

SUPERVISOR'S GUIDE
TO
FIELD LEVEL
RISK
ASSESSMENT
PART ONE: SELF STUDY
TRAINING

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Construction Owners Association of Alberta, 1998

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INTRODUCTION

Field Level Risk Assessment Training for Supervisors

Part 1 –“Supervisor’s Guide to Field Level Risk Assessment: Self -Study Training” (this document)

The purpose of this training is to fully acquaint you with Field Level Risk Assessment. It will help you develop the understanding and skill that you need to use Field Level Risk Assessment and teach it to others. This package can be used by anyone who would like to learn more about Field Level Risk Assessment.

Part 2 – “Supervisor’s Guide to Field Level Risk Assessment – Training Others”

This includes a description of the training, how to prepare to train others in Field Level Risk Assessment, specific lesson plans for delivering the training, how to customize the training, and some tips on how to deliver effective training.

Additional Tools for Use in Doing Field Level Risk Assessment:

The following tools have been developed to assist in doing Field Level Risk Assessment

- The **“Memory Jogger”**
- The **Risk Assessment Matrix**
- The **Field Level Risk Assessment Form**

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COURSE DESCRIPTION

Purpose

To provide you with the knowledge and skills you will need to use Field Level Risk Assessment in your daily work with your crews and to deliver training in Field Level Risk Assessment.

Objectives

After completing this self study training you will be able to:

1. Describe why Field Level Risk Assessment is needed to improve worker health and safety, work effectiveness and company profitability.
2. Describe how Field Level Risk Assessment helps employers and workers fulfill the requirements of the occupational health and safety legislation.
3. Describe what Field Level Risk Assessment is, when it is done, and who does it.
4. Describe the process steps for doing Field Level Risk Assessment.
5. Identify the steps of a job and identify the hazards linked to each job step.
6. Assess the risks linked to the hazards identified in a job using the Risk Assessment Matrix.
7. Identify appropriate controls to put in place, to reduce risk to an acceptable level.
8. Use a form to record Field Level Risk Assessment discussions.
9. Make plans for using Field Level Risk Assessment with your crew on a daily basis.
10. List the benefits that the company and workers experience through using Field Level Risk Assessment.

About This Course

This course is divided into sections. Each section begins with a Learning Objective. The Learning Objective will tell you what you are expected to know or be able to do at the end of the section. There are questions at the end of each section. The questions will relate to the learning objective. The content of the section will give you the information and skill practice that you need to answer the questions.

Most of the questions have “right” answers, others have “best” answers and some are “your opinion” questions. Your opinion questions will help you to think about your own situation. The answers to the questions are given to you to help you check your learning.

SECTION 1: THE PROBLEM

Learning Objective:

Describe why Field Level Risk Assessment is needed to improve worker health and safety, work effectiveness and company profitability.

Some Facts

1. The construction industry has the highest rate of injury accidents of all industries in Alberta.
2. Injury accidents are just one kind of work site incident. Incidents include unplanned events that may or may not result in undesirable consequences.
3. The **real cost** of incidents includes the following:
 - equipment damage
 - environmental damage
 - lost work time
 - higher WCB premiums
 - poor reliability resulting in bad public relations
 - low morale
4. The cost of incidents in your company may be higher than you think. In one Alberta company the direct costs alone for a 15-month period were estimated to be:

• Critical incidents:	2 = \$1,000,000
• Major incidents	57 = \$7,647,735
• Serious incidents	79 = \$1,642,200
• Other incidents	223=\$386,800
TOTAL	\$11,581,535
5. Companies use a variety of methods to reduce incidents and improve worker safety. These include Hazop, Job Safety Analysis, safe work procedures, Failure Modes and Effect Analysis (FMEA) etc. These are applied before a job is started to “build in” safety.
6. There is information that cannot be considered in these planning methods. Information from the job site and the changes that occur as the work is done must also be used to ensure worker safety. When this information is ignored incidents occur.

7. Many incidents could be avoided if workers stopped to think about the hazards that are part of doing the work under the conditions found at the site. Workers could then assess the risks of these hazards and put effective controls in place.
8. Reducing or eliminating hazards and controlling risk is an effective way of improving the way work is done. Work methods can become more reliable and crews become more productive. There is a direct positive impact on worker morale and company profits from these improvements.

Section 1: The Problem – Questions

1. Why is a method of risk assessment required at the field level?

2. How would using a method of field level assessment of risks improve the results that your crew delivers?

Turn the page for the answers.

Answers

1. Other planning methods like Job Safety Analysis do not use information about current job site conditions. When workers use information from other safety and planning methods **and** information about the current work conditions to think about hazards and risks, and put controls in place, they protect themselves and company property from accident or injury.
2. This is a “your opinion “ question. You may have said:
 - Your crew would have better morale.
 - There would be less emotional “down time” because of accidents.
 - Your crew would get more done because less time would be lost due to incidents.
 - Your safety record would improve.
 - There may be fewer equipment problems and damage.
 - Your crew would save time because no one has to fill in for an injured worker.
 - Equipment down time would be reduced or eliminated.

SECTION 2: OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

Learning Objective

Describe how Field Level Risk Assessment helps employers and workers fulfill the requirements of occupational health and safety legislation.

Responsibilities Defined in the Act

Employer Responsibilities

2(1) Every employer shall ensure, as far as it is reasonably practicable for him to do so,

(a) the health and safety of

- workers engaged in the work of that employer, and
- those workers not engaged in the work of that employer but present at the work site at which that work is being carried out, and

(b) that the workers engaged in the work of that employer are aware of their responsibilities and duties under this Act and the regulations.

