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# FIELD LEVEL RISK ASSESSMENT TRAINING



# Overview

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- What is a Hazard Assessment?
- Compliance with the OHS
- When is one required?
- How do I conduct one?
- 4 step process
- FLRA – A valuable tool
- QUIZ



# Definition

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- A hazard assessment is an evaluation of a work place, or work situation, **to identify the potential for hazards** that an employee may encounter while performing the job.



# Definition

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- A Field Level Risk Assessment(FLRA) is a technique that focuses on job tasks as a **way to identify hazards before they result in injury, illness, property damage, or worse.**
- It focuses on the **relationship** between the worker, the task, the tools, and the work environment
- Ideally, after you identify uncontrolled hazards, you will **take steps to eliminate or reduce** them to an acceptable risk level



# Requirements

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- OH&S requires employers to provide a place of employment that is free of recognized hazards that are causing, or likely to cause death or serious physical harm to employees
- Employers must comply with occupational safety and health legislation that requires the identification, assessment and control of workplace hazards

The **MOST** common and useful tool used to comply with this requirement, is the FLRA!



# Benefits



- Reduced injuries
- Reduced absenteeism
- Increased productivity
- Increased morale
- And it protects employees!
- Sets performance standards
- Standardizes operations based on acceptable safe practices and PPE
- Provides a form of training documentation regarding the employee's knowledge of the job requirements.
- Complies with OH&S Legislation

# Where To Begin

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- The most logical place to begin is to review your accident and illness reports.
  - Is there a work area that seems to have more accidents and injuries than others?
  - Is there a type of injury that seems to occur more frequently than others?



# Where To Begin Continued

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- If injury and illness reports do not point you towards a place to begin, consider beginning with:
  - Near Misses
  - New Tasks Or Positions
  - Tasks That Have Changed
  - Non-Routine Jobs
  - Routine Jobs





# Work Area Assessment

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- After you have chosen a place to start, perform a walk-through of the work area, looking for hazards as indicated in this training.



**Helpful Tip:** Involve other workers in this process!



# Step 1

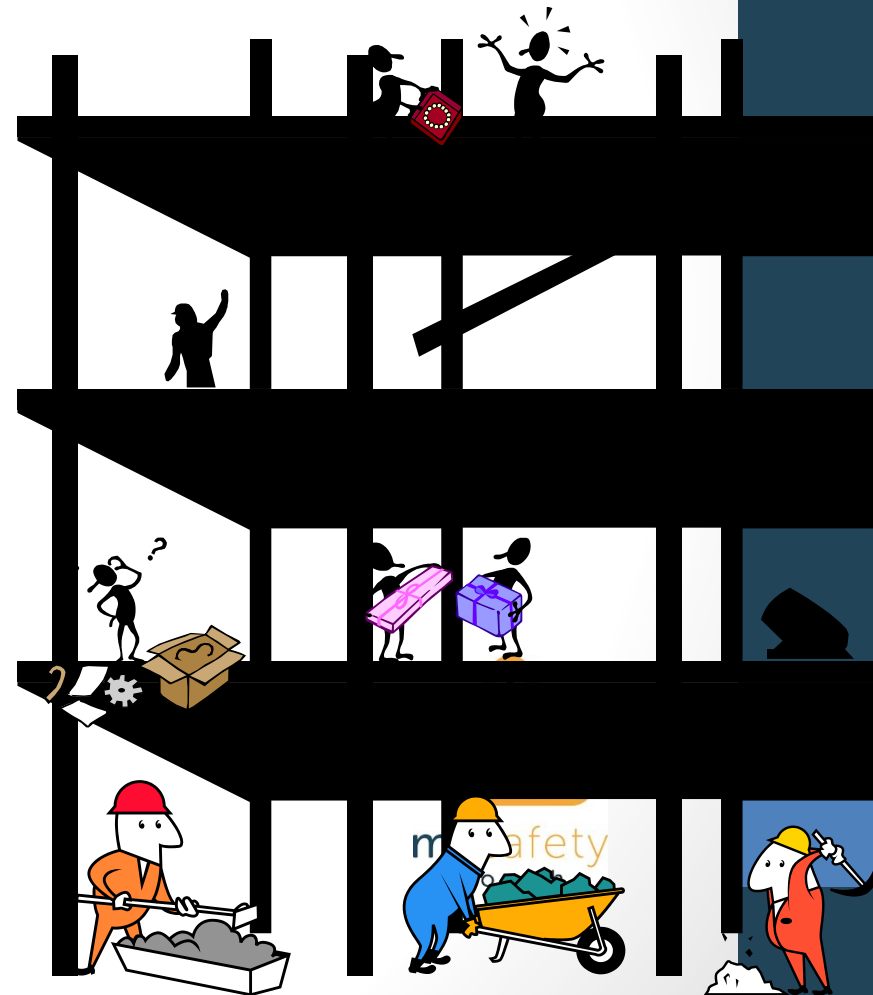
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- You must identify the hazards in your work area
- As you walk through the area and discuss work tasks with employees, look for the following hazards.



