DISCLAIMER

This Personal Protective Equipment (PPE) Workplace Program is a guide to help employers develop a safety plan to comply with the requirements of the Occupational Safety and Health Administration (OSHA). It contains helpful information and the basic elements to build a safety and health program. It is not meant to supersede OSHA requirements. Employers should review the OSHA standard for each specific worksite and customize the program accordingly. This PPE Workplace Program is provided as a public service by the Texas Department of Insurance, Division of Workers’ Compensation (DWC)-Workplace Safety and the Texas Occupational Safety and Health Consultation (OSHCON) Program. The information in this document was produced, unless otherwise noted, from staff subject specialists, government entities, or other authoritative sources. Information contained in this publication is considered accurate at the time of publication. For more free DWC publications on this and other safety topics and for free occupational safety and health streaming videos, visit www.txworker.com, call 1-800-252-7031, option 2, or email resourcecenter@tdi.texas.gov.
INTRODUCTION

The Occupational Safety and Health Administration (OSHA) requires employers to protect their employees from workplace hazards. The priority for protecting employees should follow a Hierarchy of Controls. The Hierarchy of Controls is a step-by-step approach to eliminating or reducing workplace hazards. It ranks controls from the most effective level of protection to the least effective level of protection. When choosing a method to control a hazard, start from the top of the inverted pyramid:

- **Elimination or substitution** (the most effective controls) removes hazards from the workplace or replaces hazardous equipment, materials, or procedures with non-hazardous ones.

- **Engineering controls** are methods that keep the hazard from coming in contact with the worker. These can be built into the design of a plant, equipment, or process to separate workers from hazards. Examples of engineering controls include barriers, enclosures, guarding, shielding, ventilation, guardrails, and mechanical lifting devices, to name a few.

- **Administrative controls** put policies and rules in place that reduce hazards by changing the way employees perform their work. These work practices may include job rotation, maintenance and training programs, restricting access to certain work areas, specific hygiene practices, good housekeeping, and more.

- **Personal protective equipment (PPE)** is all clothing and work accessories employees wear to help protect them from workplace hazards. Examples of PPE include:
  - respirators;
  - gloves;
  - aprons;
  - fall protection;
  - full body suits;
  - goggles;
  - face shields; and
  - leg and foot protection.

PPE is considered the last level of protection and the least effective. **PPE should never be considered a substitute for other control methods.**

This publication is designed to help employers create or improve upon their PPE Workplace Program. It provides information on how to use a hazard assessment to identify risks in the workplace and ways to select, fit, use, maintain, and evaluate the effectiveness of PPE when needed to reduce job-related injuries and illnesses.
# Table of Contents

## Personal Protective Equipment Workplace Program

### Introduction

- Introduction .................................................................................................................. 3

## PPE Workplace Program

- Hazard Assessment ........................................................................................................ 5
- Selecting PPE .................................................................................................................... 6
- Fitting PPE ....................................................................................................................... 7
- Maintaining PPE ................................................................................................................. 8
- Evaluating PPE ................................................................................................................. 8
- PPE Training ..................................................................................................................... 8
- PPE Resources ................................................................................................................... 9

## Appendix A

- Sample PPE Written Program ..................................................................................... 10

## Appendix B

- PPE Hazard Analysis Worksheet .................................................................................. 11

## Appendix C

- PPE Selection Guidelines ............................................................................................. 14
  - Eye and Face Protection ............................................................................................... 14
  - Head Protection ........................................................................................................... 16
  - Foot Protection ............................................................................................................ 16
  - Hand Protection ......................................................................................................... 17

## Appendix D

- Sample Training Record Logs ..................................................................................... 19
OSHA Standard 29 Code of Federal Regulations (CFR) 1910.132 states that employers must determine if hazards are present, or are likely to be present, in the workplace that would require the use of PPE. If PPE is needed to reduce workers’ exposure to hazards, OSHA requires employers to create, write, and maintain a PPE Workplace Program. (See Appendix A for a Sample PPE Written Program.)

