



## Hand and Power Tool Safety

**Course Number:** HS-02-108

**PDH:** 1

**Approved for:** AK, AL, AR, DE, FL, GA, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, ND, NE, NH, NJ, NM, NV, NY, OH, OK, OR, PA, SC, SD, TN, TX, UT, VA, VT, WI, WV, and WY

### State Board Approvals

Florida Provider # 0009553 License #868

Indiana Continuing Education Provider #CE21800088

Maryland Approved Provider of Continuing Professional Competency

New Jersey Professional Competency Approval #24GP00025600

North Carolina Approved Sponsor #S-0695

NYSED Sponsor #274

### How Our Written Courses Work

This document is the course text. You may review this material at your leisure before or after you purchase the course.

After the course has been purchased, review the technical material and then complete the quiz at your convenience.

A Certificate of Completion is available once you pass the exam (70% or greater).

If a passing grade is not obtained, you may take the quiz as many times as necessary until a passing grade is obtained).

If you have any questions or technical difficulties, please call (508) 298-4787 or email us at [admin@PDH Pro.com](mailto:admin@PDH Pro.com).





## Module 1: Introduction - The Value of a Safety and Health Management System

### Learning Objectives

By the end of this section, you will be able to:

- **Evaluate** the financial and operational impact of occupational safety on a firm's profit and loss statement.
- **Identify** the four fundamental elements required to develop a comprehensive safety and health management system.
- **Select** appropriate prevention principles to mitigate both accidental injuries and routine health hazard exposures.

*Executive Summary:* Implementing a safety and health management system is a strategic business decision that protects a firm's most valuable assets—its employees—while safeguarding profitability through the active prevention of workplace losses.

### Assessing the Profit and Loss Impact

As an engineering leader or business owner, your success depends on high-quality management information and the ability to make data-driven decisions. While serious workplace incidents may be statistically rare in some small operations, the impact of a single loss can be catastrophic.

- **The Reality of Risk:** Thousands of workers suffer fatal injuries annually, with many more sustaining debilitating illnesses.
- **The Cost of Reactivity:** Waiting for an accident to occur before taking action is a failed strategy; at that point, the loss to profit or the business entity is often already sustained.
- **Strategic Investment:** Integrating safety into daily operations is not just a regulatory hurdle but a method to avoid future losses and ensure long-term viability.

### Developing a Profitable Prevention Strategy

Preventing loss does not require an organizational overhaul or excessive capital expenditure. It requires applying recognized **prevention principles** and sound business sense.

### Accident Causation and Resolution


Accidents are not random; they have specific causes. By identifying the "why" behind an event, you can implement a plan to prevent recurrence.



## Routine Health Hazard Exposures

Harm is not always the result of a sudden accident. Professional Engineers must account for routine exposures that have delayed effects:


- **Chemical Hazards:** Exposure to toxic substances.
- **Physical Hazards:** Harmful levels of noise or radiation.

 **Design Tip:** A robust safety and health management system should be tailored to the specific needs and requirements of your unique workplace to be effective.

## The Four-Point Workplace Program

To facilitate the application of safety standards, your program must be built upon four critical pillars:

1. **Management Commitment and Employee Involvement:** Leadership sets the policy, assigns responsibility, and involves the workforce in the safety process.
2. **Worksite Analysis:** The environment is continually analyzed to identify existing and potential hazards.
3. **Hazard Prevention and Control:** Active methods are established and maintained to control or eliminate hazards.
4. **Safety and Health Training:** All personnel—including managers and supervisors—must be trained to recognize and handle worksite hazards.

 **Safety Constraint:** While this four-point approach facilitates a path toward full OSHA compliance and demonstrates "good faith" commitment, it does not inherently guarantee compliance with every specific standard.

## Operational Integration

Effective safety management should be a seamless part of your business culture.

- **Integration:** Safety and health can be merged into existing business functions with modest effort.
- **Efficiency:** This approach often improves overall operational efficiency and reduces insurance claims.
- **Culture:** Once implemented, safety awareness becomes second nature to the entire organization.



---

*Checkpoint Quiz*

---

**1. Which of the following best describes the financial justification for a safety and health management system?**

- a) It is a required expenditure that yields no ROI.
- b) It prevents sudden losses to profit or business viability caused by accidents and exposures.
- c) It is only necessary for large, heavily financed corporate groups.
- d) It replaces the need for insurance coverage.

