training.

- Program management
- Planning and conduct
- Evaluation and improvement planning

<https://hseep.dhs.gov>

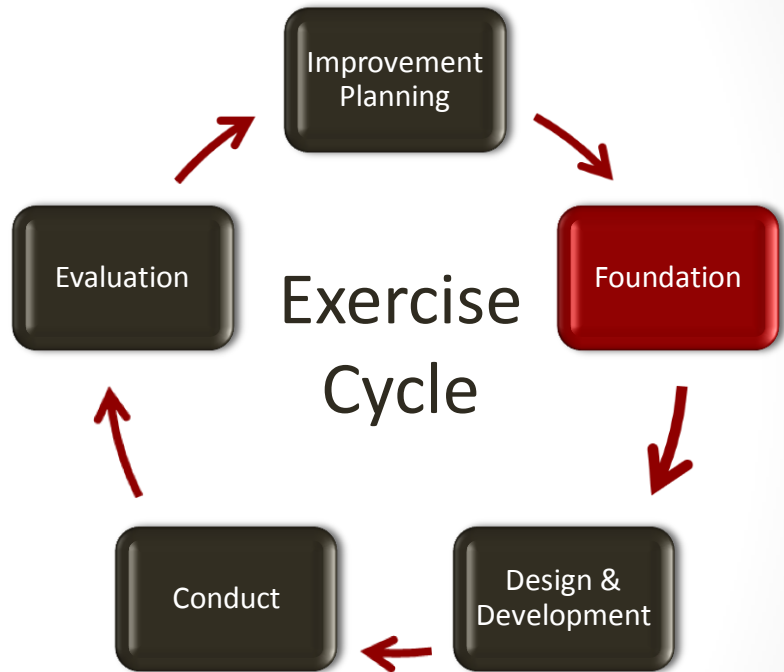


Successful exercise programs rely on stakeholder engagement and resources that provide for the execution of five distinct phases.



To provide a foundation for an effective exercise:

- Review current plan.
- Conduct needs assessment.
- Select exercise type.
- Establish buy-in from senior officials and/or appropriate entities.
- Develop timeline and establish milestones.
- Identify planning team and schedule planning meetings.



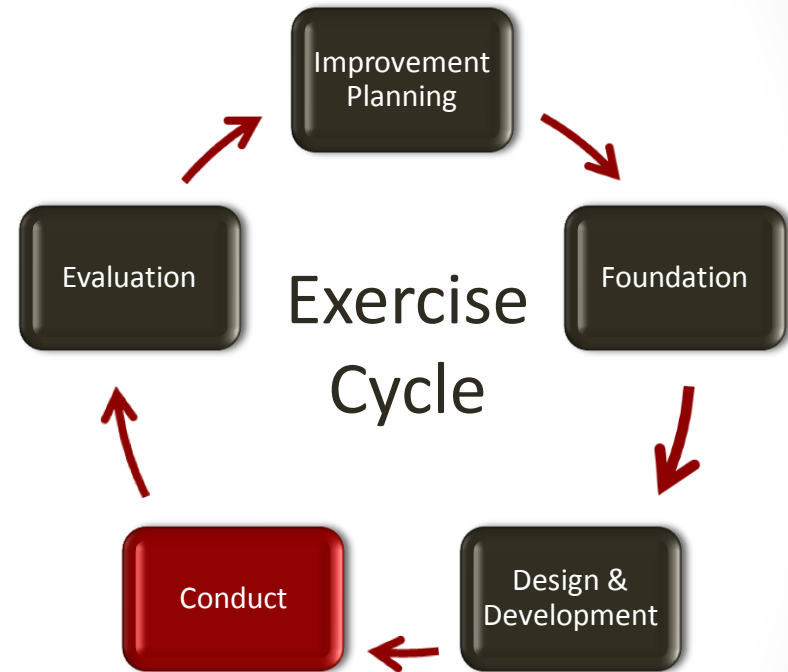
To design and develop an effective exercise:

- Define scope and purpose.
- Write objectives.
- Compose scenario narrative and events.
- Prepare messages.
- Develop documentation.
- Coordinate logistics.
- Plan exercise conduct.
- Select evaluation methods.



