

LEPC ACTIVITY GUIDE

A Guide for Local Emergency Planning Committees December 2014



Implementing the Emergency Planning and Community Right-To-Know Act (EPCRA/SARA Title III)

This guide was created with the support of the U.S. Department of Transportation Hazardous Materials Emergency Preparedness grant. This is a public document to be used for educational purposes only.

Please feel free to use portions of this document with the following citation: Georgia Emergency Management Agency, 2014. LEPC Activities Guide, Volume 1. Atlanta, Georgia. Website www.gema.ga.gov

TABLE OF CONTENTS

Purpose
Guide Summary 2
Getting Started 3
Activity: Community Vulnerability Assessment 5
Activity: Commodity Flow Study (CFS) 6
Activity: Facility Site Tour 8
Outreach: Emergency Preparedness Fair 10
Outreach: Reporting Seminar 11
EPA's Tier II Reporting Form14
Exercise Information16
The Homeland Security Exercise and Evaluation Program (HSEEP)
Exercise: Tabletop Exercise 21
Example: Tabletop Exercise
Example: Drill 26
Glossary of Terms



Purpose

Created and developed from best practices throughout the state, this guide is designed to help Local Emergency Planning Committees (LEPCs) establish and maintain momentum while also meeting the requirements and regulations of the Emergency Planning and Community Right-to-Know Act (EPCRA) and the Superfund Amendments Reauthorization Act (SARA Title III). Each of the activities in this guide is eligible for funding under the Hazardous Materials Emergency Preparedness (HMEP) grant program.

This guide draws on the experience of those LEPCs in Georgia that have developed comprehensive plans as well as on the experience of industry members, trade partners, and public interest groups.

Guide Summary

This guide is divided into three sections: Activities, Outreach, and Exercises. To make material more accessible and understandable, each section includes an introduction, purpose, instructions, and specific examples. Explanatory materials, including examples, are also included.

Examples given throughout the guidebook are meant to be used as guidance and should be altered to fit the needs and resources of a given community.

The **Activities** section includes assessments that are designed to improve your knowledge of what is going on in your community, whether it is demographic information or hazmat transportation routes.

The **Exercise** section gives specific instructions and examples of both discussion based and operations based exercises that will improve an LEPC's capability to respond to a particular incident.

The **Outreach** section provides LEPCs with examples on how to reach out to their community members by including them in events that will increase knowledge of hazard risk and boost the community's preparedness and resilience as a whole.







What is EPCRA?

In 1986, Congress passed the Emergency Planning and Community Right-to-Know Act (EPCRA) as Title III of the Superfund Amendments and Reauthorization Act (SARA). For this reason, EPCRA is sometimes also referred to as SARA Title III. Congress enacted this law to help local communities protect public health and safety and the environment from chemical hazards.

To implement SARA Title III, Congress requires each state to appoint a State Emergency Response Commission (SERC). The SERCs are required to divide their states into emergency planning districts and name a Local Emergency Planning Committee (LEPC) for each district. The expertise of the required LEPC members ensures that all the necessary elements of the planning process are represented.

What is an LEPC?

Local Emergency Planning Committees are community-based organizations that assist first responders, industry partners, and community members in planning and training to prepare for hazardous materials emergencies.

LEPCs also assist in the development of emergency response plans and provide information about chemicals in the community to citizens. The detailed requirements for creating and maintaining an LEPC are outlined on gema.ga.gov. Basic responsibilities for an LEPC include:

- Creating a community emergency response plan, collecting and storing information provided by facilities, and making information available to the public.
- Providing a continuing forum in which the local community and facilities can discuss issues related to hazardous materials emergency preparedness.

Who is involved with an LEPC?

Typically, members of an LEPC include representatives from the fire service, law enforcement agencies, public health, environmental professionals, local officials,

GETTING STARTED



community groups, media representatives, industry and facility partners, emergency management officials, and anyone else who can contribute to the overall protection and safety of the community.

Why an LEPC?

Having an active LEPC in your community can be beneficial for several reasons:

- Provide an opportunity for business owners, nonprofits, and other community stakeholders to understand more about emergency preparedness.
- For those LEPCs with 501(c)3 nonprofit status, community donations can supplement funding gaps in hazmat emergency response planning, training, equipment, and supplies.
- Offer a chance to build trusting relationships between different emergency responders and jurisdictions before a disaster occurs.
- Support the efforts of first responder planning and training with coordination, hosting, and organization.
- Increase a community's overall ability to "bounce back" after disasters due to their higher knowledge of resources, trust in emergency responders, and access to information.

What is HMEP?

The Hazardous Materials Emergency Preparedness grant, also known as HMEP, is a grant that the Georgia Emergency Management Agency (GEMA) receives from the U.S. Department of Transportation (DOT) to fund planning and training for hazardous materials preparedness and response, with a focus on transportation. GEMA uses this funding to support our LEPCs through sub-grants and offering statewide planning and training.





ACTIVITIES

Helpful Tip: Many local governments already have hazard mitigation plans in place. A portion of your mitigation plan includes a vulnerability assessment that you can pull information from.

Helpful Tip: Census data is free and can be easily searched.

STEP 1: Go to factfinder2.census.gov

STEP 2: Type in your city, town, county, state, or zip code into the text box under Community Facts **STEP 3**: Click GO

STEP 4: The total population for your area will be displayed

You can also find tables for housing characteristics and demographic characteristics



Activity: Community Vulnerability Assessment

Introduction

Each community has unique vulnerabilities. Vulnerability is the reduced capability of an individual or group of individuals to anticipate, cope with, resist, and recover from a hazardous event. For example, those who are elderly commonly need more assistance during and after evacuations than the general public.