# Falling Objects

- Are there objects which may fall from above onto employees?
  - Employees working overhead?
  - Tools or materials handled above your head?



# Harmful Dusts/Fumes

▶ Are employees exposed to chemicals or harmful dusts/mists/fumes? Examples:

- Any chemical which poses a health hazard
- Asbestos
- Welding fumes
- Solder fumes
- Silica
- Post Blast Airborne Toxins



*Reference: Obtain a Material Safety Data Sheet on the product in question from the supplier and review the information provided for health hazards and suggested controls.*

# Energy Sources

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- ▶ Are there energy sources which could be harmful if accidental release or startup occurs?
  - Electrical
  - Pneumatic
  - Hydraulic
  - Thermal
  - Mechanical
  - Gravity



# Sharp Objects

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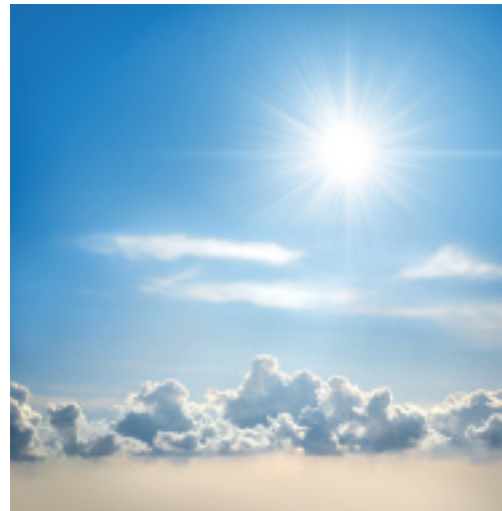
- ▶ Are there sharp objects which could cut or pierce the body?
  - Glass
  - Knife blades
  - Sheet metal
  - Nail guns
  - Needles
  - Splinters (wood)
  - Burrs (metal)



# Temperature Extremes

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- ▶ Are there hot or cold surfaces which could burn or freeze employees?
  - Welded parts
  - Cryogenic materials
  - Autoclaves
- Ovens/stoves
  - Molten metals



# Light Radiation

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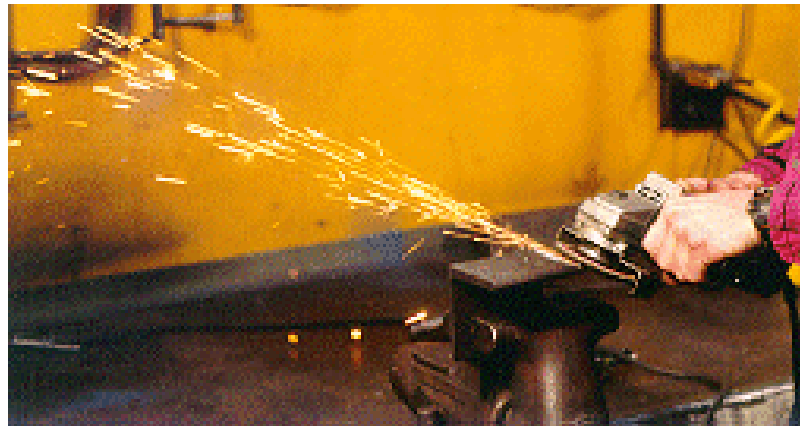
- Is there light radiation which could be harmful to the skin or eyes?
  - Welding
  - Cutting
  - Lasers
  - X-ray





# Flying Debris

- ▶ Will employee be operating, or be exposed to, tools/equipment which may generate flying debris?
  - Hammering
  - Sawing
  - Chipping
  - Grinding
  - Drilling
  - Buffing
  - Cutting