Worker Responsibilities

(2) Every worker shall, while engaged in an occupation,

(a) take responsible care to protect the health and safety of himself and of other workers present while he is working, and

(b) co-operate with his employer for the purpose of protecting the health and safety of

- himself,
- other workers engaged in the work of the employer, and
- other workers not engaged in the work of that employer but present at the work site at which that work is being carried out.

Safety is everyone's responsibility. Both employers and workers are required by law to do all that is reasonably possible to protect the health and safety of everyone on the work site. Field Level Risk Assessment provides a way that both workers and employers can take action on this responsibility. It helps everyone to be responsible for what happens on the work site.

Section 2: Occupational Health and Safety
Regulations - Questions

1. As a supervisor what is your responsibility as a representative of the employer?

2. What are the responsibilities that workers have in the legislation?

3. How would a method of assessing risk at the field level help to take action on these legal responsibilities?

Answers

1. To take every reasonable and possible action to ensure that workers are safe.
2. To take care to ensure their own safety and the safety of others.
3. Taking responsibility for assessing risk and taking action to control risk is a good way to fulfill the legal responsibilities to work safely.

SECTION 3: FIELD LEVEL RISK ASSESSMENT DESCRIBED

Learning Objective

Describe what Field Level Risk Assessment is, when it is done, and who does it.

What is Field Level Risk Assessment?

1. A Part of Your Company's Safety Program

There are many ways of improving safety at work. Many companies have programs that build in safety. These include Job Safety Analysis, Hazop, Failure Modes and Effect Analysis (FMEA), development of work procedures, etc. These methods may be developed before workers arrive at the job site. They change how work is planned and direct how work is to be done. Field Level Risk Assessment is used at the work site during construction. It uses information from the other company safety, risk assessment and planning processes and adds information about conditions at the actual time and location of the construction.

2. An Assessment of Risks at the Job Site

Crews and individual workers do Field Level Risk Assessment before they do work on the job site. They use information that they have been given about the work, how to do it safely and then add information from the job site that day. They think about each job step and identify possible hazards. They assess risk in relation to each job step. They identify ways of controlling the risk and put these controls in place.

3. A Team Discussion and Individual Mental Process

The supervisor leads a discussion about the risks and records the crew's assessment on a form designed for that purpose. The workers do their own risk assessment as they work. Before taking any action, a worker stops and thinks about the hazards, the risks and the controls.

When Do You Do Field Level Risk Assessment?

Workers and Crews do Field Level Risk Assessment:

Any time there is a **change** that affects our work or someone else's:

- At the beginning of a new job or a new shift
- When new workers come on site
- When the information about the work changes (e.g. changed plans, unexpected characteristics of the task such as the configuration of equipment)
- Whenever conditions on the job site change (e.g. weather, availability of tools, etc.)