It is important to identify vulnerable populations because they are likely to experience the most negative consequences during a disaster, due to their location, abilities, and/or lack of resources. A vulnerability assessment identifies the factors increasing hazard risk, to what degree they affect different populations, and how response methods can be improved with planning and awareness.

Purpose

Understanding the vulnerabilities that exist in your community provides a basis for developing strategies to protect those identified people and structures from harm.

Vulnerability Assessment Steps

- 1. Develop a team that is representative of the community to conduct the assessment. Members can come from state and local emergency management offices, health departments, non-profit organizations, nursing facilities, etc.
- 2. Identify and map hazmat transportation routes and fixed facilities in the area that will be assessed. (For detailed instructions on identifying hazmat transportation routes, please refer to the Commodity Flow Study section of this document).
- 3. Locate vulnerable populations that are in close proximity to the identified hazmat locations.
 - Vulnerable populations include: elderly, disabled, foreign language speakers, low-income residents, children, etc.
 - Some structures that are easy indicators of vulnerable populations include: hospitals, nursing homes, schools, and low-income housing areas.
- 4. Place each facility and vulnerable area on a map. Be sure to ask community partners and



WHAT IS THE DIFFERENCE BETWEEN RISK AND VULNERABILITY?

RISK: The potential for loss due to a hazard. For example, all individuals below in Figure 1 (represented by circles) living near a chemical facility are at risk of harm should there be an incident at the facility.



VULNERABILITY: Certain characteristics about a person, place, or thing that increase their hazard risk. For example, imagine that some of those individuals at risk suffer from some sort of respiratory illness. Those individuals, represented below in red, would be considered vulnerable because of the characteristics that increase their risk when compared to others in a similar situation.



stakeholders if there are any other areas that need to be included in the map.

- 5. Collect information about the vulnerable populations you have identified.
 - Do they need assistance in understanding emergency warnings? (e.g. the elderly or non-English speakers)
 - Would they need more assistance during an evacuation? (e.g. people without transportation or homebound individuals)
 - Might their health be compromised quicker than others? (e.g. children and hospital patients)
- 6. Develop strategies and policies to protect vulnerable facilities and individuals. For example:
 - What kind of mutual aid agreements are in place to assist with the evacuation of hospitals and nursing home facilities?
 - How can transportation be provided to evacuate people who don't own a car?
 - Can public service announcements be translated into other languages before a disaster occurs?
 - What kind of early warning systems can be put in place for hospitals, schools, nursing homes, etc.?
- 7. Implement strategies to reduce vulnerability and increase hazard resilience of the community as a whole.

Activity: Commodity Flow Study (CFS)

Introduction

Most communities are origins, destinations, or through-routes for hazardous materials. In order to plan and prepare for possible incidents related to hazmat transportation, LEPCs need basic data on the types and quantities of chemicals transported through the jurisdiction. A commodity flow study identifies the goods and commodities that are being transported through a particular area.

Purpose:

A Commodity Flow Study (CFS) provides critical information to the emergency planning process specifically: understanding the situation, determining goals and objectives, and developing a plan. Results can be used to analyze current traffic patterns, focus planning efforts on existing



needs, and reduce the potential for incidents to occur. The goal of a CFS is to map the goods that are being transported within a given area.

Cost:

Depends on the scale of activity. Contractors can range from \$6,000 for a small study to \$30,000+ for a large-scale study. However, basic windshield studies can be done using volunteers. That information can then be added to online research and information provided by the state and industry partners to create a simple but useful CFS.

Steps:

- 1. Involve all necessary stakeholders. For example: representatives from fire, EMS, law enforcement, planning officials, and industry members.
- 2. Set leadership roles, goals and objectives, and requirements for collecting data.
- 3. Examine your transportation network. What modes of hazardous materials transportation run through your area? Some possibilities include:
 - Highways and roads
 - Pipelines
 - Railroads
 - Waterways
 - Airways
- 4. Collect baseline information such as traffic history, past spill information, road characteristics, population demographics, and planning documents.
 - Interview local authorities. Chances are they have a good understanding of traffic flows and transportation routes.

• Identify what additional information needs to be collected. How will the project be funded? Over what time period will it be conducted? Who will be conducting the study?

- 5. Conduct the CFS by collecting new data. You may want to consider hiring a contractor for this portion. Include materials imported, exported, mode of transportation, location of transportation, and volume. Contact the following sources to see what data they can provide:
 - GDOT
 - GEMA
 - Coast Guard

DETERMINING RISK – FACTORS TO CONSIDER

PROBABILITY * How likely is the hazmat emergency incident to occur concerning this one [location, material]?

SEVERITY If it does occur, what's the possible magnitude? * Will it cause casualties? * What about property damage?

WARNING TIME * Would there be warning for this event like a pressure valve has been damaged and needs to be replaced? * Or would there be no warning, like a tractor trailer accident?

DURATION * How long of a response would this incident require? * Would it be easy or difficult to clean up?



- Georgia Ports Authority
- Georgia Public Safety Motor Carrier Compliance Division
- Weigh stations
- Rail companies
- Pipeline companies
- 6. Analyze the new data by:

• Identifying which hazardous materials are
being transported through your region.
 Noting the amount of materials being
transported and the risk associated with the
transportation of these materials.

- 7. Display your findings through tables and charts. There are many ways you can organize the data. Here are some examples:
 - Vehicle count by time (hour) of the day
 - Count by placard ID on vehicles
 - Top commodities by count or by weight
- 8. Identify and distribute this information by compiling the data into a booklet that can be used by LEPC members, first responders, and community partners.

