

ER Risk Management Plan Exercise

Background and Preparation

Background

The data shown on Worksheet 1 was developed over several years and shows consistently that efforts of trainers resulted in empowered workers who changed the workplace and transferred those new skills and knowledge to the home and neighborhood. This is a major achievement on the part of the trainers and has impressed a number of external reviewers and our advisory board. Additionally, we later followed that work up, by asking for specific examples of the changes made. This too was very informative, and showed in particular that workers took more time to think about the job and plan, before doing a task.

This data has been central to our successful competitive renewals for funding from the National Institute of Environmental Health Sciences (NIEHS). We proposed the following:

- Document impact of training by identifying changes in workplace practices and barriers to change
- Improve participants' abilities to implement change by designing, implementing and evaluating training modules to improve practices

The results provided support of our successful renewal applications. Our current work on resilience will result in empowered participants—that is the same goal as this exercise.

The activities in this exercise will result in workplace changes that reduce exposures. Many will be small changes, but every avoided or eliminated exposure benefits workers. Each success builds confidence that change can be made.

Preparation

See the listing “What you do next at the Training Center’ for what must be submitted to MWC.

Underscore to participants that we are evaluating the training program, not them or their employer.

This exercise will not be appropriate for all refresher programs – selection of when to use it is made at the training center.

Only one facilitator is necessary for this exercise. To maximize learning, the class size should be limited to no more than 24 participants.

This exercise is developed to be conducted as a discussion while completing three activities:

- Review of success in reducing risk after training and identifying opportunities for improvement
- Summarizing current ways of making suggestions and the overall focus on safety at the workplace
- Developing a plan to reduce risk and chart progress

Depending on the number of employers represented, some activities may be conducted as a full group of participants or as small groups. For participants from the same employer with the same goal, the plan may be developed as a group. For most emergency response teams, this will likely be a full group activity; report back will only apply when there are small groups.

For discussion note-taking to summarize experience and feedback of the participants, you may want to use paper (like large easel paper blocks) or Smartboard technology.

There are no lectures; rather the activities are conducted as discussions. The instructor’s role is to facilitate discussion, keep the exercise on track and ensure that questions are answered. The purpose of these activities is to encourage participants to use training to reduce risk at work.

If the group is small, it may be useful to organize the room as a large round or U shape to increase discussion. Additional arrangements may be needed if the plans are developed as small group activities.

In order to report the overall tallies of responses, it may be useful to keep track of feedback on a copy of the various tables, entering numbers rather than tick marks.

Agenda

Introduction	5 minutes
Activity 1	15 minutes
Activity 2	10 minutes
Activity 3	30 minutes
Closing	10 minutes

Note: These times are estimated minimums and could vary depending on engagement of participants. Activity 2 time is estimated based on a review/discussion, rather than small group activity and feedback.

Additional Facilitator Resources

Compliance Assistance Quick Start: General Industry

https://www.osha.gov/dcsp/compliance_assistance/quickstarts/general_industry/index.html

shows:

- Step 1: OSHA Requirements That Apply to Most General Industry Employers
- Step 2: OSHA Requirements That May Apply to Your Workplace
- Step 3: Survey Your Workplace for Additional Hazards
- Step 4: Develop a Comprehensive Jobsite Safety and Health Program
- Step 5: Train Your Employees
- Step 6: Recordkeeping, Reporting and Posting
- Step 7: Find Additional Compliance Assistance Information

Introduction

Refer to page 1 of the exercise. This provides the overall goals of the program.

Review the main points of the introduction:

- Previous participants have applied skills and knowledge at work and in the community
- Documentation of change and barriers to change is part of good training, so that training can be improved

Activity 1

Minimum Content Requirement

Worksheet 1: How Has Training Been Put into Practice?