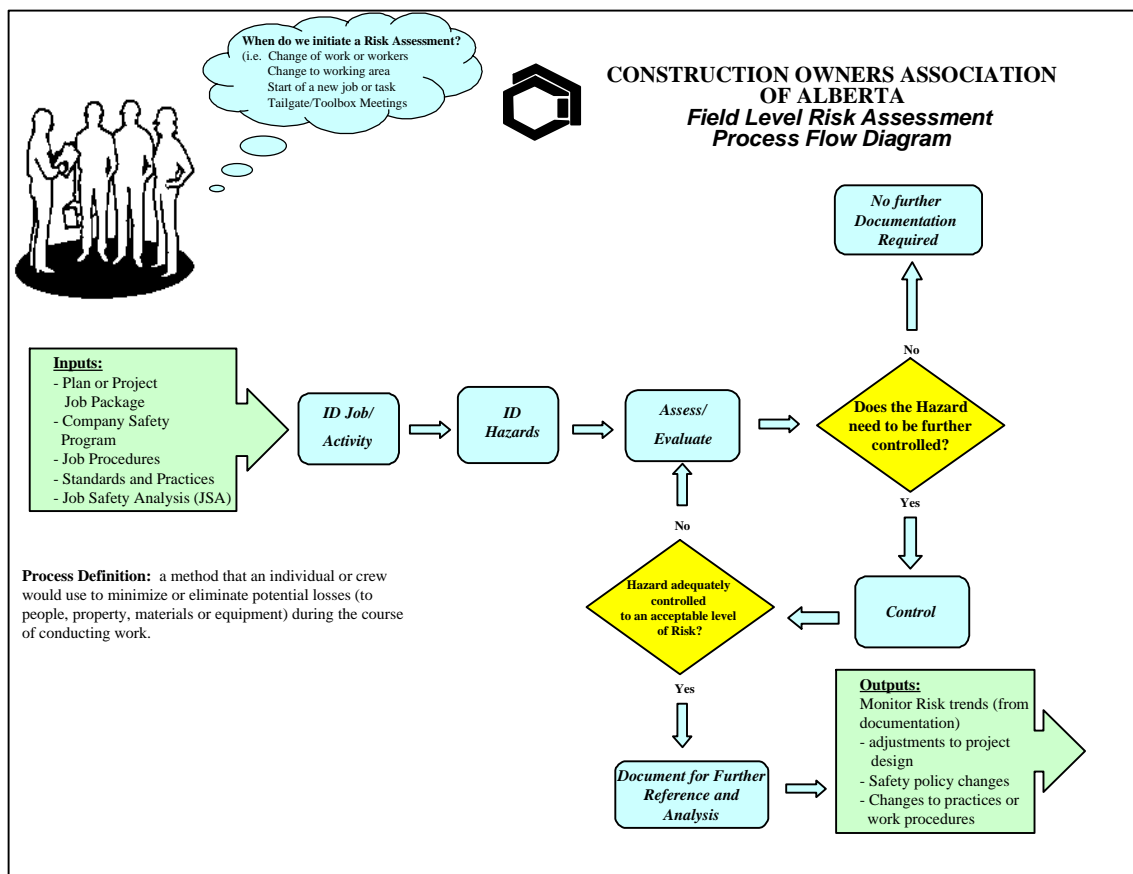
Field Level Risk Assessment Process

Supervisors use **INPUTS** like the project plan, the company safety program, job procedures, and job safety analysis to ensure worker health and safety. They use immediate information about the actual work location to **prepare** for a discussion.

Supervisors lead a discussion with crews to **IDENTIFY** the job steps and **IDENTIFY HAZARDS** associated with **each job step**. Together, supervisors and workers **ASSESS the RISKS** of those hazards using the Risk Assessment Matrix. They **IDENTIFY CONTROLS** that reduce the risk to an acceptable level. For those risks that are not adequately controlled, further control measures are used.

Supervisors **RECORD** the risk assessment discussion. The record is used to identify effective ways to improve the way work is done to increase safety.

Field Level Risk Assessment is done every time conditions, workers or plans change. Crews do Field Level Risk Assessment as a team activity with their supervisor. Workers do the same steps as a habitual mental process as they work.



**Section 3: What is Field Level Risk Assessment -
Questions**

1. How does Field Level Risk Assessment fit into a company's safety program?

2. How is Field Level Risk Assessment a mental process?

3. How is Field Level Risk Assessment a team problem solving process?

4. When is Field Level Risk Assessment done?

5. What are the three central steps in Field Level Risk Assessment?

Answers

1. It uses information from other safety, planning and risk assessment programs and adds field level information about current conditions.
2. Supervisors do Field Level Risk Assessment mentally before leading a discussion with their crew. Individual workers do a mental Field Level Risk Assessment before doing each step of a job.
3. Crews discuss the job, do a risk assessment, and develop controls together before doing work.
4. Anytime there is a change: a change in plans, a change in conditions, a new shift, new workers on site, etc.
5. Identify hazards for each job step, assess level of risk, and identify controls.

SECTION 4: STEPS OF FIELD LEVEL RISK ASSESSMENT

Learning Objective

Describe the process steps for doing Field Level Risk Assessment.

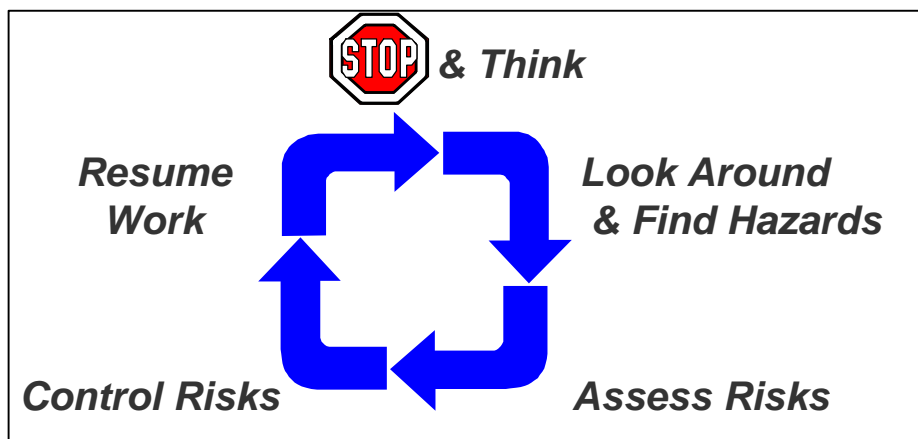
The Process You Do

Whether you are doing a Field Level Risk Assessment as a crew discussion or as a mental activity while you are working, the steps are the same. For **each job step** you:

1. STOP and Think
2. Look Around and Find Hazards
3. Assess Risks
4. Control Risks
5. Resume Work

These are the steps in the process of Field Level Risk Assessment. They are used in crew discussions and used mentally by individuals.

The first step: “Stop and Think” is perhaps the most difficult. Getting the job done, especially one that is familiar is something that a good worker does naturally. Stopping and thinking before doing a task that is very familiar is often difficult. It requires breaking the habit of just “getting to it” and replacing it with **thinking first** about what could happen given the **current situation**. This is a **critical responsibility** of a supervisor.



“Look Around and Find Hazards” is done for **each step of the job**. It can include identifying both the hazards that are part of this kind of work and also hazards that are there because of the specific conditions that exist on the job site.

“Assessing the Risks” is done for **each hazard** that is identified. The hazards are considered in light of how serious the consequences of the incident would be and how likely it is that an incident would occur.

Action is taken to “Control the Risk” for those hazards that present **unacceptable risk**.

NOTE: Each of these steps is dealt with separately in the sections that follow.