Provide suggestions to LEPC members to help them improve response capabilities. Make this information available to community partners so they have enough knowledge to monitor the trends.

For an example of a completed local Commodity Flow Study, please enter the following search terms into your preferred Internet search engine: county commodity flow study.

Activity: Facility Site Tour

Introduction

Many communities have businesses that deal with hazardous materials daily. These facilities operate within their own guidelines and structures. However, during an emergency event, first responders are involved to ensure the safety of the people and property. To ensure a smooth transition, prior information about the facility and a solid relationship with the employees is a must.

Purpose

The facility site tour familiarizes first responders with the ins and outs of the facility and provides the business with valuable feedback on safety measures.

	EXAMPLE WINDSHIELD CFS TABLE						
#	Time	Vehicle Type	Placard UN or				
			Class	NA ID#			
1	10:30	20' Container	3	3257			
2	11:25	Tanker	3	1073			
3	13:20	Tractor Trailer	2	3082			
4	14:35	Cargo Van	8	1263			
Location: Westbound Exit 22 on Interstate 1							





Cost and Equipment

Minimal Cost! This will be helpful and beneficial to the LEPC members, first responders, and industry members.

Steps

- 1. Invite and welcome all local industry partners to your next LEPC meeting. Use E-Plan to identify these facilities by doing an online search in your county or jurisdiction. Make sure they know how valuable their participation will be.
 - E-Plan is an online database where facilities report chemicals they have and provide information on their emergency coordinator. Go to: https://erplan.net and register for an account for access to your county's data.
- 2. In the meeting, demonstrate the benefits of information sharing between industry facilities and first responders.

• Use past examples of both successful and failed responses, either in your area or more notable cases, such as the West, TX fertilizer plant explosion in 2013.

- 3. Set up a date and time for the tour.
- 4. Have first responders prepare site-specific questions. For example:
 - Who are the emergency contacts for the facility?
 - Does that facility have an internal hazmat team?
 - What routes do their chemical supplies take to the facility and how often do they expect those shipments?
 - Where are the entrances and exits located?
 - Where is the closest fire hydrant?
 - How does the facility alarm work?
 - Is there a sprinkler system?
 - Where are large-quantity chemicals located?
 - Where are the utility shutoffs?
- 5. Create a map of each section of the facility that includes the information you just gathered. This map can be drawn by hand, on a computer, or as an overlay on an aerial map (if available).
- 6. Remember that the point of this activity is to build a trusting relationship.





Outreach: Hazardous Materials Expo

Introduction

Many local communities are unaware of the hazards that can be found in their jurisdiction. It is important to not only be aware, but also to understand the nature of the hazards, their potential for damage, and how to protect oneself from those hazards.

Purpose

The purpose of this expo is to help members of the community prepare for emergency situations and unexpected events, such as industrial and transportation incidents involving hazardous materials. This expo will provide tips for individuals and families to help citizens learn how to prepare and how to use resources available to them.

Steps

- 1. Reach out to the local community to build interest in the event.
- 2. Include anyone that would be involved in a real emergency response situation.
 - Examples include: emergency management officials, first responders, non-profit organizations, animal control, chamber of commerce, electric companies, food banks, medical groups, local businesses, hospitals, health departments, industry partners, etc.
 - If you do not have a relationship with these community members, now is the time to build one!
- 3. Create a subcommittee within the LEPC that will be focused on planning and preparing this event.

• Suggested members: primary point of contact, media relations coordinator, facilities coordinator, event safety coordinator, government liaison.

- 4. Demonstrate to local partners that this fair will draw the community closer together, stimulate preparedness awareness.
 - Sponsors can provide prizes and giveaways to promote their business.
- 5. Identify the knowledge gaps within the community and include specific presentations on those topics.

• For example: When would it be appropriate to shelter-in-place in response to a hazmat transportation incident?

OUTREACH



Helpful tip: Carefully choose a date and time free of conflicts and potential weather issues.

Helpful tip: The state of Georgia encourages all reporting to be done electronically through E-Plan.

- 6. Send out letters and posters to local community organizations in hopes that they will distribute the information.
 - Create flyers, brochures, campaign signs and have each LEPC member distribute a specific amount.
 - A sample letter and flyer can be found on the following page.
- 7. Visit Ready Georgia at www.ready.ga.gov for useful community materials and information.

Outreach: Reporting Seminar

Purpose

The purpose of a reporting seminar (or workshop) is to familiarize your LEPC and first responders with the requirements for reporting hazardous materials, as stated in the Emergency Planning and Community Right-to-Know Act (EPCRA).

What is E-Plan?

E-Plan is an electronic database where industries can report what kinds of chemicals they have and contact information for their emergency coordinators. It is a large database of facility data, including: Tier II reports, maps of the area surrounding a fixed facility, Material Safety Data Sheets (MSDSs), emergency response guidebook references, facility risk management plans, and more.

You can access E-Plan at https://erplan.net

For more information on Tier II reporting in Georgia, please contact:

Tier II Administration, Georgia Environmental Protection Division Jerry Campbell P.O. Box 3250 16 Center Road Cartersville, GA 30120

Phone: 404-656-6905 Email: jerry.campbell@dnr.state.ga.us

Continued on p. 14

Sample letter

XYZ COUNTY EMA LETTERHEAD

DATE

To our local community,

Community and Faith-based organizations provide a tremendous amount of help during disasters and we wanted to be sure you received a special invitation to our upcoming Hazardous Materials (Hazmat) Expo.