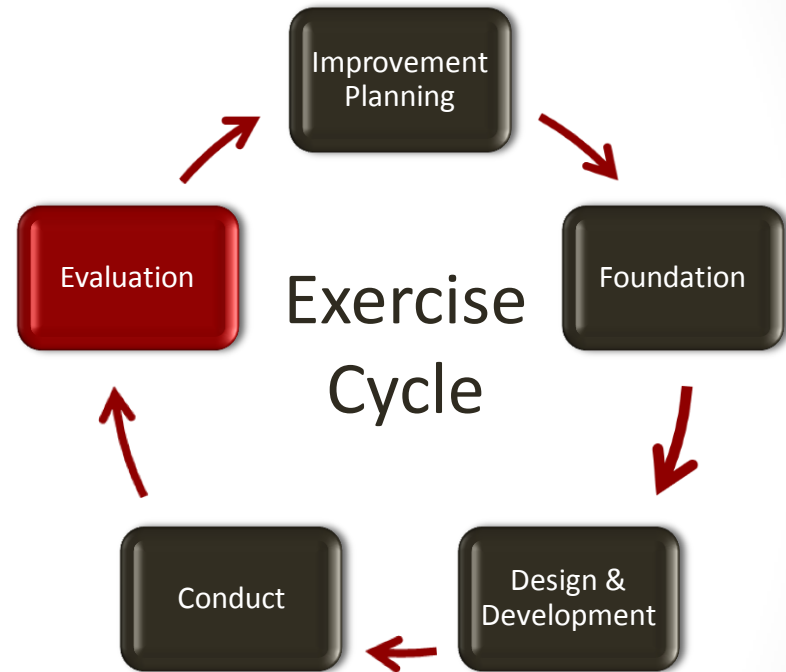
To conduct an effective exercise:

- Clearly explain to participants what is expected of them.
- Sustain action.
- Foster realism.
- Review real-world emergency procedures.



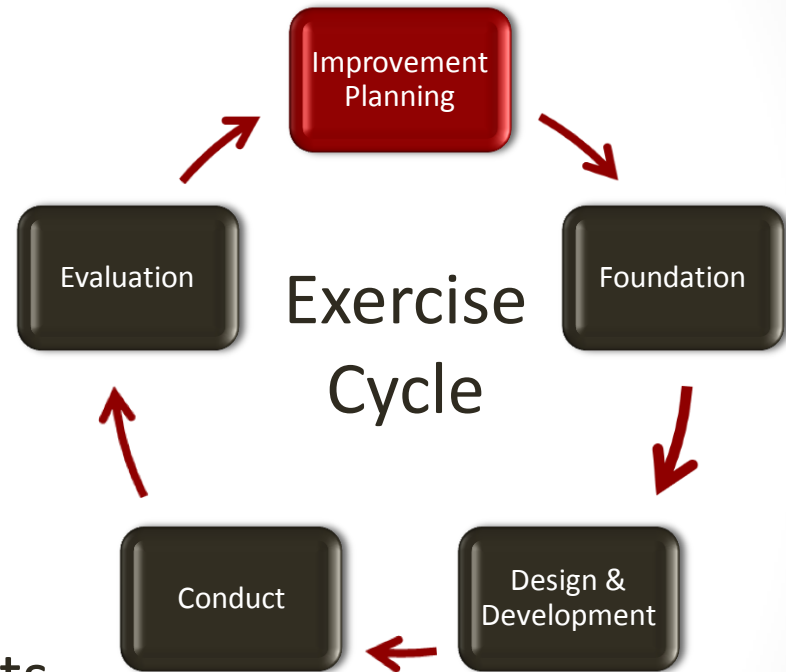
To effectively evaluate an exercise:

- Plan evaluation.
- Determine expected actions.
- Select and brief evaluator(s).
- Observe exercise and document actions.
- Participate in follow-up activities.



To effectively follow up an exercise:

- Identify recommendations:
 - What was planned?
 - What actually happened?
 - Why did it happen?
 - How do we do better?
- Assign responsibility for corrective actions.
- Track progress of implementing improvements.
- Build testing of improvements into the next exercise.



In summary:

- An emergency action plan is not viable without an exercise and training program to support it.
- An exercise program can benefit individual training and system improvement.
- The full benefits arise from evaluating exercises and acting upon the improvement planning recommendations.
- HSEEP provides additional guidance, sample documentation, and training resources (<https://hseep.dhs.gov>).