Section 4: Steps in Field Level Risk Assessment - Questions

Questions

1. What is the first and often most difficult step to do?

2. Why is the first step difficult to do?

3. What is done for each job step?

Answers

1. It requires stopping and thinking before doing well-known tasks.
2. It is difficult because the action we are going to take is a habit. Thinking about it is not.
3. Identify hazards, assess the risk of each hazard, and identify and put in place controls for each job steps.

SECTION 5: HOW TO IDENTIFY HAZARDS

Learning Objective

Identify the steps of a job and identify the hazards linked to each job step.

1. Stop and Think

- Use the information from safe work planning, safe work procedures, other company programs and years of experience working to identify the hazards inherent in doing the work.
- List the steps to be taken in doing the job. These are the groups of activities that must be taken to complete a job.

Example: Job steps to replace a fluorescent lamp in a busy, poorly lit hallway.

1. Acquire replacement lamp(s), bulb(s) or tube(s) and equipment to do the job
2. Locate fixture with burnt out lighting
3. Gain access to the lighting fixture
4. Turn off the lamp
5. Remove the fixture cover if present
6. Remove the defective lamp (bulb or tube)
7. Install the new lamp (bulb or tube)
8. Replace the fixture cover
9. Turn on the lamp to test it
10. Dispose of the defective lamp

Questions to ask (Note: These questions are on the back of the “Memory Jogger”)

1. Do I clearly understand the steps to this job?
 - What exact job will I do, and what specific job steps does it involve?
2. Am I physically and mentally prepared to do each job step?
 - Am I strong enough to do each of the steps involved in this job?
 - Do I know how to do each step safely?

2. Identify Hazards

- Consider what hazards are linked with each job step. Consider anything that could cause harm to people, property, materials, or the environment.
- Consider: weights, heights, trenches, heat, cold, electricity, explosions, fires, radioactivity, chemicals (liquid, vapour), noise, muscle strains, microbes, sharp objects, vibrations, stress, falling, equipment, etc.

Example: Hazards linked to replacing a fluorescent lamp in a busy and poorly lit hallway

1. Working at elevation
2. Dust disturbance (eyes and breathing)
3. Electrical hazard
4. Breaking glass (lamp and fixture cover)
5. Other workers or traffic below
6. Eye and muscle strain from poor lighting

Note: Some hazards are there because of the nature of the job, e.g. electrical hazard. Some are there because of the specific location where this work is being done i.e. poorly lit and busy hallway. These conditions may not have been predicted.

Questions to ask (Note: These questions are on the back of the “Memory Jogger”)

1. What could go wrong?
 - What could upset my plan for each job step?
2. Is there any danger to myself or others? (any potential danger is a hazard)
 - To equipment?
 - To the environment?
3. What could change and create a new hazard?
 - What could interfere with how I have planned to do the job safely?
4. Could other crews, workers, or conditions pose hazards to me?
 - Will others go through the same mental process and control their hazards?
 - Will their work cause a hazard to me?

Section 5: How to Identify Hazard - Questions

Questions

1. What do you stop and think about before doing a job?

2. What is a hazard? Give some examples.

3. Use the following facts to identify the job steps required to complete this job. Identify the hazards linked to these job steps.

“ You are supervising a crew that is unloading cable from a picker truck flatbed. You require the cable to be on the third level of a building that is in the early stages of construction. There are three people on your crew: a crane operator, a rigger and yourself. There are other workers on site, some of whom are using noisy power tools. Another group is involved in trenching activities nearby.”

- (a) What are the steps required to complete this job?

- (b) What are the hazards linked to these job steps?

Answers

1. The steps required to do the job and the hazards linked to each job step.
2. Anything that would cause harm to people, equipment or the environment, e.g. weights, heights, trenches, heat, cold, electricity, explosions, fires, radioactivity, chemicals (liquid, gas), noise, muscle strains, microbes, sharp objects, vibrations, stress, falling, equipment, etc.
- 3.

(a) Job Steps	(b) Hazards
1. Position the truck	<ul style="list-style-type: none"> • Traffic flow • Swing angles given the location of trenching and the structure itself
2. Attach the cable reels on the sling	<ul style="list-style-type: none"> • Pinch points • Cuts from handling the cable • Failure of the sling cable • Load falling due to improper use of sling • Noise interrupting communication between operator and rigger
3. Connect the tag line	<ul style="list-style-type: none"> • Pinch points
4. Lift the reels to the third level	<ul style="list-style-type: none"> • Pinch points • Cuts from handling the cable • Noise interrupting communication between operator and rigger
5. Remove the reels from the sling	<ul style="list-style-type: none"> • Noise interrupting communication between operator and rigger • Slipping/ rolling of reels

SECTION 6: HOW TO ASSESS RISKS

Learning Objective

Assess the risks linked to the hazards identified in a job using the Risk Assessment Matrix.

Making the Assessment

Factors in Risk Assessment

For each hazard an assessment is needed to find out what the level of risk is. The level of risk includes: (1) how **serious** the consequences of a hazard would be and (2) how **likely** it is to occur.

Questions to ask (Note: These questions are on the back of the “Memory Jogger”)

1. How serious could this be?
 - Could it cause someone to break a bone, be injured? Cause death?
 - Cause damage to equipment?
 - Contaminate the soil or the air?
 - Slow down work?
 - What could go wrong as a result of this hazard?

2. How likely is it to happen?
 - Is it almost certain to happen?
 - Likely to happen?
 - Not very likely?
 - Almost impossible?

A Tool To Use

The **RISK ASSESSMENT MATRIX** will help you assess the level of risk. “Seriousness” is called the consequences. “Likelihood “ is called the probability.