As you may or may not know, hazardous materials are being stored and transported through our county on a day to day basis. As your Local Emergency Planning Committee, it is our duty to ensure that our citizens knowledgeable about nearby chemicals and prepared for any potential chemical emergencies.

The Fair is sponsored by XYZ County Emergency Management Agency and the Local Emergency Planning Committee.

WHEN: XYZ date WHERE: XYZ location TIME: XX: 00 - XX: 00

Please encourage your community members, neighbors, and/or congregation, to visit the fair and consider publishing the details in your bulletin or newsletter. A copy of our announcement notice is included. You will be seeing and hearing more details in local media outlets.

For further information, go to (link to county EMA website) or call XXX-XXX-XXXX.

We look forward to seeing you and your community at the fair!

Sincerely, (Signature)

Helpful tip: HSEEP's website has a variety of downloadable templates that can easily be integrated into your event. Visit https://www.llis.dhs.gov/hseep for more information.

Sample flyer



Are you READY for a crisis?

Please join XXX County government and Emergency Management Agency for

PREPAREDNESS EXPO

Date: Time: Location:

door prizes • food • equipment demonstrations • supplies • tools • more Fun for the whole family!

Sponsored by: XXX County Emergency Management Agency XXX County Local Emergency Planning Committee



What is Tier II reporting?

EPCRA requires that industries submit Tier II forms yearly to provide local, state, and federal officials with specific information on hazardous chemicals present at their facility. Tier II forms gather information about the types, quantities, and locations of hazardous chemicals at a given facility.

Who is responsible for submitting the forms?

The owner or operator of a facility will submit the Tier II forms or designate an employee to do so.

When do the forms need to be submitted?

The form must be submitted through E-Plan no later than March 1 of the following year being reported (i.e. for January-December 2013, the form was due no later than March 1, 2014).

Where are the forms submitted?

Once the form is completed on E-Plan, it is accessible to the Environmental Protection Agency (EPA), State Emergency Response Commission (SERC), your Local Emergency Planning Committee (LEPC), and the fire department located in your county.

Paper copies may also be submitted to fulfill the requirements to the above mentioned entities.

Which chemicals are included?

Facilities with chemicals in quantities that equal or exceed the following thresholds must report:

For Extremely Hazardous Substances (EHSs) (40 CFR part 355 Appendix A and Appendix B), either 500 pounds or the Threshold Planning Quantity (TPQ), whichever is lower.
For gasoline (all grades combined) at a retail gas station, the threshold level is 75,000 gallons (or approximately 283,900 liters), if the tank(s) was stored entirely underground and was in compliance at all times during the preceding calendar year with all applicable Underground Storage Tank (UST) requirements at 40 CFR part 280 or requirements of the State UST program approved by the Agency under 40 CFR part 281.







• For diesel fuel (all grades combined) at a retail gas station, the threshold level is 100,000 gallons (or approximately 378,500 liters), if the tank(s) was stored entirely underground and the tank(s) was in compliance at all times during the preceding calendar year with all applicable UST requirements at 40 CFR part 280 or requirements of the State UST program approved by the Agency under 40 CFR part 281.

• For all other hazardous chemicals: 10,000 pounds.

For more information, go to the Environmental Protection Agency's (EPA) website at: www.epa.gov and search "Tier II" in the text box on the top right of the screen.



What is an Exercise?

Exercises are scripted situations based on reallife threats that provide emergency managers and first responders an opportunity to train and practice. They are an important tool for testing knowledge and plans while identifying areas for improvement. Exercises aim to help individuals and organizations within the community gain a sense of what additional resources are needed and what improvements can be made in a real-life event.

A successful exercise program combines resources, organizations, and individuals in order to identify and achieve program priorities. It is an essential component of emergency response preparedness.

Types of Exercises

There are seven different types of exercises that you can use to test your capabilities and preparedness. Planning exercises are called discussion-based exercises, while training exercises fall into the operations-based category.

Discussion-Based Exercises

These types of exercises are typically used as a starting point for exercise planning. These exercises highlight existing plans, policies, and procedures. In this type of exercise, facilitators and/or presenters lead the discussion, keeping participants on track toward meeting the objectives of the exercise. Seminars, workshops, tabletop exercises, and games are all examples of a discussion-based exercise.

Operations-Based Exercises

Operations-based exercises represent a more complex level of the exercise cycle. They are used to test plans, policies, agreements, and procedures that were created and decided upon during the discussion-based exercise portion. These exercises can clarify roles and responsibilities, identify gaps in resources, and improve individual and team performance. Exercises are represented by an actual to reaction to a simulated event, response to emergency conditions, mobilization of resources, and commitment of personnel. Drills, functional exercises, and full scale exercises are all examples of an operations-based exercise

EXERCISES



	Utillty/Purpose	Type of Player Action	Duration	Real-Time Play?	Scope
Discussion- Based Exercises	Familiarize players with current plans, policies, agreements, and procedures; develop new plans, policies, agreements, and procedures	Notional; player actions are imaginary or hypothetical	Rarely exceeding 8 hours	No	Varies
Seminar	Provide overview of new or current plans, resources, strategies, concepts or ideas	N/A	2-5 hours	No	Multi- or Single-agency
Workshop Achieve specific goal or build product (e.g., exercise objectives, SOPs, policies, plans)		N/A	3-8 hours	No	Multi-agency/ Single function
Tabletop Exercise (TTX)	abletop xercise TTX) Assist senior officials in the ability to understand and assess plans, policies, procedures, and concepts		4-8 hours	No	Multi-agency/ Multiple functions
Game Explore decision-making process and examine consequences of those decisions		Notional	2-5 hours	No (though some simulations provide real- or near-real-time play)	Multi-agency/ Multiple functions
Operations- Based Exercises	Test and validate plans, policies, agreements, and procedures; clarify roles and responsibilities; identify resource gaps	Actual; player action mimics reaction, response, mobilization, and commitment of personnel and resources	May be hours, days, or weeks, depending on purpose, type, and scope of the exercise	Yes	Varies
Drill	Test a single operation or function of an agency	Actual	2-4 hours	Yes	Single agency/ Single function
Functional Exercise (FE) (FE) (FE) (FE) (FE) (FE) (FE) (FE)		Command staff actions are actual; move- ment of other personnel, equipment, or adversaries is simulated	4-8 hours or several days or weeks	Yes	Multiple functional areas/ Multiple functions
Full-Scale Implement and analyze plans, policies, procedures, and cooperative agreements developed in previous exercises		Actual	One full day or several days or weeks	Yes	Multi-agency/ Multiple functions