# Excessive Noise

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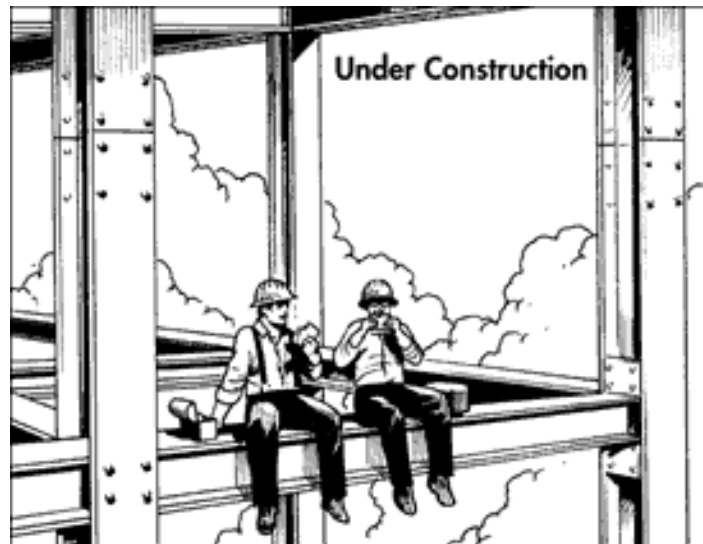
- ▶ Will employee be operating, or be exposed to, tools/equipment which may generate excessive noise?
  - Jack-hammering
  - Woodworking machinery
  - Metalworking machinery
  - Operating heavy equipment



# Workplace Layout

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- ▶ Does the layout of the workplace create a potential hazard?
  - Fall hazards of 6 feet.
  - Low clearances
  - Confined spaces
  - Open holes



# Fire/Explosions

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- ▶ Is there the potential for a fire or explosion?



# STEP 2

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- Once the hazards have been identified, you must implement effective controls to eliminate the hazard, reduce the hazard to an acceptable manner, or protect the employee.



# STEP 3

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- Evaluate the level of risk for each hazard to help determine what type of control should be implemented to reduce exposure.



# STEP 4

- Select an appropriate solution to each hazard.
  - Always consider eliminating the hazard (if possible) first.
  - If elimination is not possible, consider reducing the hazard to an acceptable level.
  - If an acceptable level cannot be reached, select and provide appropriate personal protective equipment for the employee.



# Engineering Controls

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- Engineering controls eliminate exposure to the hazard. They are;
  - relatively permanent
  - can be costly
  - can be time-consuming

## EXAMPLES of Engineering Controls...

- Isolation
- Process Change
- Design
- Workplace Layout
- Substitution
- Ventilation





# Isolation

- Isolate the employee from the hazard.
  - Control rooms
  - Machine guarding
  - Protective barriers and shields
  - Guardrails
  - Clearance distances



# Design

- Is there new (or existing) technology on the market for the product which, by it's design, protects the person using it?

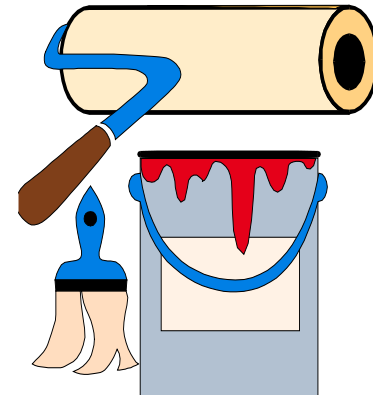
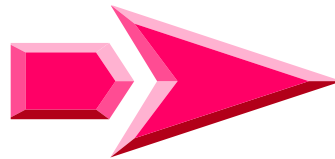


# Process Change

- Can a non-hazardous process be substituted for a hazardous process?