Worksheet 2: Other Areas Where Training Could Be Put into Practice

Summary of discussion

- Retain group feedback on barriers to change (part of Worksheet 1)
- Retain group feedback on where training helped (part of Worksheet 1)
- Retain group feedback on specific observations during past year (1st part of Worksheet 2)
- Retain group feedback on could/should have been different (2nd part of Worksheet 2)
- Retain tally of summary (last part of Worksheet 2)

Teaching Method

- Group discussion
- Reference materials
- Evaluation forms used previously to generate ‘success’
- Questions you may be asked

Some participants may question why we are doing this. Ensure participants that we are evaluating **training**, not participants. NIEHS funds us to present ‘model’ or ‘cutting edge’ training that will be used in the workplace to reduce risk of exposure to hazards.

Some participants may be reluctant to share. Ask these participants if any of their friends or co-workers have shared relevant experiences with them from other employers or worksites. This will aid in stimulating discussion and may be less threatening.

Citing barriers at their workplace may be done with reluctance. Do not push. Any information shared is welcome to improve training.

Audio Visuals

- Easel or Smartboard

Special Space Requirements

- Space for everyone to see each other to facilitate discussion

Suggested Instructor Preparation

- See overview preparation
- Ensure copies of worksheets are available

Discussion

Hand out or refer to Worksheet 1: How Has Training Been Put into Practice?

Give participants a minute to look at the table.

Ask questions:

- *What would you tell your co-workers from the information in the table?*
- *What do you think about seeing nearly the same numbers in each year?*

Refer to the types of changes that were reported.

(The evaluation forms used to generate the information in the table and the summary data on ‘what you changed’ follow this Activity description.)

Ask participants to think about barriers to risk reduction that have existed at their workplace, and complete the table on page 2 of the Worksheet.

Give participants 5 minutes to complete the table ‘What have been the barriers to workplace...’

Ask: *How has training helped you and co-workers reduce hazards at work?*

If no one offers an example, continue to ask questions:

Have any of you done any of the actions reported by prior participants?

- What
- How
- Who helped you
- Who else benefitted
- Other outcomes

Has anyone asked you a question that you were able to answer because of training?

Have you used the NIOSH Pocket Guide?

Have you asked a question based on your training?

- What
- Who
- Did you use the information?

Complete the three parts of the “Using Training” table.

The best stories are those from participants. Any of these that you can write down will also be useful to the Consortium You may want to have an emergency response example as a back-up BUT it should be a last resort only.

Pass out or refer to Worksheet 2: Other Areas Where Training Could Be Put into Practice.

Introduce by asking participants to think back about the past year since the last refresher or initial training. Sometimes work practices are observed or other situations occur but cannot be dealt with at the time. This is a chance to recall activities or actions that might be selected for risk reduction.

Give participants 5 minutes to complete the first list with “yes/no/DR/NA”. Let everyone know there will be a discussion after the list is reviewed. When everyone has completed the list, use easel paper with each of the items listed on a separate sheet and ask for specific examples from the experience of the participants. Write the feedback on the easel paper; alternatively, participants can write on papers posted on the walls of the training site. Retain these lists as part of our data collection. Leave the sheets posted for the remainder of the exercise.

Now **ask**: *For the past year of work activities, did you think of anything that could/should have been done more safely?*

Refer to the examples shown on Worksheet 2 as needed.

Write feedback on easel paper, or if participants want to think about it, or work in small groups, there is space on the Worksheet to write examples.

Retain the listing of feedback. Leave the sheets (if using easel paper) posted for the remainder of the exercise. Save Smartboard postings.

Have each person complete the “Summary” table. If participants are comfortable with the questions, ask for a show of hands for each response (no recording of specifically what they identified). Retain the tally.

Resource for Facilitators: Evaluation form used to generate the table (shown on next page). This is the original data collection form. It is provided as background, in case you are asked about the original questions.

Activity 2

This part of the Exercise is designed to help participants organize information on current ways of making suggestions and their experience with using the existing system and to give some indication of the focus on safety at a response by rating support for use of safe work practices.