1 . and

.



The Exercise Cycle

The National Incident Management System (NIMS) provides a cycle of preparedness, which is depicted below. As you can see, exercising is vital step in the preparedness process.







The Five Phases of the Exercise Cycle

1. Foundation: Create a base of support, develop a project management timeline, establish milestones, identify an exercise planning team, and schedule planning conferences.

2. Design and Development: Identify objectives, design the scenario, create documentation, coordinate logistics, plan exercise conduct, and select an evaluation and improvement methodology.

3. Conduct: Determine how the exercise will run. This includes setup, briefings, facilitation/control/evaluation, and wrap up activities.

4. Evaluation: Document strengths and weaknesses, write After Action Report.

5. Improvement Planning: Assign due dates to responsible parties to correct action items, track progress to implementation.





The Homeland Security Exercise and Evaluation Program (HSEEP)

Purpose

HSEEP is a national exercise program that provides knowledge and instruction to guide you through the exercise cycle of foundation, development, conduct, evaluation, and improvement planning. HSEEP provides tools and resources to make it easier to build and maintain exercise programs. The language used throughout the exercise program is consistent so that planners from any agency or organization can stay on the same page as one another.

What does HSEEP do for me?

HSEEP reflects lessons learned and best practices from existing exercise programs and can be changed to be used for any different hazard scenario (e.g., natural disasters, terrorism, and technological disasters). It was created to help you learn and understand the different parts of an exercise that can be applied to any kind of emergency event.

Think of HSEEP like a salad bar. While you may like all the toppings, you certainly do not have to put every topping on your plate, every time. Instead, you can pick and choose the guidance (i.e. toppings) that you find most useful for your exercise.

The HSEEP combines language and concepts from the National Response Plan (NRP), the National Incident Management System (NIMS), the National Preparedness Goal, the Universal Task List, the Core Capabilities List, existing exercise programs, and prevention and response protocols from all levels of government. In the spirit of NIMS, all efforts should be made to ensure consistent use of the terminology and processes described in HSEEP. More information about NRP and the Core Capabilities can be found here: http://www.fema.gov/pdf/prepared/npg.pdf

Helpful Tip: HSEEP's website has a wide variety of downloadable templates, including exercise plans, public announcements, communications plans, and handbooks to be distributed to players. https://www.llis.dhs.gov/hseep





Exercise: Tabletop Exercise (Discussion based)

Introduction

A tabletop exercise brings together people from a variety of fields to discuss how they would respond during a potential disaster scenario. Any agency who would be involved in an actual response is included in this event. A facilitator will introduce each model, asking questions to guide participant discussion.

Participants are asked to respond as they would in a real emergency, based on current plans and procedures, to an identified threat or hazard that is identified in the exercise. There is no right or wrong answer to any component of this exercise. Discuss and make decisions based on the information you are given.

Purpose

Tabletop exercises are meant to identify strengths in planning and preparedness and also discover weaknesses and resource gaps. Don't be afraid to be honest about what you don't know or don't have — that is the whole point of exercising! We test the plan around a table now so that we won't be caught off guard later.

Steps

- 1. Determine what strengths and gaps you would like to test. Set these as your core capabilities and exercise objectives.
 - See the table on the following page for examples of capabilities and objectives.
- 2. Invite various organizations to get involved in the exercise
 - Choose a primary organization to serve as the subject of the exercise, such as a major pipeline company in your county.
- 3. Extend an invitation to organizations, community partners, and LEPC members to a planning meeting regarding the exercise.
- 4. Hold a planning meeting to discuss:
 - Goals and objectives
 - Safety precautions
 - Activities to be simulated during the drill
 - Schedule and agenda for the drill
 - Player rules and expectations
- 5. Set up a scenario.







Helpful tip: Remember, Objectives should be: Specific, Measurable, Achievable, Realistic, and Timely. SMART!

Core Capabilities

Core capabilities provide the means to accomplish a mission and achieve desired outcomes by performing critical tasks, under specific conditions. You will select your capabilities based on the type and the scope of your exercise.

Some common capabilities include: planning, communications, community preparedness, risk management, and information sharing.

You can reference FEMA's Core Capabilities List at: http://www.fema.gov/core-capabilities

Exercise Objectives

Exercise objectives lay out who should be doing what, under which conditions, according to what standards. Tailor your objectives to your local jurisdiction and exercise-specific information.

