

**Electrical Workplace Safety**  
**Lead in Construction; Trenching & Excavations; Stairways and Ladders**

Wisconsin Department of Safety and Professional Services

Course Identification Number 14135

Expiration Date: 11/5/2025

Credit Hours: 9 hours

Course Provider:

USCONTRACTORLICENSE LLC dba Kevin Wunderlin

P.O. Box 268

Platteville, Wisconsin 53818-0268

(608) 348-6688

[www.uscontractorlicense.com](http://www.uscontractorlicense.com)

**Course Type: Continuing Education**

**ELECTRICAL WORKPLACE SAFETY**

This course was developed for persons working in the electrical field who are exposed to a variety of workplace hazards. OSHA has developed extensive materials to reduce the incidents of work related accidents and workers should be aware of basic workplace safety practices. This course is an overview of the OSHA rules in regards to worker safety with an emphasis on more current issues such as Lead in Construction, Trenching and Excavations, and Stairway and Ladder safety practices which are required by OSHA.

**Outline of Course**

**Lead In Construction**

OSHA Introduction

Health Hazards of Lead Exposure

Symptoms of Chronic Overexposure

Reproductive Risks

Chelating Agents

Worker Exposure

Construction Workers and Lead Exposure

Most Vulnerable Workers

OSHA's Lead Standard

Exposure Limits

Applicability to Construction

Employer Responsibilities

Elements of a Compliance Program

Initial Employee Exposure Assessment

- Biological Monitoring Tests
- Pending Employee Exposure Assessment
- Test Results Showing No Overexposures
- Employee Notification of Monitoring Results

#### Medical Exams

- Medical Surveillance
- Information for the Examining Physician
- When Monitoring Shows No Employee Exposures
- After the Medical Examinations
- Medical Removal Provisions

#### Worker Protections and Benefits

- Records Requirements Involving Medical Removal

#### Recordkeeping

- Employer Requirements
- Exposure Assessment Records
- Medical Surveillance Records
- Documents for Employees Subject to Medical Removal
- Employer Requirements Related to Objective Data
- Documents for OSHA and NOISH Review
- When Closing a Business

#### Exposure Reduction and Employee Protection

- Engineering Controls
- Exhaust Ventilation
- Enclosure or Encapsulation
- Substitution
- Component Replacement
- Process or Equipment Modification
- Isolation

#### Housekeeping Practices

- Personal Hygiene Practices
- Change Areas
- Showers and Washing Facilities
- Personal Practices
- End-Of-Day Procedures

#### Protective Clothing and Equipment

- Employer Requirements
- Handling Contaminated Protective Clothing
- Preventing Heat Stress
- Respiratory Protection

- Providing Adequate Respiratory Protection
- Respiratory Protection Programs
- Selecting a Respirator

- Employee Information and Training
  - Program Requirements
  - Warning Signs

- OSHA Assistance, Services and Products
  - State Programs
- Consultation Assistance
- Safety and Health Achievement Recognition Program
- Voluntary Protection Programs
- Cooperative Partnerships
- Alliance Program
- Strategic Partnership Program
- Occupational Safety and Health Training
  - Training Grants
  - Other Assistance Materials
- In Case of an Emergency Or To File A Complaint
  - OSHA Regional Offices
  - Blood Lead Laboratories-Wisconsin

## **Trenches and Excavations**

- Working Safely in Trenches
  - Dangers of Trenching and Evacuation
  - Protect Yourself
  - Protective Systems
  - Competent Person
  - Access and Egress
  - General Trenching and Excavation Rules

- Excavations
  - Introduction
  - Difference between Excavation and Trench
  - Dangers
  - OSHA Standard Rule
  - Exemptions

- Preplanning
  - Why is it important?
  - Utility Lines and Pipes
  - Informing Workers

## Protective Systems

- Preventing Cave-ins
- Most appropriate Protective System Design
- Other Safety Precautions
- Installation and Removal of Protective Systems

## Additional Hazards and Protections

- Warning Systems
- Water Accumulation
- Hazardous Atmospheres
- Means of Egress
- Pier Holes
- Site Inspection

## OSHA Assistance, Services and Programs

- State Plans
  - Consultation Assistance
    - Privacy
    - Cost
    - Violations
    - Voluntary Protection Programs
    - Strategic Partnership Program
- OSHA Training for Employers and Employees
  - Training Grants
- Contact OSHA

## Stairways and Ladders

### RULES FOR STAIRWAYS

- Stairways Used During Construction
- Temporary Stairs
- Stair Rails
- Handrails
- Midrails

### LADDERS

- Safety Tips
- General Requirements
- Rules for Ladders
- Specific Types of Ladders
  - Step Ladders
  - Portable Ladders
    - Fixed Ladders
    - Cages for Fixed Ladders
    - Wells for Fixed Ladders

Safety Devices  
Defective Ladders

TRAINING REQUIREMENTS

**Exam**

100 Questions related to the Reference Materials are used to test the attendee on their comprehension of the materials. A 70% score will need to be attained in order to pass this course.