A PPE Workplace Program helps employers:

- identify the job hazards (through a hazard assessment);
- select the proper PPE;
- train workers on how to use and care for the PPE;
- maintain the PPE; and
- evaluate the effectiveness of the PPE.

**Who is responsible?**

Management, supervisors, and employees must work together to ensure personal protection is part of an ongoing safety program.

- **Management** must:
  - conduct a hazard assessment to identify risks;
  - select the PPE needed for specific tasks; and
  - train employees on the limits of PPE and how to use, inspect, store, and clean the PPE.

- **Supervisors** must:
  - assist in the hazard assessment;
  - monitor the use of PPE;
  - replace PPE when needed; and
  - identify any new hazards that would require the use of PPE.

- **Employees** must properly:
  - use the assigned PPE;
  - maintain the PPE; and
  - inform a supervisor(s) if the PPE is damaged or not effective.

**Hazard Assessment**

A hazard assessment is a process that helps identify, assess, and eliminate or manage workplace hazards. It includes assessing hazards that may require employees to use PPE for:

- **head, eye, face, hand, or foot protection**;
- **fall protection**;
- **hearing protection**;
- **respiratory protection**; or
- **electric shock protection**.

Conducting a hazard assessment requires a walkthrough of the business or worksite to identify health and safety risks. Management should be looking for potential hazards, among others, related to:

- **impact** - chipping, grinding, machining, masonry, woodworking, sawing, drilling, chiseling, power fastening, riveting, or sanding;
- **penetration** - sharp objects that could go through the skin, such as nails, knives, and saws.
• **compression** - construction, plumbing, smithing, building maintenance; trenching, utility work, and moving equipment operations such as powered industrial trucks and lawn equipment;

• **hazardous chemical exposure** - pouring, mixing, painting, cleaning, siphoning, dip tank operations, and dental and health care services;

• **heat** - welding, pouring molten metal, smithing, baking, cooking, and drying;

• **light radiation** - welding, including electric arc, gas, cutting torch brazing, soldering, and glare;

• **electric hazards** - building and tool maintenance, utility work, construction, wiring, and welding (computer, arc, or resistance);

• **harmful dusts** - sawing, drilling, sanding, abrasive blasting, and grinding;

• **falls** - the need for restraint systems, arrest systems, positioning systems, and ladder safety systems, (see [29 CFR 1910.140](#));

• **noise** – sounds at or above 85 decibels averaged over eight working hours, or an eight-hour time-weighted average, (see [29 CFR 1910.95](#));

• **insufficient oxygen environments** – tanks, any confined spaces, or any other oxygen-deficient atmospheres that may result in less than 19.5% oxygen present, (see [29 CFR 1910.134](#));

• **airborne harmful exposures** – fogs, dust, fumes, mists, smokes, gases, vapors, and sprays above permissible limits or of a nature that can result in illness, disease, impairment, or loss of function, (see [29 CFR 1910.134](#)); and

• **other exposures requiring rubber insulating materials or protective shields** – the need for gloves, blankets, sleeves, hoses, hoods, covers, tools, and fiberglass or phenolic resin barriers to prevent burns, shock, or other electrical hazards, (see [29 CFR 1910.137](#)).

A Hazard Analysis Worksheet is attached to this publication in Appendix B to help managers and supervisors identify workplace risks for each job task performed.

### Selecting PPE

If hazards exist that require the use of PPE:

- **select** the proper PPE for each affected employee;

- **communicate** the selection decision to each affected employee; and

- **certify** in writing that a workplace hazard assessment was performed and keep it on file, (see [29 CFR 1910.132(d) (2)](#)). The certification must:

  - identify the workplace evaluated;
  - identify the person certifying that the evaluation was performed; and
  - list the date of the assessment.