Discussion-based	Operations based
Examine interactions between private and public sectors during the event.	Evaluate the capability to implement the Incident Command System, and the ability to transition to Unified Command.
Determine strengths and weaknesses in local coordination and integration of response resources.	Assess the ability to establish and maintain multi- jurisdictional and multi-agency communications in response to the incident.
Review inter-jurisdictional mutual aid agreements between your neighboring communities.	Examine the ability of local response agencies to implement victim, personnel, equipment, and facility decontamination in a mass-casualty incident.
Assess the capability of response personnel to detect, identify, monitor, and respond to the effects of a chemical, biological, radiological, nuclear, or explosive agent (CBRNE).	Assess the capability of response personnel to detect, identify, monitor, and respond to the effects of a chemical, biological, radiological, nuclear, or explosive agent (CBRNE).



Example: Tabletop Exercise (Discussion based)

Purpose

The purpose of this given scenario is to test and evaluate established response plans and procedures and a variety of other functions, including: transportation services, communications, fire services, information and planning, resource support, evacuation, and public information. Exercises are focused activities that are focused on established plans and procedures. Before you begin an exercise, make sure you have set plans and procedures to know how to properly respond.

Example Exercise Objectives

- 1. Evaluate XYZ Corp's protocols to respond to a hazardous material release.
- 2. Demonstrate the ability to control and maintain critical communication links.
- 3. Demonstrate the ability to direct, coordinate, and control emergency activities.
- 4. Demonstrate the ability to identify and properly utilize the resources available at or to the jurisdiction.

Steps

- 1. Select a local facility to participate in the scenario, in this case, "XYZ Lab Corporation."
- 2. Invite community members to participate, including but not limited to: first responders, emergency management officials, and non-government organizations.
- 3. Schedule a planning meeting with all previously established members of the LEPC. Remember to invite ALL potential players in the exercise.
- 4. Determine roles and responsibilities for all parties involved in the exercise.
- 5. Set a clear purpose, realistic goals, and measurable objectives.
- 6. Present scenes to the players and ask them to discuss their response as if this is a real event, based on plans and procedures.
- 7. Develop questions to ask players, designed to test their knowledge and skills. Answers should be based on plans and procedures.
 - Create a list of potential deviations from the plan to maintain an element of surprise. Remember: You are not out to trick them!
 - A list of scenes and questions to accompany this scenario can be found on the following page.

Helpful tip: Have no more than three to five objectives per exercise. Remember that you can't do everything, every time. Focus on what is most important.







It is a hot summer day at XYZ Lab Corporation as 100 workers go about their daily duties of moving totes around and making cleaning products. A railroad is moving railcars around on the sidetracks that run along the building so product can be off loaded for use at XYZ. A forklift driver soon finds that a tote is leaking that is being moved. There is a strong pungent odor in the area. The driver starts to feel sick after moving the product and he reports to the company nurse. The company nurse calls 911 for an ambulance for the worker. Dispatch is told that a worker is sick and would like to go to the hospital.

Questions

- 1. Who in the company should be notified of the worker's sickness?
- 2. What questions should communications ask about the worker?
- 3. What action should the nurse take?
- 4. What initial steps/action would XYZ Corp personnel take?



After calling 911, the nurse questions the worker about what he had been doing. The nurse learns that he had been moving totes with a forklift, and one of the totes had been leaking. The worker did not know what was in the tote but there was a label on with the UN Number 2078. The worker was complaining of burning of eyes, throat and nose, chest pain, nausea, and abdominal pain. The ambulance arrives and finds the plant has been evacuated and they have a total of 40 workers that have been affected. The nurse tells the responders that the product is a toluene-2,4-dilsocyanate and gives the sign and symptoms of the product.

Questions

- 1. What are the XYZ Lab workers doing at this time?
- 2. What actions, and by whom, would be taken to obtain initial control of the scene (i.e., security issues, injured personnel, evacuation, etc.)?
- 3. Would any other agencies/personnel be notified? If so, why?
- 4. Where is the point of entry onto the property of XYZ Corporation? Where would emergency response vehicles be places?
- 5. With the information given thus far, what is the top priority?



Upon investigation by employees, a tote is found to be leaking. There is about 350 gallons of product left in the tote. Some 150 gallons of product have leaked onto the ground and running toward a fresh water discharge. The management of XYZ Corp has determined that not all workers are accounted for. They pass this information onto the first units on scene. The first fire units are overwhelmed and call for additional support.

Questions

- 1. Would a command post be set up? If so, who would determine where would it be?
- 2. Who would go to the command post?
- 3. Who would be "in charge" of the scene?
- 4. What type of information would be helpful to the emergency responders?
- 5. What additional site would be designated? (Media, staging, assembly area, triage, etc.)
- 6. Where would a temporary morgue be set up? Who would set it up and operate it?
- 7. Where would triage be set up? Who would set it up and operate it?



The area affected by the release is getting bigger and more people are in danger. The current conditions are: wind X miles per hour from the east, temperature is X degrees, and the pressure is X. The sky is clear.

Questions

- 1. Given the nature of the situation, would this be a "site specific" response or would the EOC be activated? If so, which level of activation?
- 2. If the EOC were activated, who would go to the EOC?
- 3. How would "information" be processed by the command post, 911, and on scene responders in order for the command staff to take the necessary course of action?
- 4. With the current information given, what course of action would XYZ Corp and public safety agencies take?
- 5. Who would need to determine evacuation and how would it be accomplished?

Scene 5

Media crews are arriving on the scene. Ground crews have arrived with reporters and cameramen. Helicopters are also heard flying above the site. A group of by-standers have started to gather at the scene asking about their loved ones. Some of these people are becoming hostile and hysterical.