Spray Painting



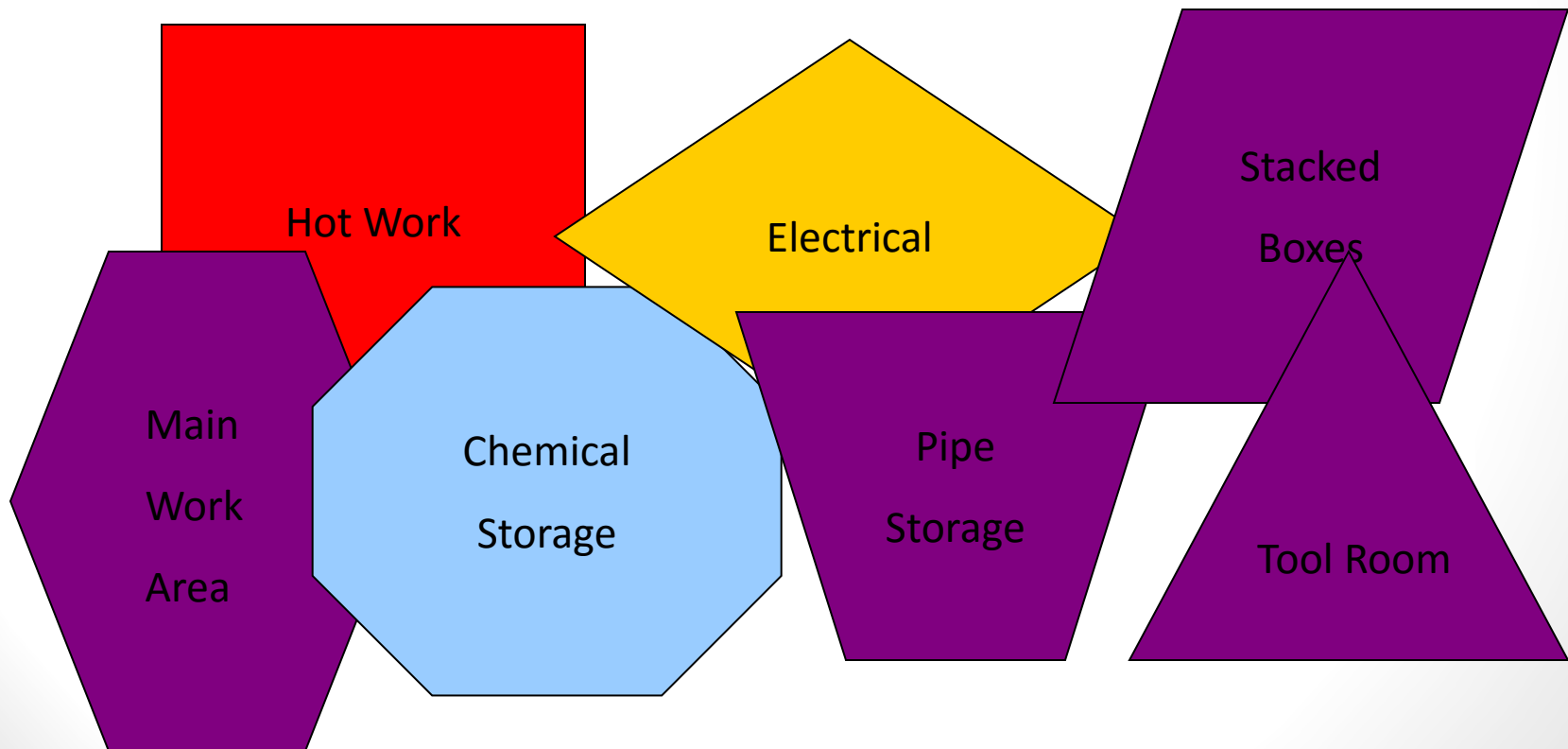
Dipping or Brushing

# Work Area Layout

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- Can a hazardous work area layout be improved?

