

Safety and Health Programs

lecture 2

Introduction

Lesson objectives:

1. Recognize the costs of workplace accidents.
2. Recognize benefits of implementing an effective safety and health program.
3. Describe the elements of an effective safety and health program.
4. Identify three methods to prevent workplace hazards.



Costs of Accidents

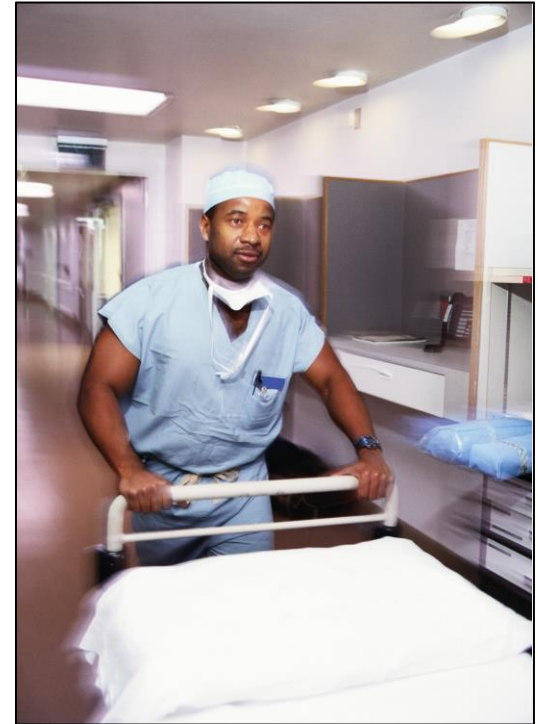
Direct costs:

Cost of treatment

Cost of physician and hospital

Cost of medications

Cost of medical equipment



Source: NIOSH



Costs of Accidents

Indirect costs:

- Schedule delays
- Lower morale
- Increased Absenteeism
- Poor Customer Relations
- Re-training

Benefits of Safety & Health Programs

Pros of Safety and Health Programs

Cons of Safety and Health Programs



Source: OSHA

Benefits of Safety & Health Programs

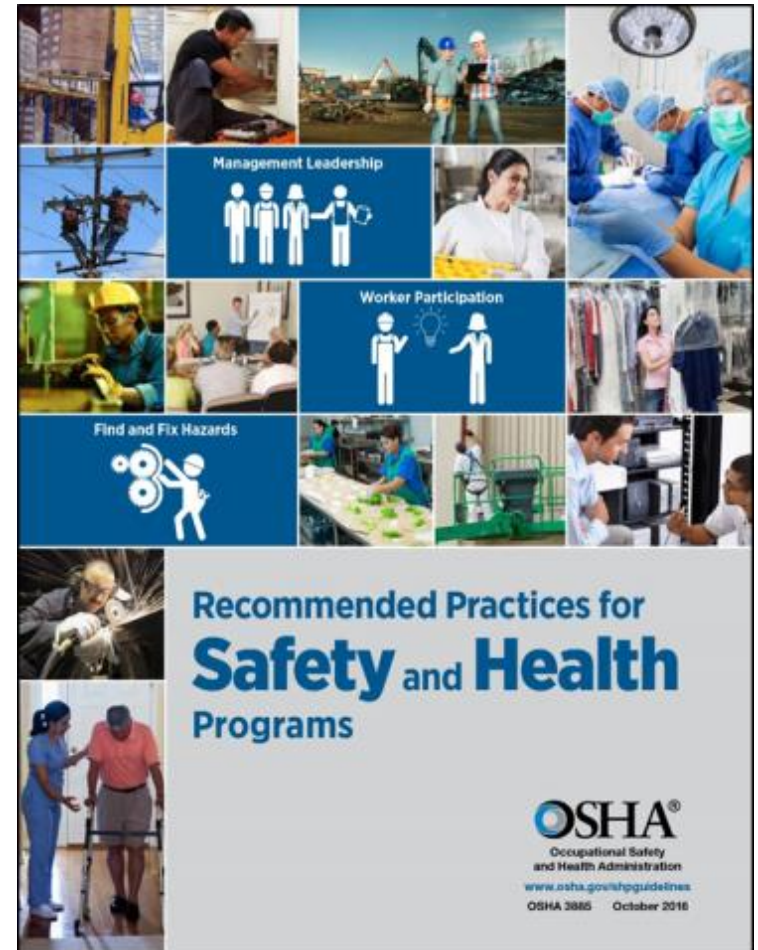
Benefits may include:

Improvements in product, process,
and service quality

Better morale

Improved recruiting and retention

More favorable image and
reputation



Elements of Safety & Health Programs



What are some of the ways that management can show their support of a safety program?