What action you decide to take to control the risk presented by each hazard will depend upon the level of risk.

RISK= Consequences X Probability

Risk Assessment Matrix

Consequences: High - Serious; Medium - Moderate; Low - Minor
Probability: High - Often; Medium - Sometimes; Low - Rarely

RISK = CONSEQUENCES X PROBABILITY

		PROBABILITY		
		High	Med.	Low
CONSEQUENCES	High	H	H	M
	Med.	H	M	L
	Low	M	L	L

Find the code for the consequence along the left side and code for the probability along top of the Risk Assessment Matrix. Draw a mental line across the diagram from the consequences code and down the diagram from the probability code. The point where they meet is the code for the assessment of the risk associated with the particular hazard. The outcome of the risk assessment will help to determine the most appropriate kind of control to use.

Example: Replacing a Fluorescent bulb in a busy hallway

Hazard	Consequence	Probability	Risk
Falls from elevation	Serious (H)	Sometimes (M)	High
Dust inhalation or in eyes	Minor (L)	Often (H)	Medium
Electrical Shock	Serious (H)	Rarely (L)	Medium
Cuts from broken glass	Moderate (M)	Sometimes (M)	Medium
Traffic bumping ladder	Serious (H)	Sometimes (M)	High
Eye and muscle strain	Moderate (M)	Often (H)	High

Using the matrix, falls from elevation, traffic bumping ladder and eye and muscle strain have a high risk of resulting in injury. The other hazards represent a medium level of risk.

Section 6: Assess Risks - Questions

Questions

1. What are the two factors that you consider in assessing risk?

2. How do you use the Risk Assessment Matrix?

3. Use the answer for Question #3, Section 5 – Identify Hazards to assess the level of risk associated with each hazard identified. The situation is:

“You are supervising a crew that is unloading cable from a picker truck flatbed. You require the cable to be on the third level of a building that is in the early stages of construction. There are three people on your crew: a crane operator, a rigger and yourself. There are other workers on site, some of whom are using noisy power tools. Another group is involved in trenching activities nearby.”

Hazards	Consequence	Probability	Risk
Pinch points			
Cuts etc from handling the cable			
Load falling due to improper use of sling			
Swing angles given the location of trenching and the structure itself			
Rolling and slipping of reel			
Noise interrupting communication between operator and rigger			

Answers

1. Seriousness (Consequences), Likelihood (Probability)
2. For each hazard, assess how serious the consequences would be (high-serious, medium-moderate, low–minor). Assess how probable the hazard (high-often, medium-sometimes, low-rarely). Find where the two assessments intersect on the matrix.

Hazards	Consequence	Probability	Risk
Pinch points	High (Serious)	Medium (Sometimes)	High
Cuts etc from handling the cable	High (Serious)	Medium (Sometimes)	High
Load falling due to improper use of sling	Low (Minor)	High (Often)	Medium
Swing angles given the location of trenching and the structure itself	Low (Minor)	Medium (Sometimes)	Low
Rolling and slipping of reel			
Noise interrupting communication between operator and rigger	Medium (Moderate)	High (Often)	High

SECTION 7: HOW TO CONTROL RISKS

Learning Objective

Identify appropriate controls to put in place, to reduce risk to an acceptable level

Identify Appropriate Controls

1. Hazard controls need to be appropriate to the level of risk. High risks need very tight controls.
2. Appropriate controls must be put in place before work can proceed.
3. There are some hazards that require specific expertise to identify or apply the appropriate controls. In these situations, supervisors or workers need to stop the task until the needed expertise is applied e.g. air quality test done by occupational hygienist, process equipment isolation by designated site representative.
4. There are three types of controls. These are:
 - **Engineering controls**, e.g. elimination, substitution, guards, process enclosures, automatic shutdown devices, ventilation, and communication devices.
 - **Administrative controls**, e.g. permits, procedures, communication, training and education and work scheduling to minimize the number of workers exposed.
 - **Personal Protective Equipment** e.g. fall protection, ear plugs and safety goggles.
5. It may be necessary to stop work and get help if you can't control the risk.

Questions to ask (Note: These questions are on the back of the “Memory Jogger”)

1. Are permits, written practices, procedures, or work scheduling to reduce number of workers required? e.g. administrative controls
 - Take immediate steps to do this.
2. What can I do to control the hazard?
 - Do I know how to put a control in place for this hazard?
 - Do I know all the required steps in the procedure, code of practice, permit, job plan etc.?
 - Are there any other controls that I think are needed? e.g. personal protective equipment (fall protection, ear plugs, safety goggles etc.), engineering controls (guards, automatic shutdown devices, enclosures, ventilation)
3. Will the controls affect any other part of the job?
 - Does the control introduce a new hazard (e.g. exhaust from a heater when it is cold)

4. Do I need to tell anyone else?
 - Is there anyone else who could be affected by these controls?
 - Is there a need to coordinate work being done by more than one person?