**Answer:** (b). The text highlights that a serious injury or death can cause the loss of profit or even an entire business, making prevention a profitable strategy.

**2. A safety and health plan must address "routine" dangers. What does this include?**

- a) Only incidents that happen by accident.
- b) Only hazards that have immediate physical effects.
- c) Ongoing exposures to toxins, noise, or radiation during regular work.
- d) Only hazards identified by outside OSHA inspectors.

**Answer:** (c). The manual notes that harm can occur during routine work, such as exposure to toxic chemicals or harmful noise levels, and the effects may not be immediate.

**3. What are the four basic elements of a good safety and health program?**

- a) Inspections, Citations, Standards, and Fines.
- b) Management Commitment/Employee Involvement, Worksite Analysis, Hazard Prevention/Control, and Training.
- c) Hiring, Firing, Production, and Marketing.
- d) Insurance, Legal Counsel, PPE, and Signage.

**Answer:** (b). These four pillars are explicitly listed as the basis for all successful safety and health management systems regardless of business size.



## Module 2: A FOUR-POINT WORKPLACE PROGRAM: The Basis of a Plan

### Learning Objectives

By the end of this section, you will be able to:

- **Evaluate** management strategies to demonstrate visible commitment to workplace safety and health.
- **Implement** a systematic worksite analysis to identify existing and potential hazards.
- **Establish** comprehensive recordkeeping procedures for injuries, illnesses, and hazardous exposures in compliance with OSHA requirements.


*Executive Summary:* The Four-Point Workplace Program, based on OSHA's 1989 Management Guidelines, provides a voluntary yet authoritative framework for protecting workers through management leadership, worksite analysis, hazard control, and rigorous training.

### Management Commitment and Employee Involvement

As a manager, your attitude toward safety is directly reflected in employee behavior. A clear, active policy is required to show that safety is a top priority.

### Key Leadership Actions

- **Visible Support:** Personally involve yourself in safety activities, such as reviewing inspection and accident reports.
- **Leading by Example:** Follow all safety requirements, including wearing mandatory **Personal Protective Equipment (PPE)** like hard hats and safety glasses, even during brief visits to an area.
- **Clear Assignments:** Assign safety responsibilities in the same manner as production responsibilities and provide the necessary resources (personnel, time, and budget) to execute them.
- **Policy Communication:** Post your safety policy next to the **Job Safety and Health Protection Poster** and hold regular meetings to discuss objectives.

 **Design Tip:** Take advantage of your employees' specialized knowledge by having them conduct safety training or investigate accidents to encourage program "buy-in".

### Worksite Analysis

It is a management responsibility to identify all items or substances that could harm workers. This involves a group of processes designed to maintain a safe environment.

- **Consultation Services:** Request a free, confidential survey from your state on-site **Consultation Program** to identify current and developing hazards.



- **Change Management:** Seek professional advice when changing procedures or equipment to avoid introducing new hazards.
- **Self-Inspection:** Establish a system to check hazard controls and evaluate new risks periodically.
- **Trend Analysis:** Review several years of injury and illness records to identify high-risk patterns.

### Hazard Prevention and Control

Once hazards are identified, you must implement systems to eliminate or control them. Elimination through substitution or engineering controls is the preferred method.

### Operational Controls

- **Safe Work Procedures:** Develop procedures based on hazard analysis and ensure they are enforced through a fair disciplinary system.
- **Maintenance:** Provide regular equipment maintenance and track it to completion to prevent hazard-creating breakdowns.
- **Emergency Planning:** Conduct frequent drills for fire and natural disasters so employees remain capable under stressful conditions.

### Medical and First Aid Requirements

- **Medical Advice:** Ensure medical personnel are available for advice on employee health matters.
- **Emergency Procedures:** Develop and post procedures for handling and transporting injured workers.
- **First Aid Access:** If your facility is remote, you **must** ensure trained personnel and supplies are readily available.

**⚠ Safety Constraint:** You must check battery charging stations and corrosive material areas to ensure that required eyewash facilities and showers are fully operational.

### Training for Employees, Supervisors, and Managers

Proper job performance is the foundation of accident prevention.

- **Job Instructions:** No employee should undertake a job until they have received instructions and are authorized to perform it.
- **Safety Rights:** Employees should not undertake any task that appears unsafe.
- **Supervisor Training:** Supervisors must understand all hazards faced by their team and know how to reinforce training with refreshers or disciplinary action.



Purchase this course to  
see the remainder of  
the technical materials.