The general process for choosing and using PPE is to:

- **learn what PPE is available** and what it can do to protect against each hazard, such as splash protection or impact protection;
• compare the hazards with the environment or climate employees are working in, the visibility workers need, and the PPE’s capabilities;
• select the PPE that ensures a level of protection greater than the minimum required to protect workers from the hazards;
• fit the user with the PPE; and
• give instructions on the PPE care and use.

It is important to **involve individual workers in the selection of PPE.** Always allow workers to evaluate various models so management can receive information about fit and comfort. When PPE is uncomfortable, workers have a harder time concentrating on their job and are more likely to remove it. Involving workers in the selection also helps them accept PPE rules and procedures.

**PPE should be individually assigned once the selection has been made.** Make end users aware of all warning labels, limitations of their PPE, and the importance of not altering or removing the PPE. Also, let employees know that PPE does not eliminate the hazard. If the equipment fails or if the employee fails to wear it properly, exposure will occur.

For more information on selection guidelines, see Appendix C.

---

**Fitting PPE**

PPE must be properly fitted not only to reduce the possibility of failure but for the worker’s comfort. Fit all workers on an individual basis and explain how to wear and maintain the PPE properly.

In some cases, individual fitting programs may need to be carried out by qualified personnel. For example, eye protection fitting may be performed by a qualified person such as an optometrist, an optician, a manufacturers’ representative, or a specially trained staff member, such as a nurse. Devices with adjustable features should be fitted for comfort and in a manner that keeps the PPE in the proper position. Particular care should be taken in fitting devices for eye protection against dust and chemical splashes to ensure that the devices are sealed to the face.

Also, proper fitting of hard hats and helmets is important to ensure that headgear does not fall off during work operations. (Chin straps should break at a reasonably low force to prevent a strangulation hazard.) Always follow the manufacturer’s instructions when available.
Maintaining PPE

Keep PPE clean and in a serviceable condition. Without proper maintenance, the effectiveness of PPE cannot be guaranteed. Maintenance should include:

- inspection;
- care;
- cleaning;
- repair; and
- proper storage.

Perhaps the most important part of maintenance is the need for continual inspection of the PPE. If carefully performed, inspections identify damaged or malfunctioning PPE before it is used. PPE that is not performing up to the manufacturer’s specifications should be discarded. A common example is eyewear with scratched lenses, which lessen the safety glass’s ability to withstand impact. **Always repair or discard any defective or damaged PPE immediately.** Procedures should also be put in place to allow workers to get new PPE or replacement parts for damaged PPE.

It is also important to help employees keep their PPE clean. For example, respiratory protection devices require a program of repair, cleaning, storage, and periodic testing. Wearing poorly maintained or malfunctioning PPE can be more dangerous than not wearing any protection at all. The workers may have a false sense of security and think they are protected when they are not.

Evaluating PPE

As with any program or procedure started in an organization, the effectiveness of the PPE Workplace Program must be evaluated regularly. Annual audits of equipment and procedures are common, but critical areas may need review more often. Safety performance data collected before the start of the program can be used as a comparison to determine the success or failure of the program.

PPE Training

Training workers about hazards is an important part of workplace safety. Where hazards or the potential for hazards are identified that require the use of PPE, employers must provide training to each affected worker (29 CFR 1910.152). This includes information on protective clothing, protective shields, protective barriers, personal fall protection equipment, and lifesaving equipment. Workers required to use PPE must receive training on:

- when PPE is necessary;
- what PPE is necessary;
- how to put on, adjust, wear, and remove PPE;
- limitations of the equipment; and
- proper care, maintenance, useful life, and disposal of the equipment.