Minimum Content Requirement

- Worksheet 3: Current Practice for Suggestions and Emphasis on Safety and Health
- Summary of discussion
- Retain group feedback on suggestion methods
- Retain group feedback on feedback methods
- Retain group feedback on suggestion experience
- Retain tally of safety as part of routine

Teaching Method

- Group discussion

Reference Materials

- None

Questions you may be asked

Some participants may be reluctant to share what they perceive as negative feedback on their company. No one should feel that we are requiring them to provide information that they feel may jeopardize their standing at the company.

Audio Visuals

- Easel or Smartboard

Special Space Requirements

- Space for everyone to see each other to facilitate discussion

Suggested Instructor Preparation

- See overview preparation

Discussion

Distribute or ask participants to turn to Worksheet 3: Current Practice for Suggestions and Emphasis on Safety and Health.

Engage participants in discussion for 10 minutes to consider the issues in Worksheet 3. As time allows, this can be done as a small group activity; but with limited time, one overall tally of the worksheet may be completed by the Facilitator. If more time is available, participants can record individual or employer specifics. Participants will use this information later.

Facilitate a discussion, as appropriate.

- How many ticked each type of suggestion method?
- How is feedback received?
- What types of suggestions were made?
- What are barriers to suggestions?
- How much is safety routine an SOP?

This information will give you, as a trainer, a lot of guidance. For example, if there is no mechanism for input and support for safe work practices is low, those participants may be challenged to find something that they can plan to do. Examples in this situation might include:

- Ask that an SDS be included in a tool box meeting
- Document sharing of training information between workers and responders

When there is no mechanism, but high support for safety the participants might work on a formal suggestion and tracking method

When there is a method and high support for safety the participants are more likely to take on elements from the lists developed.

This information also provides a basis for understanding how much emphasis should be devoted to barriers in Activity 3.

Activity 3

Minimum Content Requirement

- Worksheet 4:
 - Developing a Plan to Reduce Risk
- Worksheet 5:
 - Plan (blank)
 - Plan (example, use as determined by facilitator)
- Summary of discussion
- Retain group feedback
 - on Goals by goal
 - on Reason
 - on Challenge/barrier
 - on Approach

Teaching Method

- Group discussion
- Small group discussion

Reference Materials

- www.whistleblowers.gov
- Other resources on OSHA website regarding whistleblower protection

Questions you may be asked

Some participants may be uncomfortable discussing barriers. Do not push them.

Exercise developers agreed that whistle blower protections should be included in discussion while working on Worksheet 4. Be prepared to discuss the pluses and cautions of the rule. See website above.

Audio Visuals

- Easel or Smartboard
- Worksheet 5 (blank) on a flash drive

Special Space Requirements

- Space for everyone to see each other to facilitate discussion

- Depending on participants and items identified as goals, may need areas for small groups

Suggested Instructor Preparation

- See overview preparation
- Ensure that you have copies of the Plan template and prepare an electronic version as appropriate.

Discussion

Distribute Worksheet 4: Developing a Plan to Reduce Risk. Start the activity by listing the goal. Have participants indicate their selected project(s).

Ask: *What are the reasons (root causes) that make this goal a priority for you?*

What would you want to have in a plan to achieve the goal?

Possible responses:

- Timeline
- Someone responsible for each step
- Completion of each step defined

Ask: *What tools or approaches do you have available?*

Ask: *What are the barriers to achieving the goal?*

Possible responses:

- Money
- Need to build support/participation
- Time

Ask: *What is a strategy to overcome [barrier] ?*

Possible responses:

- Enlist other responders
- Enlist a team member who is especially safety conscious, or the Safety Officer
- Scale back, and set a smaller goal

Distribute the blank Worksheet 5: Plan

Be prepared to provide the Plan template electronically to anyone who wants it. Use the example Worksheet 5, or one you develop for a specific group of participants, as appropriate.