Questions

- 1. How are the public safety agencies coordinating their roles in caring for and controlling the workers from XYZ Corp?
- 2. What is the plan for determining the accountability of staff and XYZ Corp workers?
- 3. How will relatives and loved ones be managed? Who is responsible for this? How will this information be processed?
- 4. What type of counseling would be requested? When? By whom?
- 5. How and who would handle the media? Could the media be used to aid in the management of this situation?
- 6. How will by-standers be managed at the scene?
- 7. How could the public safety incident command be organized to most efficiently manage this situation?



Example: Drill (Operations based)

Purpose

The purpose of this exercise is to blend a mutual aid training drill with local industry and first responders to insure readiness in the event of an emergency. The goal is to limit the consequences of a chemical leak. This is a great opportunity to build a relationship that will be put to use when an actual emergency event occurs. Both agencies will be familiar with each other's capabilities and this allows for emergency events to flow more smoothly.

Equipment

- Full level A hazmat training suits, boots, and gloves
- Decontamination equipment
- Ammonia monitoring equipment
- Ventilation equipment
- Research resources, laptops, and Internet access
- Plugging and patching equipment
- Smoke machine
- Portable generator
- Communications equipment
- Posters and signs that clearly state that this is only a drill.

Steps

- 1. Contact your neighboring counties and invite them to participate in a mutual aid operations exercise, which will be beneficial for both or all parties involved.
- 2. Choose a primary agency or organization to serve as the subject of the exercise, such as a company that transports hazardous materials from facility to facility.
- 3. Hold a planning meeting to determine goals and objectives for the exercise, based on what specific strengths and weaknesses you would like to test.
- 4. At the planning meeting, organize a schedule and agenda for the exercise and clearly lay out activities, expectations, and safety precautions.
- 5. Determine a scenario for your mutual aid chemical leak. A sample scenario is given on the following page, including evolving scenes with questions to ask players.







- 6. Once the exercise is complete, show the players that their dedication and time is valuable. Consider distributing certificates of completion.
- 7. Develop an after action report based on the notes from participants and evaluators, specifying strengths and weaknesses of the exercises.

Sample certificate

Certificate of Completion
Presented to Name
for Activity
 Signature Date



Sample Scenario

- Weather conditions are cloudy, with rain expected. Clouds hang low at 500 feet and impair visibility to less than a mile.
- There will be a simulated leak on the liquid side of the system from a site glass near the condensers. A smoke machine will be placed in the area of the leak to simulate the ammonia.
- There will be false valves installed in the area with appropriate valve numbers and tags installed meant to be found and used during the recon and mitigation portion of the incident.
- Arriving crews will have to work with facility employees to recon the area and determine where the leak is located and what the area of the system is used for.

Scene 1: Notification of incident

XYZ County has been experiencing record rainfalls over the past couple of weeks and the ground is saturated with water. At 9:03 a.m., the county 911 communications center receives a call in regards to a passenger vehicle that has run off the roadway on ABC Road between 1st Street and 2nd Avenue. Several people are in the vehicle, unsure if anyone is injured. The caller also states that the road has partially collapsed.

Questions

- 1. Who or what agencies would be notified of this incident? What would your unit be doing?
- 2. Would a formal incident command be initiated? If so, what agencies would be involved and who would be the incident commander? Where would command be established?
- 3. What is plan of action (response priorities) for this situation?
- 4. Who if anyone will be speaking with the media regarding this event? What will your message be?

Scene 2: Ruptured water line detected

Upon investigation of the scene, responders determine that the roadway has been washed away below the surface due to a ruptured water line that has been leaking for some time and has gone unnoticed, due to the excessive rainfall. The water line was damaged extensively as the roadway continues to collapse and water is flowing profusely from the area.

Questions

- 1. Given the changes in the situation, what additional agencies would be notified of the incident? Would all agencies respond to the scene or what actions would they take?
- 2. What does your incident command look like at this point? Who is the Incident Commander? Where is Incident Command (IC) located? How does everyone know who the IC is?
- 3. Who is keeping up with what units/agencies/personnel are on scene and what they are doing?
- 4. What are your response priorities?
- 5. How does this affect traffic flow in the area?
- 6. How do the changes in the situation affect communications with the media?



Scene 3: Pipeline is damaged

As the utility department works to quickly stop the water leak and prevent further damage to the roadway, a pipeline is damaged causing a release of liquid from the pipe. There is a large amount of liquid that is being released from the pipe. There are multiple transmission and service lines in the area, and the utility crew is unsure of which pipe has been damaged and who the pipe belongs to.

Questions

- 1. Given the changes in circumstances, what additional agencies would be notified of this incident?
- 2. How does this change your incident command structure?
- 3. How are you going to communicate with other agencies on scene?
- 4. How do you determine who the owner of the pipe is and what product is being released?
- 5. How do you control and/or contain the leak of the product?
- 6. How do the changes in the situation affect communications with the media?

Scene 4: Responsible party is responding

The responsible part has begun to arrive on site with oil spill response organizations. Petroleum product and water mixture has begun to travel down a trajectory path. The responsible party has begun to set up an Incident Command Center, staging area, and Incident Command structure to effectively manage the spill.

Questions

- 1. How would you identify what hazardous product you are dealing with and how to effectively contain and clean up the spill?
- 2. How do you determine who is the Incident Commander for the responsible party and what communications do you need to have with the responsible party?
- 3. What other actions would you take with the responsible party?
- 4. What actions would you take to work as a team with the responsible party, and other responding agencies?

Scene 5: Responsible party is proactively following the IAP cycle

The responsible part has begun to arrive on site with oil spill response organizations. Petroleum product and water mixture has begun to travel down a trajectory path. The responsible party has begun to set up an Incident Command Center, staging area, and Incident Command structure to effectively manage the spill.