Each affected employee must demonstrate an understanding of the training and the ability to use PPE properly before being allowed to perform work requiring its use. Certification of PPE training is required by OSHA and can be accomplished by a PPE Training Record Log, or similar documentation, to verify that each affected employee received and understood the required PPE training. *(A sample PPE Training Record Log is in Appendix D.)*
PPE Resources
For more information on personal protection, review OSHA’s Respiratory Fit Testing video or download any of the free Texas Department of Insurance, Division of Workers’ Compensation (DWC) – Workplace Safety’s publications:

- Eye Protection Safety Training Program (English/Spanish);
- Fall Protection for the Construction Industry Workplace Program (English/Spanish);
- Fall Prevention in Sawmills Take 5 for Safety (English/Spanish);
- Fall Protection for the Construction Industry Sample Written Program (English/Spanish);
- Foot and Leg Protection Workplace Program (English/Spanish);
- Footwear Safety Fact Sheet (English/Spanish);
- Hand Protection from Chemical Exposure Safety Training Program (English/Spanish);
- Personal Fall Protection Systems Fact Sheet (English/Spanish);
- Personal Protective Equipment Fact Sheet (English/Spanish);
- Personal Protective Equipment Safety Training Program (English/Spanish);
- Protective Clothing Workplace Program (English/Spanish);
- Protective Headgear Safety Training Program (English/Spanish);
- Respirator Types Safety Training Program (English/Spanish);
- Respirator Use (English/Spanish);
- Respiratory Protection Sample OSHA Written Program (English) and
- Respiratory Protection Workplace Program (English/Spanish).

DWC safety training specialists and virtual or onsite, confidential, free consultants are also available to meet companies’ training and OSHA-compliance needs. Contact 1-800-252-7031, option 2, or visit www.txsafetyatwork.com.
APPENDIX A:
Sample PPE Written Program

[Company Name]
Personal Protective Equipment Written Program
(OSHA 29 CFR 1910.132)

[Company Name] will assess our workplace to determine if hazards are present or likely to be present which requires the use of Personal Protective Equipment (PPE). If hazards are present or likely to be present, [Company Name] shall:

• select the type of PPE that will protect each employee;
• require the employee to use the PPE;
• communicate selection decisions to each affected employee. (Reference: 29 CFR 1910.132 (d)(1)(i - iii)).

[Company Name] shall verify the hazard assessment has been performed through a written certification. The certification shall:

• identify the workplace where the assessment was performed;
• name the person certifying that the assessment was performed;
• give the date(s) that the hazard assessment was performed.
• be identifiable as a document of certification of hazard assessment. (Reference: 29 CFR 1910.132 (d)(2)).

[Company Name] shall assure that defective or damaged PPE is not used. (Reference: 29 CFR 1910.132(e)).

[Company Name] will provide training to each employee who is required by this section to use PPE. Each employee shall be trained to know at least the following:

• when PPE is necessary;
• what PPE is necessary;
• how to put on, take off, adjust, and wear PPE;
• limitations of PPE; and
• proper care, maintenance, useful life, and disposal of the PPE. (Reference: 29 CFR 1910.132 (f)(1)(i-v)).

Before being allowed to perform work that requires the use of PPE, each employee shall:

• demonstrate an understanding of the training provided and
• demonstrate the ability to properly use PPE.

When [Company Name] has reason to believe that an employee does not understand the training or possess the skill required to wear the PPE, the employer shall retrain the employee. Other circumstances where retraining is required, but are not limited to, include:

• changes in the workplace that render previous training obsolete;
• changes in PPE that render previous training obsolete; or
• when an employee does not retain the understanding or skill to use PPE.

[Company Name] shall verify that each affected employee receives and understands the required training. The verification shall be a:

• written certification;
• show the name of the employee trained;
• show the date(s) of training; and
• identify the subject of the certification.
APPENDIX B: PPE Hazard Analysis Worksheet

To meet the requirements in OSHA 29 CFR 1910.132 and to maintain a safe working environment, all supervisors and managers must analyze the potential job hazards within their area. The PPE Hazard Analysis Worksheet on the next page is designed to help you conduct a comprehensive assessment.

