

Hazard Control Refresher - Using the ERG

Time Requirement: 1.5 - 2 hours

Number of Instructors: 1 or more, consistent with ratio shown in the Minimum Criteria

Materials

- Student materials (participant guide, worksheets)
- Whiteboard, easel and easel paper, or chalkboard
- Markers or chalk
- If using books, Emergency Response Guidebooks (ERG) (at least one per group)
- If using devices, one per participant with ERG already loaded
- NIOSH Pocket Guides (if air monitoring data is part of the Exposure Scenario)

Module Objectives

When completed, participants will be better able to:

- Identify hazard information using the ERG
- Identify response actions based on scenario provided
- Identify changes in tactical operations as conditions change

Teaching Methods

- Presentation/discussion
- Small-group activity

Suggested Instructor Preparation

- Review the Participant guide
- Test web links prior to the session and If any are inoperative please notify the Midwest Consortium at alerdilr@ucmail.uc.edu
- Conduct reconnaissance: what hazards are of interest to this group? How frequently do the participants use the ERG? What types of stimuli are reasonable for the group? Do participants use the ERG in hard copy or digital? What is the work schedule—day or night or variable? What sampling equipment is available or might be used by others who would provide input during a response? Has there been a response during the past year—to what, and other details.
- Obtain the Emergency Response Plan for the group (contract program) or use the 'for training only' plan at MWC website:
<http://med.uc.edu/eh/academics/training/mwc/exercise-resources>
- Review the ERG exercise at MWC website here: [http://med.uc.edu/docs/default-source/Environmental-Health/mwc/erg-performance-measure-facilitator-guide-\(2016\).pdf?sfvrsn=0](http://med.uc.edu/docs/default-source/Environmental-Health/mwc/erg-performance-measure-facilitator-guide-(2016).pdf?sfvrsn=0)

- Review the Hazard Recognition and Hazard Control sections of the 24IER participant and facilitator manuals at MWC website here:
<http://med.uc.edu/eh/academics/training/mwc/training-manuals>
- Review OSHA standard 1910.1000, Air Contaminants, where PELs are listed.
- Review 29CFR1010.120(q)(6)(i)(E)
- Assure you are familiar with the sampling equipment used for monitoring cited in any report of results used as a stimulus.
- Prepare agenda, exposure scenario and stimuli and class notes for this part of the refresher; put copy in the program file.
- Copy Worksheets from the ERG exercise for initial condition and each stimulus you will include.
- If using digital devices, assure there are enough with ERG already loaded so each participant has one. Some participants may choose to use their own smartphone or device instead. An internet connection will be needed for the download but not for use of the app once it is loaded.
- Proficient with download and navigation of ERG for all devices (Smartphone, iPad, Windows). Instructions are provided below.
- Assure that you have assembled all the materials needed for the exercise

Getting the ERG app

The ERG can be downloaded onto your device for free. Here are the websites for each device:

Android phone (at Google store):

<https://play.google.com/store/apps/details?id=gov.nih.nlm.erg2012&hl=en>

iPhone or iPad (at itunes):

<https://itunes.apple.com/us/app/erg-2016/id592158838?mt=8>

Windows (this will download the file from Department of Transportation):

<https://www.phmsa.dot.gov/hazmat/erg/erg2016-windows-software>

Note there is also a pdf version that can be opened on electronic devices. While you can scroll through the pdf fairly well on a computer, it is difficult on a smaller device like a tablet or phone. The app is much easier to use.

Minimum Content Requirements

The following are minimum content objectives for the Monitoring section:

- Review objectives
- Review ERG use
- Use ERG during a table top emergency response that includes changing conditions (training stimulus 1, 2, ...)

Questions You May be Asked

1. “We do not ever see the ERP”. Seeing it may not be needed, if the training is based on the plan, and drills support it. Be prepared to discuss the need to be able to implement the plan.
2. “The only time we train is this once-a-year-thing. Is that enough?” The annual training is required, but the format is flexible. The MWC is investigating if shorter training durations, spaced throughout the year, are better. The programs will add up to 8 hours, but may not all be in the same day.

Presentation of the Session

If using digital format, make sure everyone has a device with ERG loaded prior to the session.

This session can be presented as follows:

Review objectives

Review graphics of DOT placards and labels

Review the ERG

Tailor this review to the results of your reconnaissance.

As part of this review, include:

- Display Department of Transportation (DOT) placards and labels. Discuss the meaning of colors, words, symbols and numbers on the placards.

Ask participants for input so you can gauge the level of familiarity (confirm your reconnaissance).

- Select a DOT placard, and lead the class through identification of one chemical. Have the page numbers ready to give to the class. Tying in the discussion to an incident during the past year at the facility or in the area could make the discussion more interesting; summarize the Numbered Guide information—do not read it—or ask participants to provide one fact each.

Exercise—Use the ERG

The Exposure Scenario

Describe the exposure scenario to be used in the exercise.

A good exposure scenario includes the information on the Scenario Worksheet attached to this Facilitator Guide. Add other factors as appropriate.

Develop one or more stimuli that may change the response.

Provide the details of the scenario where everyone can see for quick reference during the exercise.

Distribute the ERG exercise Worksheets.

Facilitate a report back to assure that everyone has identified the correct information.

Describe the Response

Using the Emergency Response Plan or the 'For Training Only' Plan, each group will describe a response at the Operations level.

Facilitate a discussion based on differences in plans between the groups.

Introduce a Stimulus

Introduce Stimulus #1, and give each group a few minutes to determine how the information changes its response and ask them to complete a second worksheet (or update the first with a different color pen). Ask: How is your response affected?

Record response where everyone can see

Introduce Stimulus #2, and give each group a few minutes to determine how the information changes its response and ask them to complete a second worksheet (or update the first with a different color pen). Ask: How is your response affected?

Record response where everyone can see

Finally ask each group: What else would you have liked to know? And when?

Record response where everyone can see

Summary

Review the objectives.

Lead a discussion on how the stimuli changed response operations.

Ask: Based on this exercise, what takeaways do you have as you go back to work?

List them where everyone can see

Answer any remaining questions.

Follow-up

Make this exercise better:

Forward suggestions to UC

Are there other 'Questions you may be asked' that should be included?

Organize the listing of 'takeaways' and forward to your program director. These are very important impacts to report to NIEHS.

Exposure Scenario development worksheet			
Factor	Initial Condition	Stimulus #1	Stimulus #2
Weather conditions			
Topography			
Surrounding vegetation, Waterways, highways, drains			
Vulnerable populations in the area			
Time of event			
Mode(s) of Transportation Involved			
Exact location			
Hazardous material(s)			
Quantity released or release rate			
Quantity not initially released			
Fire?			
Incompatibles nearby			
PPE needed			
Air concentrations reported			