Source: OSHA

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Management Leadership

- **Action Item 1:** Communicate your commitment to Safety and Health Programs

How to accomplish it:

- Establish a written safety and health policy statement signed by top management
- Communicate the policy to all workers, contractors, unions, supplier, visitors, customers, etc.

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Management Leadership

Action Item 2: Define program goals and expectations

How to accomplish it:

- Establish realistic, attainable and measurable goals that demonstrate progress toward improving safety and health
- Develop safety and health plans

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Management Leadership

Action Item 3: Allocate Resources

How to accomplish it:

- Integrate safety and health into planning and budgeting
- Allow time in workers schedule for participation

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Management Leadership

- **Action Item 4:** Expect Performance

How to accomplish it:

- Define and communicate responsibilities and authorities for accountability
- Set an example for workers by following the same procedures

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Source: OSHA

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Worker Participation

- **Action Item 1:** Encourage workers to report safety and health concerns

How to accomplish it:

- Establish a process to report injuries, near misses and other safety and health concerns
- Empower workers to temporarily suspend work they feel is unsafe

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Worker Participation

- **Action Item 2:** Encourage participation in the program

How to accomplish it:

- Provide positive reinforcement to workers who participate
- Maintain an open-door policy, inviting workers to speak to managers about safety and health

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Worker Participation

- **Action Item 3:** Involve workers in all aspects of the program

To accomplish, allow workers to be involved in:

- Developing a program
- Reporting hazards and developing solutions
- Analyzing hazards
- Defining safe work practices
- Conducting site inspections
- Participating in incident/near-miss investigations
- Serving as trainers
- Developing and evaluating training programs

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Worker Participation

- **Action Item 4:** Give workers access to safety and health information

To accomplish, give workers information they need to understand safety and health hazards:

- Safety Data Sheets
- Injury Illness Data
- Results of exposure monitoring

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Worker Participation

- **Action Item 5:** Remove barriers to participation

How to accomplish it:


- Ensure workers from all levels of the organization can participate regardless of skill level, education, or language
- Ensure policies and programs do not discourage worker participation

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Source: OSHA

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HAZARD IDENTIFICATION TRAINING TOOL

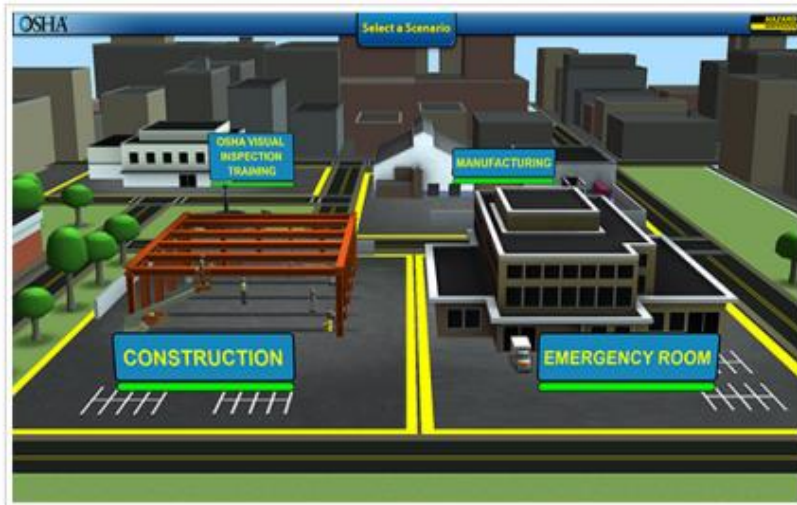
[Introduction](#) [How to Play](#) [Manual & Resources](#)

OSHA's Hazard Identification Training Tool is an interactive, online, game-based training tool for small business owners, workers and others interested in learning the core concepts of hazard identification. After using this tool, users will better understand the process to identify hazards in their own workplace.