Instructions:
Identify the job titles for all workers within your department and make a separate copy of the PPE Hazard Analysis Worksheet for each job before completing the following:

1. Enter the name of your department.
2. Enter the job title to be analyzed.
3. Enter the location or area of the facility where the job holder performs the activities or tasks, such as office, maintenance shop, warehouse, etc.
4. Enter the name of the person who is completing the analysis.
5. Enter the date of the analysis.
6. Under “Required Job Activities/Tasks,” list all duties that the job holder is required to perform.
7. Under “Potential Hazards,” enter the hazard number(s) from the Worksheet Key beside the associated “Required Job Activities/Tasks.”
8. Under “Body Parts,” enter the body part number(s) from the Worksheet Key beside the associated “Required Job Activities/Tasks” and “Potential Hazards.”
9. Under “Required PPE” enter the PPE number(s) from the Worksheet Key beside the associated “Required Job Activities/Tasks,” “Potential Hazards,” and “Body Parts.”

A completed Sample PPE Hazardous Analysis Worksheet follows the form on the next page.
## Hazard Analysis Worksheet

**Department:** __________________________  **Job title:** __________________________

**Location of job duties:** __________________________________________________________

**Analysis completed by:** __________________________  **Date:** __________________________

### Worksheet Key

#### Hazards

1. Cut  
2. Abrasion  
3. Burn  
4. Fall  
5. Falling objects  
6. Noise  
7. Flying particles  
8. Inhalation  
9. Bump  
10. Slip  
11. Splash  
12. Other

#### Body Part

a. Head  
b. Face  
c. Eye(s)  
d. Ear(s)  
e. Respiratory system  
f. Trunk  
g. Arm(s)  
h. Hand(s)  
i. Fingers  
j. Leg(s)  
k. Feet/foot  
l. Toe(s)  
m. Other

#### Required PPE

A. Hard hat  
B. Chemical goggles  
C. Safety glasses  
D. Ear plugs  
E. Ear muffs  
F. Body harness  
G. Gloves  
H. Shoes/boots  
I. Respirator  
J. Other (1st)  
K. Other (2nd)

<table>
<thead>
<tr>
<th>Required Job Activities/Tasks</th>
<th>Potential Hazards (Use Hazard Key Numbers)</th>
<th>Body Part(s) (Use Body Part Key Letter)</th>
<th>Required PPE (Use Required PPE Key Letter)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Hazard Analysis Worksheet

**Department:** Building Maintenance  
**Job title:** Maintenance Helper

**Location of job duties:** Throughout Plant

**Analysis completed by:** John Smith  
**Date:** MM/DD/YYYY

---

## Worksheet Key

<table>
<thead>
<tr>
<th><strong>Hazards</strong></th>
<th><strong>Body Part</strong></th>
<th><strong>Required PPE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cut</td>
<td>a. Head</td>
<td>A. Hard hat</td>
</tr>
<tr>
<td>2. Abrasion</td>
<td>b. Face</td>
<td>B. Chemical goggles</td>
</tr>
<tr>
<td>3. Burn</td>
<td>c. Eye(s)</td>
<td>C. Safety glasses</td>
</tr>
<tr>
<td>4. Fall</td>
<td>d. Ear(s)</td>
<td>D. Ear plugs</td>
</tr>
<tr>
<td>5. Falling objects</td>
<td>e. Respiratory system</td>
<td>E. Ear muffs</td>
</tr>
<tr>
<td>6. Noise</td>
<td>f. Trunk</td>
<td>F. Body harness</td>
</tr>
<tr>
<td>7. Flying particles</td>
<td>g. Arm(s)</td>
<td>G. Gloves</td>
</tr>
<tr>
<td>8. Inhalation</td>
<td>h. Hand(s)</td>
<td>G. (List type)</td>
</tr>
<tr>
<td>9. Bump</td>
<td>i. Fingers</td>
<td>G. (List type)</td>
</tr>
<tr>
<td>10. Slip</td>
<td>j. Leg(s)</td>
<td>G. (List type)</td>
</tr>
<tr>
<td>11. Splash</td>
<td>k. Feet/foot</td>
<td>G. (List type)</td>
</tr>
<tr>
<td>12. Other</td>
<td>l. Toe(s)</td>
<td>G. (List type)</td>
</tr>
<tr>
<td></td>
<td>m. Other</td>
<td>G. (List type)</td>
</tr>
</tbody>
</table>