5. Are emergency plans needed?
 - If the identified hazard has a high overall risk, emergency procedures may be needed.

6. Is there someone that I could call to help?
 - Who has the knowledge and skill to help me?

Example: Replacing a Fluorescent Bulb

Hazard	Consequence	Probability	Risk
Falls from elevation	Moderate to serious (medium to high)	Sometimes (medium)	High
Dust inhalation or in eyes	Minor (low)	Often (high)	Medium
Electrical Shock	Serious (high)	Rarely (low)	Medium
Cuts from broken glass	Moderate (Medium)	Sometimes (medium)	Medium
Traffic bumping ladder	Serious (high)	Sometimes (medium)	High
Eye and muscle strain	Moderate (medium)	Often (high)	High

Controls to address risk:

- Second person on job to steady ladders, control traffic and hand tools
- Housekeeping (clean up dust)
- Electrical isolation of light fixture
- PPE...Hard-hat, gloves, goggles, dust mask if necessary
- Warning signs or traffic pylons
- Portable light source

Note that the last control, may create additional hazards that must be controlled. Every control measure has to be thought about to figure out if it might cause an additional hazard.

Section 7: Control Risks - Questions

Questions

1. Name the three kinds of controls and give an example of each.

2. What level of risk requires controls?

3. Given the hazards in the “moving cable” case study what controls should be put in place?

Hazards	Risk	Control
Pinch points		
Cuts etc from handling the cable		
Load falling due to improper use of sling		
Swing angles given the location of trenching and the structure itself		
Noise interrupting communication between operator and rigger		

Answers

1.
 - **Engineering controls.** These are such things as guards, substitution, elimination, process enclosures, automatic shutdown devices and ventilation and communication devices.
 - **Administrative controls.** These are such things as permits, procedures, and work scheduling to minimize the number of workers exposed.
 - **Personal Protective Equipment.** These are items such as fall protection, ear plugs and safety goggles.

2. All risks need to be controlled. The higher the risk the greater the need for controls. hazards

- 3.

Hazards	Risk	Control
Pinch points	High	<ul style="list-style-type: none"> • Communication between operator and rigger • PPE - Gloves
Cuts etc from handling the cable	High	<ul style="list-style-type: none"> • PPE – Gloves
Load falling due to improper use of sling	Medium	<ul style="list-style-type: none"> • Check specifications of sling and crane
Swing angles given the location of trenching and the structure itself	Low	<ul style="list-style-type: none"> • Proper positioning of the truck
Rolling and slipping of reel		<ul style="list-style-type: none"> •
Noise interrupting communication between operator and rigger	High	<ul style="list-style-type: none"> • Use radio for communication • Ensure proper hand signals

SECTION 8: FILLING IN THE FORM

Learning Objective

Use a form to record Field Level Risk Assessment discussions.

Recording Field Level Risk Assessment Discussions

Reasons for Recording Discussions

1. Writing down job steps, hazards, risk assessment and controls forces better thinking.
2. The information can be reviewed to identify if work methods need to be improved to build in controls for hazards.
3. If an incident occurs there will be a record to use in the investigation.

How to Record Discussions

The Construction Owners Association of Alberta has developed a form that can be used to record Field Level Risk Assessment discussions. It is straightforward and uses the basic steps of the Field Level Risk Assessment process. There is a copy of this form on the following page and an example of a form that has been filled in. The example uses the “Changing a Fluorescent Lamp” example.

How to Fill in the Form :

1. This is done at the start of every shift, when new people come on the work site, and when conditions or plans change.
2. The supervisor/ foreman usually fills it in. Whoever fills it in should sign the bottom of the form.
3. The assessment should deal with work that is to be done that day. The assessment should not cover work that will be done another day. Field Level Risk Assessment focuses on current conditions.

4. **Step 1: Identify Main Job Tasks.** The list of job steps should include every step at a reasonable level of detail. The purpose is to identify hazards, not to do a detailed work analysis.
5. **Step 2: Identify Hazards.** Identify and list the hazards in the same order as the job steps. You should be able to see how the hazards relate to the job steps. Consider hazards that relate to the health and safety of workers, to equipment and to the environment.
6. **Remember** Field Level Risk Assessment does not replace all safe work planning. This form is not a place to repeat all the hazards that are inherent in doing the work. These hazards should have been dealt with in the normal safe work planning. **Record the hazards that are there because of the current work site situation and conditions. Record the hazards that have not been discussed and for which controls have not been put in place.**
7. **Step 3: Assess Risk.** Assess the risk of each hazard using the Risk Assessment Matrix. Determine the seriousness of the consequences and the probability that the hazard will result in an incident. Record the assessment as high, medium or low for **each hazard**. List those hazards for which controls will be put in place. Describe the controls. Assign people to put the controls in place. Determine who has the expertise to check the controls. Record these names in the **By Whom** and **Reviewed By** space.
8. If **Follow-up** is required to ensure the controls are adequate or there is a suggestion that permanently controls a recurring hazard, record these actions in the space for "Follow-up Required". If the process identifies a required change to the procedures, this should be noted, so the reviewer can initiate the change.
9. Whoever completes the form (e.g. supervisor, foreman) signs the **Completed By** line.
10. A person assigned by the company to review the forms should sign the **Supervisor/Leader Review** line.