This tool is intended to:

- (1) Teach small business owners and their workers the process for finding hazards in their workplace,
- (2) Raise awareness on the types of information and resources about workplace hazards available on OSHA's website.

Important: This is a learning tool. The items presented in this tool are for training purposes only and the visual representations are conceptual and do not always show specific control for hazards. OSHA inspections and possible citations and penalties for violation of OSHA regulations are **NOT** part of this tool. Employers and workers must consult the applicable OSHA standards for the specific requirements applicable to their workplaces when developing and implementing their own hazard identification program.



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Hazard Identification

- **Action Item 1:** Collect existing information about workplace hazards

How to accomplish it:

- Collect, organize and review information to determine what types of hazards are present and workers exposed

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Hazard Identification

- **Action Item 2:** Inspect the workplace

How to accomplish it:

- Routine inspections of workflow, equipment, materials and talk to workers
- Use checklists

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Hazard Identification

- **Action Item 3:** Conduct Incident Investigations

How to accomplish it:

- Develop a plan and procedure to begin investigation immediately after an incident or near miss.
- Conduct root cause analysis and investigate with a team.

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Hazard Identification

- **Action Item 4:** Identify hazards associated with emergency and non-routine situations

How to accomplish it:

- Assess foreseeable emergency scenarios or non-routine tasks
- Conduct “table top” exercises to help you plan and test your response plan and procedures

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Hazard Identification

- **Action Item 5:** Characterize the nature of identified hazards, determine the controls to be implemented and prioritize the hazards for control

How to accomplish it:

- Evaluate each hazard by considering the severity of potential outcomes, the likelihood that an event will occur and the number of workers exposed
- Prioritize hazards so that the greatest risks are addressed first
- Use interim control measures to protect workers until more permanent solutions can be implemented

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Source: OSHA

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Hazard Prevention and Control

- **Action Item 1:** Identify control options

How to accomplish it:

- Review literature, OSHA standards, NIOSH publications, etc. for potential control measures
- Get input from workers, safety consultants, or investigate other workplaces with similar hazards

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Hazard Prevention and Control

- **Action Item 2:** Select controls

How to accomplish it:

- Select controls using the hierarchy of controls
- Use a combination when no single method fully protects the worker

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Hazard Prevention and Control

- **Action Item 3:** Develop and update a hazard control plan

How to accomplish it:

- List hazards in order of priority, assign responsibility to a person(s), establish a target completion date.
- Plan how to track progress and verification of implementation

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Hazard Prevention and Control

- **Action Item 4:** Select controls for emergency and non-routine operations

How to accomplish it:

- Develop procedures to control hazards during these situations.
- Assign responsibility for implementing the plan and conduct emergency drills.

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Hazard Prevention and Control

- **Action Item 5:** Implement selected controls in the workplace

How to accomplish it:

- Implement controls starting with highest priority, however, regardless of priority employers must protect workers from recognized serious hazards