### Required Job Activities/Tasks

<table>
<thead>
<tr>
<th>Required Job Activities/Tasks</th>
<th>Potential Hazards (Use Hazard Key Numbers)</th>
<th>Body Part(s) (Use Body Part Key Letter)</th>
<th>Required PPE (Use Required PPE Key Letter)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replace Glass</td>
<td>1, 7</td>
<td>c, g, h</td>
<td>C, G (cut resist)</td>
</tr>
<tr>
<td>Remove Trash</td>
<td>7</td>
<td>c</td>
<td>C</td>
</tr>
<tr>
<td>Replace light bulbs</td>
<td>1, 4, 7</td>
<td>c, h</td>
<td>C, G (leather)</td>
</tr>
<tr>
<td>Welding</td>
<td>3, 7, 8</td>
<td>c, e, g, h</td>
<td>J (welding helmet)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>I (fume)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>K (welding vest)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>G (welding gloves)</td>
</tr>
</tbody>
</table>

---

**Texas Department of Insurance, Division of Workers’ Compensation**  
www.tx saf etyat work.com  
HS96-101D (07-22)
APPENDIX C:
PPE Selection Guidelines

The following information is designed to assist in the selection of PPE for eye, face, head, foot, and hand protection. Because OSHA has specific requirements for respirators (29 CFR 1910.134 and 29 CFR 1910.134), fall protection (29 CFR 1910.140), hearing conservation (29 CFR 1910.95), and rubber insulating equipment (29 CFR 1910.137), these are not discussed here. Refer to the OSHA standard for specific guidelines or review any of the applicable DWC publications.

Eye and Face Protection
The majority of workplace eye injuries can be prevented by the use of approved safety glasses, goggles, or shields. Approved eye and face protection must be worn when there is a reasonable possibility of personal injury.

- Each employee shall use appropriate eye or face protection when exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids, caustic liquids, chemical gases, vapors, or harmful light radiation.

- Each employee shall use eye protection that provides side protection when there is a hazard from flying objects. Detachable side protectors are acceptable.

- Each employee who wears prescription lenses while engaged in operations that involve eye hazards shall wear eye protection that incorporates the prescription in its design or shall wear eye protection that can be worn over the prescription lenses without disturbing the proper position of the prescription lenses or the protective lenses.

- Eye and face PPE shall be distinctly marked to identify the manufacturer.

- Each employee shall use equipment with filter lenses that have a shade number appropriate for the work being performed to protect from harmful light radiation.

Typical hazards that can cause eye and face injuries are:

- splashes of toxic or corrosive chemicals, hot liquids, and molten metals;
- flying objects, such as chips of wood, metal, stone, and dust;
- fumes, gases, and mists of toxic or corrosive chemicals; and
- aerosols of biological substances.

Preventing eye accidents requires that all people who may be in eye hazard areas must wear protective eyewear. This includes employees, visitors, contractors, and others passing through an identified eye hazard area.

Specifications for eye and face protectors purchased, issued to, and used by employees, contractors, and visitors must:
• provide adequate protection against the particular hazards for which they are designed;
• fit properly, offer the least possible resistance to movement, and cause minimal discomfort while in use;
• be durable;
• be easily cleaned or disinfected for or by the wearer; and
• be clearly marked to identify the manufacturer.