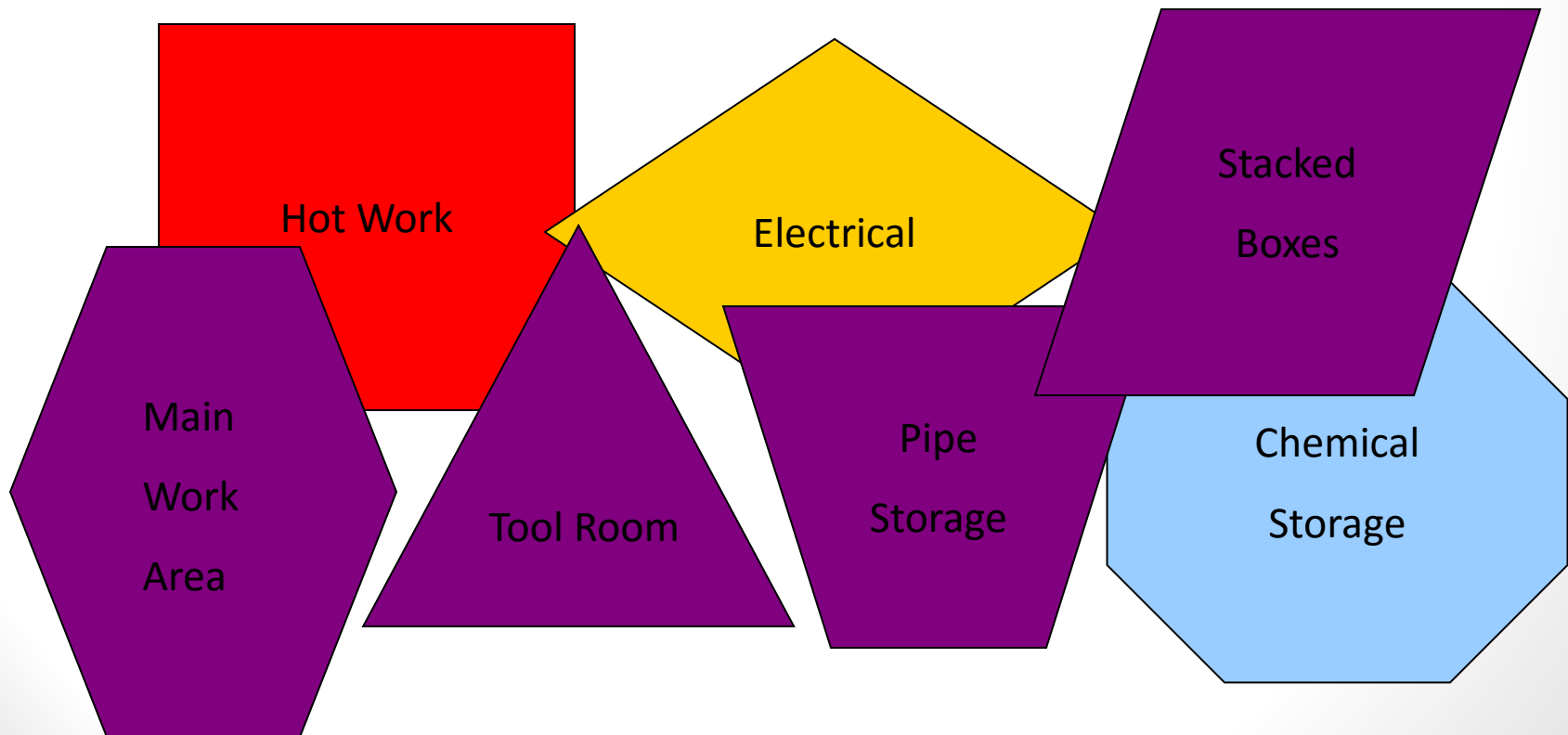


# Work Area Layout

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- Chemical storage area was moved away from hot work and electrical hazards.



# Substitution

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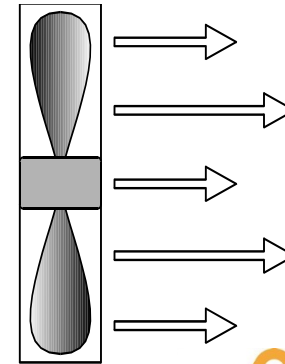
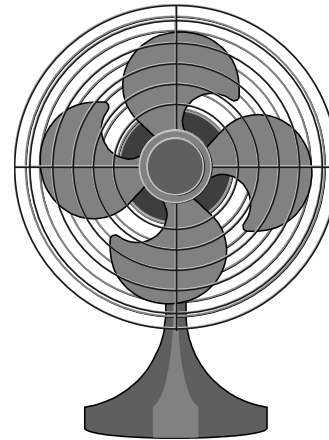
- Can a non-hazardous product be substituted for a hazardous product?
  - Pesticides
  - Solder
  - Cleaning agents
  - Solvents



# Ventilation

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- Will ventilation improve the air quality to an acceptable (i.e. safe) level?



# Administrative Controls

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- Administrative controls reduce employee exposure to a hazard
  - They do NOT eliminate the hazard, but provide an acceptable way to work around the hazard

## EXAMPLES of Administrative Controls...

- Reduction
- Rotation
- Training

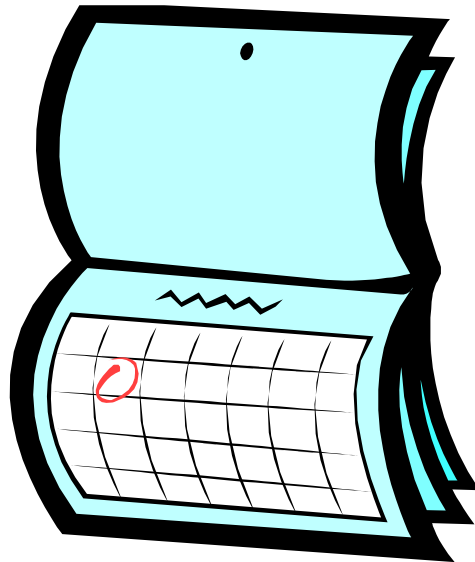




# Reduction

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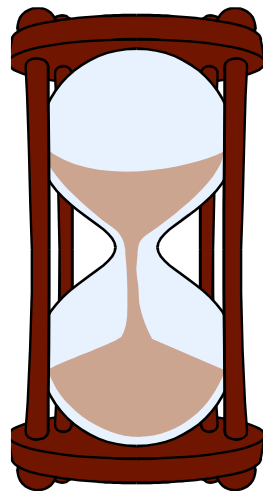
- Can you reduce the frequency of performing the hazardous task?