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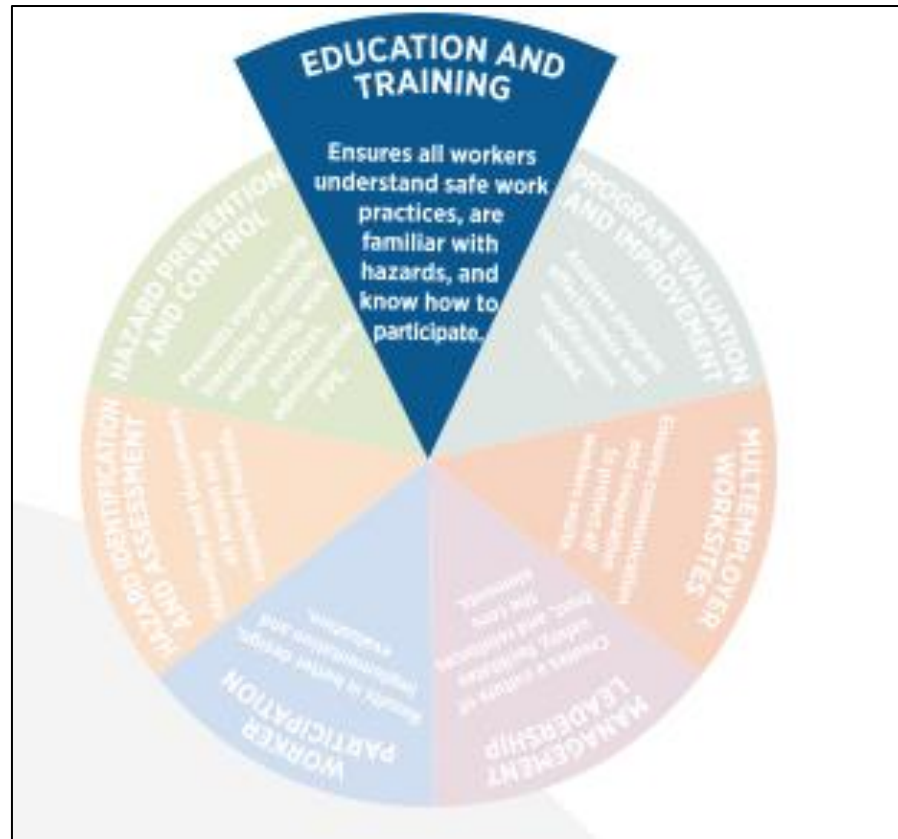
Hazard Prevention and Control

- **Action Item 6:** Follow up to confirm that controls are effective

How to accomplish it:

- Conduct regular inspections of controls, confirm that work practices are being followed.
- Track progress and implementation

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Source: OSHA

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Education and Training

- **Action Item 1:** Provide program awareness training

How to accomplish it:

- Provide training to all managers, supervisors and workers as well as contractors and temporary workers on: safety policies and procedures, program functions, emergencies, injury illness reporting, and their rights under the OSH Act
- Ensure the training is provided in a language and literacy level that all workers can understand

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Education and Training

- **Action Item 2:** Train workers on specific roles and responsibilities in the safety and health program

How to accomplish it:

- Instruct workers with specific roles within the safety and health program on how they should carry out those responsibilities
- Provide opportunities for workers to ask questions and offer feedback during training

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Education and Training

- **Action Item 3:** Train workers on hazard identification and controls

How to accomplish it:

- Train managers and workers on techniques for identifying hazards; such as job hazard analysis
- Have workers demonstrate they can recognize hazards and understand why controls are in place
- Provide training on new tasks and new assignments
- Provide training where required by specific OSHA standards such as; hazard communication and lockout/tagout

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Source: OSHA

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Program Evaluation

- **Action Item 1:** Verify the program is implemented and is operating

How to accomplish it:

- Verify the core elements of the program are fully met and key processes are in place and implemented
- Verify injuries are being reported, inspections are conducted, progress is being tracked in controlling identified hazards to ensure control measures are effective and data collected to monitor the programs performance

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Program Evaluation

- **Action Item 2:** Correct program deficiencies and identify opportunities to improve

How to accomplish it:

- Proactively seek input from managers, workers, supervisors and other stakeholders on how you can improve the program
- Determine whether changes in equipment, facilities, material, personnel or work practices trigger any need for changes in the program
- Determine whether the metrics and goals are still relevant and how you could change them to more effectively drive improvements

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Source: OSHA

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Multi-Employer Worksites

- **Action Item 1:** Management Leadership

How to accomplish it:

- Provide a copy of the safety and health policy to all contractors
- Before beginning on-site work, clarify each employer's responsibilities and obligations, such as;
 - Providing training
 - Selecting, providing and maintaining PPE
 - Recording and reporting any injuries or illnesses
 - Procedures for communication between host employer and all contractors

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Multi-Employer Worksites

- **Action Item 2:** Worker Participation

How to accomplish it:

- Encourage employees to raise safety concerns
- Identify and remove any obstacles to their participation in a program or reporting

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Multi-Employer Worksites

- **Action Item 3:** Hazard Identification and Assessment

How to accomplish it:

- Host employer performs a worksite hazard assessment and shares the results
- Contractors perform pre-job hazard assessments of the work they will perform

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Multi-Employer Worksites

- **Action Item 4:** Hazard Prevention and Control

How to accomplish it:

- Before beginning work, the host employer gives contractors information about programs and procedures to control workers' exposure to hazards

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Multi-Employer Worksites

- **Action Item 5:** Education and Training

How to accomplish it:

- The host employer and contractor identify any qualifications and certifications required by the workers
- Temporary and contract workers also receive appropriate hazard and standard specific training

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Multi-Employer Worksites

- **Action Item 6:** Program Evaluation and Improvement

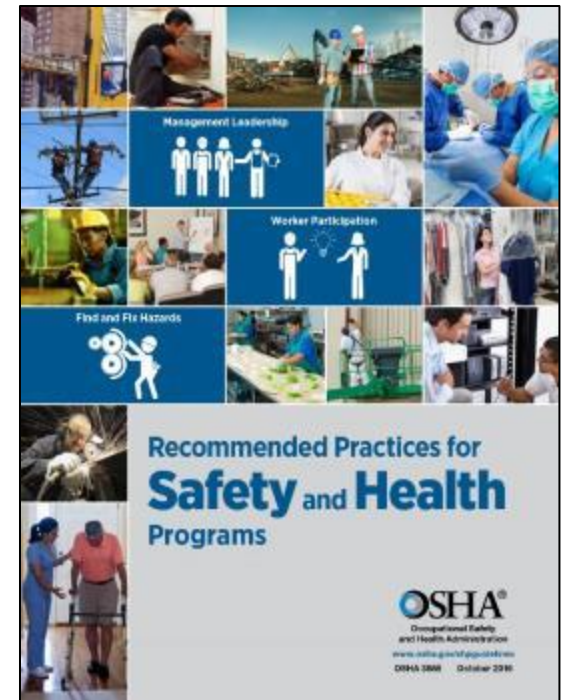
How to accomplish it:

- Exchange data on metrics tracks and use this data to evaluate the program's effectiveness
- All contractors should participate in these evaluations
- Sharing the results of the evaluations with contractors, subcontractors and temporary staffing agencies who can then inform the affected workers of the results

Prevent/Control Workplace Hazards

Methods to prevent/control workplace hazards:

- **Benefits of effective controls**
 - Protect workers from hazards
 - Help avoid injuries, illnesses, and incidents
 - Minimize/eliminate safety and health risks
 - Help employers provide safe/healthful working conditions