Closing

Ask to copy each of the plans (Worksheet 5), and obtain a contact person for follow-back for each plan. Depending on the participants you may have a plan from a group at the same plant, or for the entire group (contract program). There is no one “model” plan – it depends on the participants and the goal. The exercise is to empower trainees to identify something that can be changed, document their impact (and barriers). Everyone should think outside the box, including for the format of the final Worksheet.

Ensure that everyone understands that there will be follow up to gather information on the use of the training, and provide better training to overcome barriers identified as plans are implemented. Explain that the contact will come from you or someone at the training center (local, not UC) soon after the expected completion date. You will ask:

- If the goal was achieved
- How the plan was altered
- What caused delays
- Barriers experienced and any approaches to resolve

What you do next at the training center?

Send the following to MWC.

Comments:

- Any aspects of the exercise—what works/what does not work
- Length of each activity (need to refine the agenda)
- Changes needed

Send Activity 1

- summary of discussion
- group feedback on barriers to change (part of Worksheet 1)
- group feedback on where training helped (part of Worksheet 1)
- group feedback on specific observations during past year (first part of Worksheet 2)
- group feedback on could/should have been different (second part of Worksheet 2)
- tally of summary (last part of Worksheet 2)

Send Activity 2

- summary of discussion
- summary of discussion (Worksheet 3)
- group feedback on suggestion methods
- group feedback on feedback methods
- group feedback on suggestion experience
- tally of safety as part of routine

Send Activity 3

- summary of discussion
- group feedback
- by goal (Worksheet 4)
- group feedback on root cause
- group feedback on challenge/barrier
- group feedback on approach
- Plan (copy of worksheet 5) with expected completion dates (but without name of the contact, or e-mail or phone numbers.)

Worksheet 1: How Has Training Been Put into Practice?

Reports from previous participants—Training increases health and safety

<i>In the past 12 months...</i>	<i>YR 1</i>	<i>YR2</i>	<i>YR3</i>	<i>YR4</i>
I changed my own work behavior to perform a task more safely	82%	80%	81%	81%
I became more aware of the health and safety hazards at work	91%	92%	90%	90%
I had a chance to practice some of the skills I learned in my health and safety training	79%	70%	74%	74%
I became more aware of the health hazards around my house or apartment	83%	82%	82%	82%
I talked with a relative or friend about a safer way to do things around the house or apartment	69%	62%	64%	67%

If your work experience is represented in the table, thank you.

Reports from previous participants – specific types of practices that were changed after training

We followed up in 2009-2010 and asked participants in refreshers that year to list examples of changes in personal work practices and in changes to help coworkers. These were grouped into types of ‘actions taken’. Specific examples included changes in:

- handling chemicals, confined space,
- ergonomics, lockout/tagout,
- use of PPE, improved work practices
- sharing knowledge with co-workers
- more time taken to plan before acting

We also asked what prevented participants from making changes. The following barriers were reported:

- lack of money
- lack of leadership support

If you took refresher training in 2009-2010, thanks for answering these follow up questions. The results have been used to show value of training to employers and add new topics to training.

What have been the barriers to workplace change for you?	Yes	No	N/A
Lack of money			
Lack of Management/Company support			
Lack of Employee/Union support			
Hazards not easily recognized			

Other:

Identifying areas for improvement and working toward improvement should reflect positively at work. Consistently trying to reduce risk is a goal for everyone—labor and management.

Safety pays—everyone should go home as healthy as they came to work!

ER Risk Management Plan Exercise – Worksheet 1

Using training: How has health and safety training helped you and co-workers reduce risk and make a safer and healthier place to work or your home a safer place?