# Rotation

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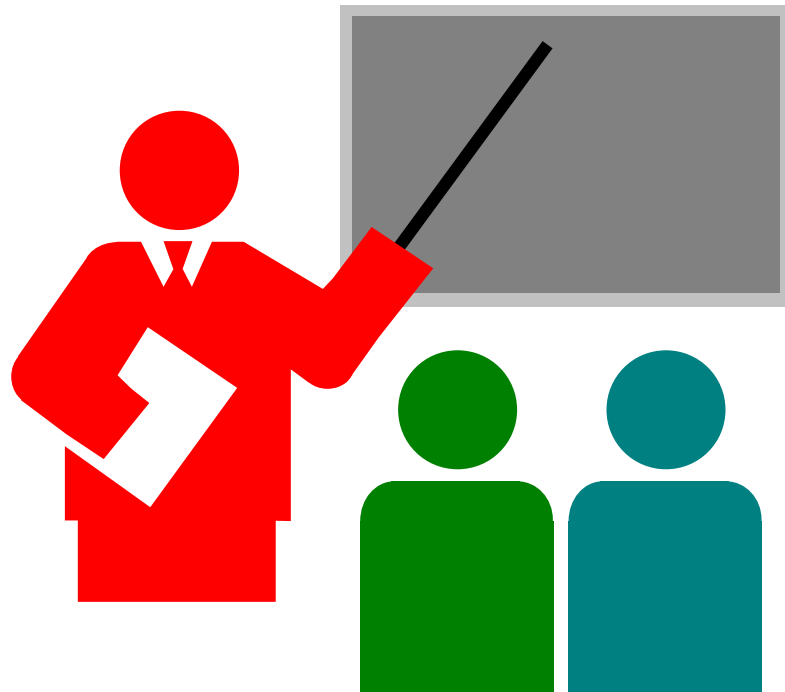
- Can employees be rotated to reduce exposure time?
- Micro breaks should be taken throughout shift



# Training

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- Can employees be trained to recognize hazards and employ safe work practices?



# Protect The Employee

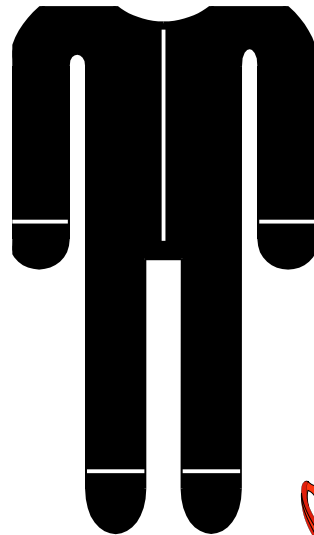
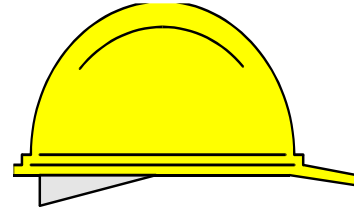
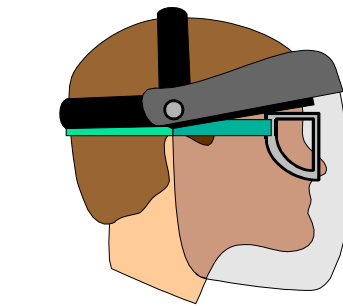
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- If the hazard cannot be eliminated or reduced to an acceptable level, the employee must be protected from exposure.
- This protection requires that the employee wear and/or use appropriate personal protective equipment as a **LAST LINE OF DEFENSE**



# Personal Protective Equipment

- Hard Hat
- Steel Toe Boots
- Gloves
- Safety Glasses
- Face Shields
- Respirators
- Hearing Protection
- Coveralls
- Long Sleeves



# Summary

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- Identify hazards in the workplace that could result in injury or illness.
- Evaluate the level of risk to help determine what controls to implement.
- Select an appropriate solution to control the hazard and/or protect the employee.