Source: OSHA

Prevent/Control Workplace Hazards

- **Involve workers**

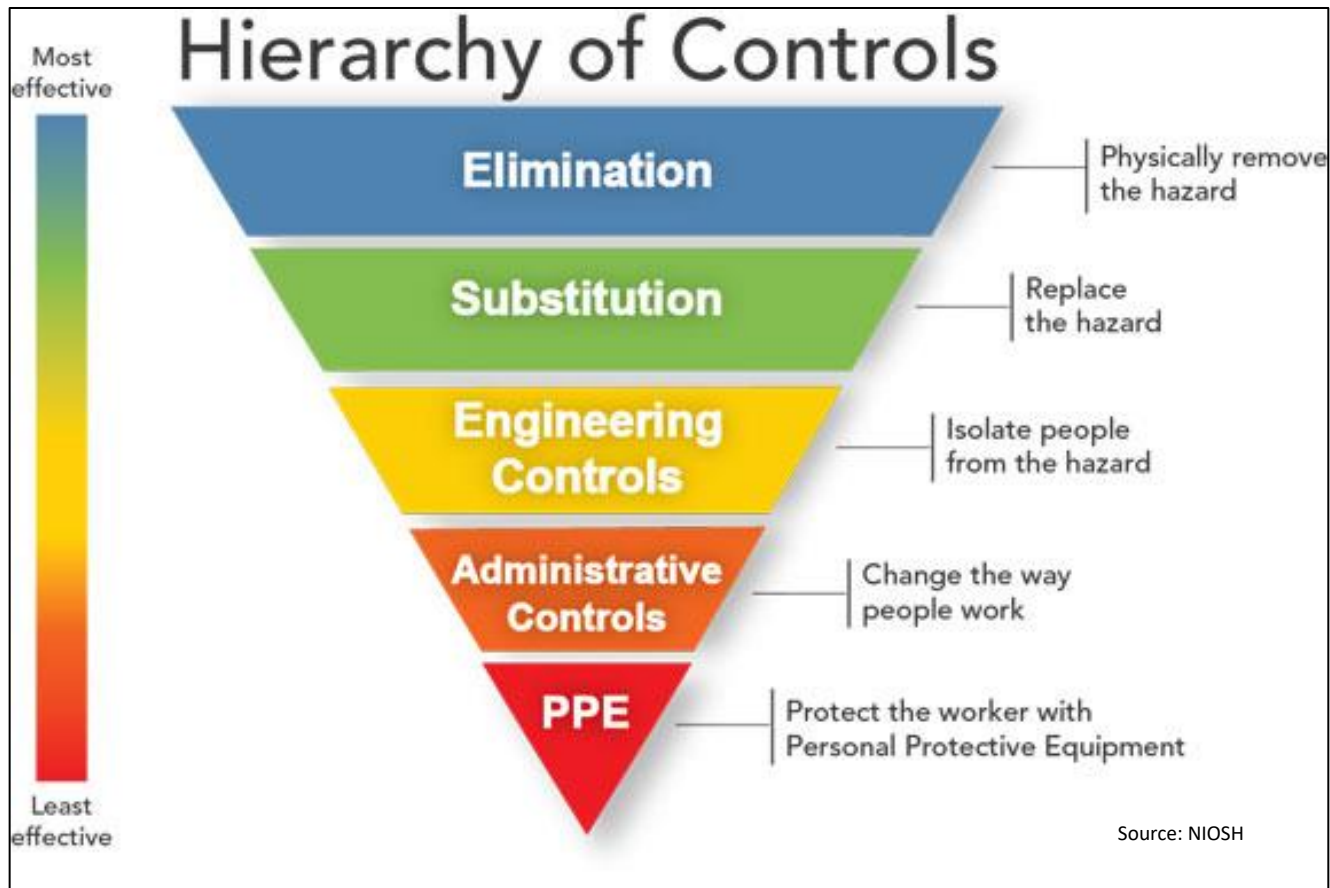
- Understand conditions that create hazards
- Insights into how hazards can be controlled



Source of photos: OSHA

Prevent/Control Workplace Hazards

- Identify and evaluate options



Prevent/ Control Workplace Hazards

- Use a hazard control plan
- Develop plans with measures to protect workers during emergencies and non-routine activities
- Evaluate effectiveness of existing controls and review new technologies

Summary

- OSHA encourages employers to create a proactive approach for finding and fixing hazards in the workplace.
- An effective safety and health program increases worker involvement, management commitment and allows employers to better manage their resources, personnel and environment.

Knowledge Check

1. Which of the following is a benefit from implementing an effective safety and health program?
 - a. Higher morale of the workforce
 - b. Improved company reputation
 - c. Lower Worker Compensation Insurance rates
 - d. All of the above

Answer: d. All of the above

Knowledge Check

2. Which of the following is a direct cost of an accident?
- a. Lost production
 - b. Retraining of new workers
 - c. Physicians examination
 - d. Poor customer relations

Answer: c. Physicians examinations

Knowledge Check

3. Employers must correct all identified hazards; however, which of the following hazards should the employer work to correct first?
- a. Guard missing on a piece of equipment, used every 6 months
 - b. Broken rung on ladder, used daily by the entire crew
 - c. Loose handrail on a dozer, used by a single equipment operator
 - d. Wet floor by an eyewash station, in a path not travelled by personnel

Answer: b. Broken rung on ladder used daily by the entire crew