FIELD LEVEL RISK ASSESSMENT			
DATE: _____		PROJECT NAME: _____	
LOCATION: _____		COMPANY: _____	
STEP 1 – IDENTIFY MAIN JOB TASKS	STEP 2 – IDENTIFY HAZARDS	STEP 3 – ASSESS RISK (RISK = CONSEQUENCE X PROBABILITY)	
STEP 4 – CONTROL RISKS			
HAZARD	WHAT CONTROL	BY WHOM	WHO CHECKED
FOLLOW-UP REQUIRED			
COMPLETED BY: _____		SUP/LEADER REVIEW: _____	

FIELD LEVEL RISK ASSESSMENT			
DATE: <u>November 20, 1999</u>		PROJECT NAME: <u>Changing a Fluorescent Lamp</u>	
LOCATION: <u>5th Floor, 10535- 105 Street, Edmonton</u>		COMPANY: <u>ABC Power</u>	
STEP 1 – IDENTIFY MAIN JOB TASKS	STEP 2 – IDENTIFY HAZARDS	STEP 3 – ASSESS RISK (RISK = CONSEQUENCE X PROBABILITY)	
Get Bulbs			
Locate fixture	Working at elevation Dust disturbance(yes/lungs)	Sometimes/serious = high Often/ minor= medium	
Gain access to lighting fixture Remove fixture cover if present	Electrical hazard Breaking glass	Rarely/serious =medium Sometimes/ moderate = medium	
Remove defective lamp Install new lamp	Dropping stuff on others Other workers or traffic below	Sometimes/ moderate = medium Sometimes/moderate = medium	
Replace fixture cover Dispose of defective lamp	Traffic bumping ladder Eye and muscle strain	Sometimes/ serious = high Often/ Moderate = high	
STEP 4 – CONTROL RISK			
HAZARD	WHAT CONTROL	BY WHOM	WHO CHECKED
Traffic	Warning signs or traffic pylons	Self	Self
Working at Elevation	Second person on the job to steady ladder ,control traffic and hand tools	George Wilkey	Self
Electrical hazard	Electrical isolation of light fixture	Self	Self
Dust Broken Glass	PPE – hard hat, gloves, dust mask if necessary, clean dust	Self and George	Self
Eye and muscle strain	Use portable light	George	Self
FOLLOW-UP REQUIRED			
None required.			
COMPLETED BY: <u>Hans Griffin</u>		SUP/LEADER REVIEW: <u>Jim Jones</u>	

Section 8: Filling in the Form - Questions

Questions

1. Name three reasons why it is important to document Field Level Risk Assessment Discussions.

2. Complete a Field Level Risk Assessment Form for the “moving cable” case study. Use the form on page 37.

Answers

1.
 - Writing down job steps, hazards, risk assessment and controls forces better thinking.
 - The information can be reviewed to identify if work methods need to be improved to build in controls for reoccurring hazards.
 - If an incident occurs there will be a record to use in the investigation.

2. The answer is recorded on the form that follows the blank form. Note that hazards have not been included that would be a hazard on any site, i.e. cuts from the cable. You do not have to include such information on the form. Only those hazards relating to the specific conditions on the work site are required. Other hazards such as the cable failing are issues that must be thought about. The failure of the cable relates to specific conditions on the work site as well as being a usual hazard of the job. Your judgement is required to decide what goes on the form as a “day of the job” hazard and what has already been covered in safe work planning and established procedure.

FIELD LEVEL RISK ASSESSMENT			
DATE: _____		PROJECT NAME: _____	
LOCATION: _____		COMPANY: _____	
STEP 1 – IDENTIFY MAIN JOB TASKS	STEP 2 – IDENTIFY HAZARDS	STEP 3 – ASSESS RISK (RISK = CONSEQUENCE X PROBABILITY)	
STEP 4 – CONTROL RISKS			
HAZARD	WHAT CONTROL	BY WHOM	WHO CHECKED
FOLLOW-UP REQUIRED			
COMPLETED BY: _____		SUP/LEADER REVIEW: _____	

ANSWER

FIELD LEVEL RISK ASSESSMENT			
DATE: <u>July 29, 1999</u>		PROJECT NAME: <u>Moving Cable</u>	
LOCATION: <u>1223 Rivera Rd.</u>		COMPANY: <u>Sand Blasters Inc.</u>	
STEP 1 – IDENTIFY MAIN JOB TASKS	STEP 2 – IDENTIFY HAZARDS	STEP 3 – ASSESS RISK (RISK = CONSEQUENCE X PROBABILITY)	
Position the truck	Traffic flow/other people, Swing angles given the location of the trenching and the structure itself	High X Medium = High, Low X Medium = Low	
Load the cable reels on the sling	Pinch points, Failure of the cable, Load falling, noise,	High x Medium = High, High X Low = Medium, Low X High = Medium, Medium X High = High	
Connect the tag line	Pinch points	High X Medium = High,	
Lift the reels to the third level	Noise interrupting communication	Medium x High = High	
Unload the reels from the sling	Noise interrupting communication	Medium X High = High	
STEP 4 – CONTROL RISKS			
HAZARD	WHAT CONTROL	BY WHOM	WHO CHECKED
Pinch Points	Communication between rigger and operator	Saul Bell/ Chad Senger	Amin Suleman
Cuts from handling the cable	PPE – Gloves	Chad Senger	Amin Suleman
Load falling/improper use of sling	Check spec. of sling and crane	Saul Bell	Amin Suleman
Other people on site	Meet with other people Set up a flag area	Amin Suleman	Amin Suleman
Noise interrupting communication	Use radio communication Ensure proper hand signals	Saul Bell / Chad Senger	Amin Suleman
FOLLOW-UP REQUIRED			
COMPLETED BY: <u>Amin Suleman</u>		SUP/LEADER REVIEW: <u>Charlie Grey</u>	

SECTION 9: SUPERVISING THE USE OF FIELD LEVEL RISK ASSESSMENT

Learning Objective

Make plans for using Field Level Risk Assessment with your crew on a daily basis.