Questions

1. What level of involvement do you as local responders expect to have with the responsible party, and other responsible agencies (i.e. EPA, PHMSA, Department of Public Safety, etc)?

After Action Review: A structured review or debrief process for analyzing what happened, why it happened, and how it can be done better by the participants and those responsible for the event. Baseline: An initial value that can be used to compare past, current, and projected future values.

CERCLA: The Comprehensive Environmental Response, Compensation, and Liability act, commonly known as Superfund, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment.

CFS: Hazardous Materials Commodity Flow Study. This is a report on the goods that are moving through a particular area.

Community: People living within a defined administrative unit—typically a local government area. Also refers to all the people within a defined cultural unit, such as a town or locality.

Drill: An event designed to develop, test, and maintain skills in a particular operation. A drill is often a component of an exercise. Players respond to a scenario as they would in an actual emergency.

Duration: The time during which something continues.

EPA: The Environmental Protection Agency. The EPA was established as an independent agency on December 2, 1970. The mission of the United States Environmental Protection Agency is to protect human health and to safeguard the natural environment, air, water, and land upon which life depends.

GLOSSARY OF TERMS





EPCRA: Emergency Planning and Community Right-to-Know Act. Implemented in 1986, this act was created to help communities plan for emergencies involving hazardous substances. It requires hazardous chemical emergency planning by federal, state and local governments, Indian tribes, and industry. It also requires industry to report on the storage, use and releases of hazardous chemicals to federal, state and local governments.

Evaluation: A determination of player strengths and areas needing improvement based on the criteria for each exercise objectives. Using a checklist, evaluators determine whether or not objectives were met, or partially met. The evaluators then weigh the importance of each objective, and make a final determination on whether player performance was adequate or inadequate.

Evaluator: Those who assess the scenario and provide feedback on a designated functional area of the exercise. They observe and document performance against established capabilities and objectives.

Exercise: An event that tests the integrated capability and a major portion of the basic elements existing within emergency preparedness plans and organizations. In exercises, players respond to an accident scenario as they would in an actual emergency. Major improvement items will be identified in an after action report and as a result should be corrected in an improvement plan.

Facilitator: One who helps others in making things easier. Their goal is to encourage participants to think productively to create ideas, ask questions, and find solutions.

FEMA: The Federal Emergency Management Agency, which is tasked with responding to, planning for, recovering from, and mitigating against disasters.

First responders: A person who is among those responsible for going immediately to the scene of an emergency to provide assistance.

GEMA: Georgia Emergency Management Agency/Homeland Security.

GDOT: Georgia Department of Transportation.

Goals: General guidelines that explain what you want to achieve in your community. They are usually long-germ and represent global visions such as "protect public health and safety."

Hazard: Any source of potential damage, harm, or adverse health effects on something or someone under certain conditions.

Hazmat: Hazardous Materials. This includes the production, use, storage, transportation, and disposal of hazardous substances and wastes that place the public, property, and environment at significant risk.

HMEP: Hazardous Materials Emergency Preparedness. This refers to the grant program that provides funding for planning and training on hazardous materials transportation.

Improvement Plan: A plan or list of corrective actions that will take place, based on an event and the after action review of that event.

LEPC: Local Emergency Planning Committee. The LEPC is used to carry out tasks that will develop and maintain effective relationships with government, private, and voluntary sectors of the community.



NIMS: National Incident Management System. This is a systematic, proactive approach to guide departments and agencies 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.

NRP: National Response Plan. This is an all-discipline, all-hazards plan that establishes a single, comprehensive framework for the management of domestic incidents. It provides the structure and mechanisms for the coordination of Federal support to state, local, and tribal incident managers and for exercising direct Federal authorities and responsibilities.

Objective: A standard or desired response by which evaluators gauge satisfactory performance. Objectives should give a broad indication of what event responders should demonstrate.

Player: A person who has an assigned role during an emergency and who has been predetermined to participate in a tabletop, drill, or exercise. Players should respond to emergency situations as they would during an actual emergency to control and mitigate the simulated emergency and ensure the health and safety of the public and the environment. Players are expected to obtain information through established emergency information channels and use established plans and procedures to determine their actions.

Preparedness: The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions.

Probability: The likelihood of something happening.

Recovery: The restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster affected communities, including efforts to reduce disaster risk factors.

Resilience: The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.

Response: The provisions of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety, and meet the basic subsistence needs of the people affected.

Risk: The combination of the probability of an event and its negative consequences. That is, the chance or probability that a person will be harmed or experience an adverse health effect if exposed to a hazard.

SARA: Superfund Amendments and Reauthorization Act. SARA amended the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) on October 17, 1986. SARA reflected the EPA's experience in administering the complex superfund program during its first six years and made several important changes and additions to the program.

SERC: State Emergency Response Commission, that is responsible for implementing the EPCRA provisions within its state. SERC duties include establishing procedures for receiving and processing public requests for information, reviewing local emergency response plans, designating local emergency planning districts, appointing an LEPC for each district, and supervising the activities of the LEPC.





SMART: The gold standard of objectives. Acronym for Specific, Measurable, Achievable, Realistic, and Timely.

Tabletop: Key players from participating agencies/organizations gather in a face-to-face, round table setting and talk through expected actions for an emergency scenario. Tabletops are typically informal and are led by one moderator who facilitates discussion among participants.

Vulnerability: The characteristics and circumstances of a community, system, or asset that make it susceptible to the damaging effects of a hazard. There are many aspects of vulnerability, arising from various physical, social, economic, and environmental factors.

Warning Time: The time between recognition of an authority that an event is impending and the start of the event.



Provided by