What changes have you made as a result of training?	Yes	No	N/A
Improved the quality of responses to spills and/or releases			
Increased the quality of PPE used for spill response			
Increased the quantity of supplies used for emergency and/or spill response			
More effective PPE is now available for emergency and/or spill response			
Enhanced relationship with local emergency response partners			
Was responsible for improvement in one or more emergency/spill response plan			
Other: write in here			

How have non-responders benefitted from training provided?	Yes	No	N/A
Company purchased better equipment			
I have shared knowledge about hazards on the job with co-workers			
New knowledge helped co-workers avoided exposure to hazards			
We all take more time to plan before beginning a hazardous job			
Other: write in here			
How has your family benefitted from training you received?			
Developed an emergency evacuation plan for home			
Purchased one or more fire extinguishers at home			
Have safer chemical storage at home			
Read labels on household chemicals			
Other: write in here			

Worksheet 2: Other Areas Where Training Could Be Put into Practice

Think about your past year at work discuss the following in your group and record your answers.

Review the following actions/activities and complete the table. (For some items a few examples are given as guidance only. Do not feel restricted by the examples.)

During the past year have you....	Yes	No	Don't Recall	N/A
Observed a work practice that could have been done more safely? <u>Examples:</u> worked at heights without harness or rail used a vehicle in need of repair communication equipment not intrinsically safe				
Identified a tool that needed a repair? <u>Example:</u> pigs are leaking absorbent due to age				
Was overexposed to dust, gas or vapor?				
Exposed to a physical hazard? <u>Examples:</u> heat/cold, noise, confined space, fall, electrical, slip/trip, struck-by				
Discovered PPE was not ready for use (missing, dirty or torn)?				
Needed a resource to find information, but it was not available <u>Examples:</u> No cell service to access ERG				
Discussed a health and safety problem with team members <u>Example:</u> One of the team does not report torn PPE				
Had or observed a near-miss? <u>Example:</u> Someone almost hit by EMS driver going too fast				
Reviewed the Emergency Response Plan				

Please share your experience with the group.

ER Risk Management Plan Exercise – Worksheet 2

As a group, discuss activities observed during the year that could/should have been done differently at your workplaces? Here are some examples, but you may recall something not listed:

Example: We were working double shifts to accomplish a very difficult production schedule. A forklift operator was delivering product to the warehouse for immediate shipping. Chemical containers were left in an area usually free of storage, and one of the forklift operators used this ‘short cut’ route on the way to the warehouse at 3 a.m.; a 55-gallon drum was punctured, resulting in a lead of acid that went into a floor drain and forced evacuation of the immediate area.

Another example: The entry team stopped the leaking valve on a 400-gallon tote of acid. We found we did not have a chemically compatible pump, other than a small one gpm model, to transfer acid to another tote. During the 5-hour transfer operation, the patch came undone and we had to respond again.

As a group, list examples of activities that could/should have been done differently last year as part of a discussion, or in the spaces below:

Summary: complete the following table for your observations during the year:

Observation	Yes	No	Don't Recall
Identified something during an emergency response to a release/spill that should/could have been done differently?			

Worksheet 3: Current Practice for Suggestions and Emphasis on Safety and Health

How are suggestions for health and safety made at your workplace – for the team, and facility-wide (if at a fixed location)?

Suggestion method—for ERT	Yes	No	Don't Recall	N/A
Response team meetings				
Post-response debriefing/critique				
Team/Team leader discussions with Safety and Health representative				
Other (please fill in)				

Suggestion method—Plant wide, all employees, if applicable	Yes	No	Don't Recall	N/A
Suggestion Box				
Health and Safety Committee				
Tell the supervisor				
No way that I am aware of				
Other (please fill in) _____				

ER Risk Management Plan Exercise – Worksheet 3

If you answered “Yes” to any of the items above, how do you get feedback?

How do you get feedback?	Yes	No	Don't Recall	N/A
Periodic team meetings				
Drill to ensure we implement change, if needed				
Health and Safety Committee or Safety Officer input to team				
Team leader reports back				
Changes to written policies and procedures				
e-mail				
No way that I am aware of				
Other (please fill in) _____				

How do others in the facility get feedback?