How to Lead Field Level Risk Assessment Discussions

1. The objective of having a crew discussion is to ensure that the work is conducted safely and to encourage workers to take greater responsibility for safety.
2. Make sure that your crew understands the objectives of doing Field Level Risk Assessment. Reassure them of this purpose.
3. Prepare for the meeting by thinking about the work to be done, reviewing safe work plans, considering the procedures/standards that affect the work to be done and doing your own analysis of the job steps, hazards, etc.
4. Call the crew together and tell them they will be doing a Field Level Risk Assessment with you.
5. Describe the work to be done and ask them to identify the job steps.
6. Work through the Field Level Risk Assessment process together. Provide information yourself only when something is missed by the crew.
7. Use questions to get information and ideas, and to clarify facts.
8. Repeat the main points of the information the crew gives, using different words, to be sure you understood. Record the discussion on the form. Ensure the workers have access to the form.
9. Use questions to increase each worker's ability to critically examine possibilities.
10. Summarize the assessment and plans of the group. Direct individuals who are responsible for putting controls in place to do so.
11. Record any suggestions that the crew has for improving safety or work methods on an ongoing basis.
12. Remind the crew to do the process while they are working and to stop if uncontrolled hazards are identified.
13. Ask regularly how the discussions could be improved.

How to Coach Workers in the Use of Field Level Risk Assessment

Field Level Risk Assessment can present a challenge for some workers. It represents a change.

Field Level Risk Assessment needs:

1. Workers to stop and **think before doing** even routine tasks.

Building this new habit will need persistent reminding from you.

2. **Critical thinking skills** that may be underdeveloped in some workers.

Thinking through job steps to assess risks will take practice. Crew discussions will help develop this ability. Using questions to push thinking is essential.

3. Individuals to **accept responsibility** for thinking and taking action.

Asking questions to help workers make assessments and put controls in place instead of telling them what to do will help them accept responsibility. Refraining from telling them what to do may be a bit challenging for you if this way of working is new to you and your crew. Recognizing and rewarding their efforts is important and will motivate them too.

4. Workers to be willing to **challenge authority** and raise difficult issues.

It may be difficult for some workers to challenge how things are being done. Sometimes they will be right and sometimes they will be wrong. Showing that you are willing to listen and consider their ideas is important. Using their mistakes as times to learn rather than times for punishment, will encourage good thinking and help them develop the courage to act on their assessments.

How to Monitor the Use of Field Level Risk Assessment

1. Lead Field Level Risk Assessment discussions **every time something changes**. This will help you to monitor how workers are thinking and using the process.
2. Observe them as they change work activities and **ask them** what hazards they are considering.
3. During inspections, audits or incident investigations, ask workers what hazards were identified for this job.
4. Use **formal performance discussions**, if your company has these, to get feedback on their use of Field Level Risk Assessment.
5. **Use safety meetings** to talk about doing Field Level Risk Assessment. This can be a time for both two-way feedback and encouragement.

How to Use Field Level Risk Assessment to Improve How Work Is Done

1. Each time you have a Field Level Risk Assessment discussion with your crew you are taking time to plan and take action on doing work more safely. This will **reduce loss from incidents**. These discussions are time well spent.
2. Each time you record a discussion you can write down the suggestions for ways to reduce hazards. Use these ideas when your crew is doing similar work. You will **learn from these discussions**, especially if you critically examine how you habitually approach a high-risk activity. With new thinking you may be able to find safer and more efficient ways to do the work.
3. You may recognize **trends or patterns** in the hazards that you face regularly. These trends may be opportunities for ongoing controls, e.g. new or better procedures.

Section 9: Supervising the Use of Field Level Risk Assessment - Questions

Question

1. Describe one action you are going to take to:

(a) Lead effective Field Level Risk Assessment discussions.

(b) Coach workers in using Field Level Risk Assessments.

(c) Monitor the use of Field Level Risk Assessment.

(d) Use Field Level Risk Assessment to improve how work is done.

Answers

There are no right answers here. Develop your own personal objectives using the ideas in this session. Good luck using Field Level Risk Assessment to become a more effective and successful supervisor.

SECTION 10: BENEFITS OF FIELD LEVEL RISK ASSESSMENT

Learning Objective

List the benefits the company and workers of using Field Level Risk Assessment.

Benefits for Companies:

Below is a list of benefits that companies can experience as a result supporting their workers in the daily use of Field Level Risk Assessment.

1. Improved productivity. Work methods improve.
2. Direct cost savings
3. WCB premium reduction
4. Decreased costs to pass on to customers, a competitive edge
5. Better data to improve company safety
6. Reduction in the “emotional” costs of accidents and injuries
7. Increase trust and confidence of workers
8. Due diligence

For Workers:

Below are the benefits that workers experience as a result of habitually using Field Level Risk Assessment.

1. Reduced probability of injuries
2. More security for their families
3. Improved morale
4. Opportunity to make work place improvements
5. Opportunity for recognition of increased contribution to the company
6. Improved ability to think critically

Section 10: Benefits of Field Level Risk Assessment **Questions**

Questions

1. Name three benefits of using Field Level Risk Assessment, for companies.

2. Name three benefits that Field Level Risk Assessment provides workers.

Answers

See the benefits listed on the previous page.

Congratulations!

**You have finished Part 1 –
Supervisor's Guide to Field Level
Risk Assessment Self-Study
Training**

See Part 2 - Training Others