How do others get feedback?	Yes	No	Don't Recall	N/A
Periodic safety meetings				
Drill to ensure we implement change, if needed				
Health and Safety Committee reports back to workers				
Changes to written procedures and policies				
e-mail				
No way that I am aware of				
Other (please fill in) _____				

ER Risk Management Plan Exercise – Worksheet 3

During the past year, my experience with making suggestions....	Yes	No	Don't Recall
I have made suggestions			

If yes, list some of the suggestions you have made below

- 1.
- 2.
- 3.

I have not made any suggestions, because...	Yes	No	Don't Recall
Nothing to suggest			
Thought the committee or Safety Officer would take care of it			
Takes too much time			
Not anonymous			
Nothing ever happens if you do make a suggestion			
Other (please fill in) _____			

How much is safety part of the routine where you work?

Rate each of the following:	Almost always	Usually	Sometimes	Rarely	Don't know
Team members expect me to use safe work practices					
Team members encourage me to use safe work practices					
If safe work practices are not used, we are told/shown the correct method					
Managers recognize that safety takes less time than an injury					
Chain-of-command/managers want to know about safer work practices					
We know we can pull back if a response action is unsafe to continue					

As appropriate, be prepared to report back from the small group to all participants.

Worksheet 4: Developing a Plan to Reduce Risk

Select a goal:

Goal	Selected (check only <u>one</u>)
Housekeeping in the equipment storage room	
Increase hazardous materials awareness training for all employees	
Update Performance Objectives for spill/response team	
Increase incentives for personnel on spill/release response team	
Personal protective equipment checked and inspected according to schedule	
Emergency alerting training for contractors	
Increase time to plan before starting response task	
Inform everyone of whistleblower policies	
Spill/release response equipment inventoried on routine schedule	
Response carts staged strategically throughout facility	
Other:	

Work in groups from the same employer, and the same goal, to formulate the plan.

Step 1. What are the reasons (root causes) that this goal needs work?

Reason it needs work	Yes	Not Applicable/ No
No one is really in charge of this		
Not enough time		
Supervisor wears too many hats		
Person who did it retired		
Not part of a written program or procedure		
Wrong or limited materials available		
Other:		

ER Risk Management Plan Exercise – Worksheet 4

Step 2. What are the strategies for overcoming challenges or barriers to achieving the goal?

Challenge/Barrier	Yes	Not Applicable/ No	Strategy to overcome challenge/barrier
Co-worker/team peer pressure			
Might get cut from the team			
Lack of top-level support for the team			
Pressure to respond too quickly			
Costs too much			
Other:			

Step 3. Determine an approach

How will you approach achieving this goal? – Select an approach (based on root cause(s), challenges/barriers and Worksheet 3: Current Practice for Suggestions and Emphasis on Safety and Health)

Approach	Selected (check as appropriate)
Use current practice	
Get support from team member(s)	
Go directly to Safety Officer	
Can implement myself	
Other: _____	

Example Worksheet 5: Build a Plan

Goal: Tape, gloves, boots were missing from the HazMat cart

Steps	Activity	Who 'owns'	Anticipated barriers and approach	Date to be completed	Reason for Delay	Date done
Step 1	Gather information. Who is taking care of the supplies? Team member? Other employees?	Team Leader	May take some time to observe	3 weeks		
Step 2	If a team, team leader deals with it in the team If other employee, Leader takes to management meeting	Team Leader	Management may be reluctant to follow-up; Team leader will have examples of types of injuries that could occur to team members, if these supplies are needed but found missing. Could result in additional costs for control/remediation.	4 weeks		
Finalize work plan and set deadlines for each additional step	Ensure routine cart inventory reports	As specified in ERP				
Report final results to coworkers	Next regular meeting	Team leader and inventory member				
Report results to Training Center	Team leader	Sam	May need a reminder	Aug 30	Needed reminder	Sept 15

Worksheet 5: Build a Plan

Goal: _____

Steps		Who 'owns'	Anticipated barriers and approach	Date to be completed	Reason for Delay	Date done
Step 1						
Step 2						
Additional step						
Additional step						
Report final results to team, coworkers						
Report results to Training Center						