Workers who require corrective lenses for normal vision and are required to wear eye protection, must wear one of the following types of goggles or safety glasses:

• safety glasses with protective lenses and optical correction;
• goggles that can be worn over prescription glasses without disturbing the adjustment of the lenses; or
• goggles with corrective lenses mounted behind the protective lenses.

The types of eye and face protection that are available include, but are not limited to:

• **Safety glasses**
  Protective eyeglasses are made with safety frames, tempered glass, or plastic lenses, temples, and side shields that protect eyes from moderate impact and particles such as during carpentry, woodworking, grinding and scaling.

• **Single lens goggles**
  Vinyl framed goggles provide eye protection from many hazards. These goggles are available with clear or tinted lenses and perforated, port-vented, or non-vented frames. Single lens goggles provide similar protection to safety glasses. They may be worn in combination with safety glasses or corrective lenses.

• **Welder’s goggles**
  These goggles are available in rigid and soft frames. Welder’s goggles protect against sparking, scaling, or splashing metals, and harmful light rays. Their lenses are impact resistant and available in multiple filter shades.

• **Chipper’s and grinder’s goggles**
  These goggles provide eye protection from flying particles. The dual protective eye cups house impact-resistant clear lenses with individual cover plates.

• **Face shields**
  These usually include an adjustable headgear and face shield of tinted or transparent acetate, polycarbonate materials, or a wire screen. Face shields are available in various sizes, tensile strength, impact and heat resistance, and light-ray-filtering capacity. Face shields should be used when the face and eyes need protection against flying particles, metal sparks, and chemical or biological splash.

• **Welding shields**
  These shields are made of vulcanized fiber or glass fiber body, a ratchet or button type

Texas Department of Insurance, Division of Workers' Compensation
www.txsafetyatwork.com
HS96-101D (07-22)
adjustable headgear or cap, a filter, and a cover plate holder. These shields protect a worker’s eyes and face from infrared or radiant light burns, flying sparks, metal spatter, and slag chips during welding, brazing, soldering, resistance welding, bare or shielded electric arc welding, oxyacetylene welding, and cutting operations.

**Head Protection**

Hard hats and safety caps have been designed and manufactured to provide workers protection from impact, heat, electrical, and fire hazards. These protectors consist of a shell, a suspension system, and a chin strap. Safety hats and caps are made of nonconductive, fire- and water-resistant materials. Bump caps and skull guards are constructed of lightweight materials and are designed to provide minimal protection against hazards when working in congested areas.

Head protection must be furnished to and used by all employees and contractors in construction and other work with potential head hazards. Head protection must also be worn by engineers, inspectors, and visitors at construction sites. Bump caps and skull guards must be issued to and worn for protection against scalp lacerations from contact with sharp objects. They cannot be worn as substitutes for safety caps and hard hats because they do not protect from high-impact forces or penetration by falling objects.

**Selection guidelines for head protection** must protect from impact and penetration hazards caused by falling objects. Head protection is also available which provides protection from electric shock and burn. When selecting head protection, knowledge of potential electrical hazards is important. Class G (General) helmets, in addition to impact and penetration resistance, provide electrical protection from low-voltage conductors to 2,200 volts. Class E (Electrical) helmets, in addition to impact and penetration resistance, provide electrical protection from high-voltage conductors to 20,000 volts. Class C (Conductive) helmets provide impact and penetration resistance. However, they are usually made of aluminum which conducts electricity, so they should not be used around electrical hazards.

**Helmets must be worn where falling object hazards are present.** This includes when employees are working:

- below other workers who are using tools and materials that could fall;
- around or under conveyor belts that carry parts or materials;
- below machinery or processes that might cause material or objects to fall; and
- on exposed energized conductors.

**Foot Protection**

Each affected employee shall wear protective footwear when working in areas where there is a danger of foot injury due to:

- falling or rolling objects;
- objects piercing the sole; and
- exposure to electrical hazards.

Safety shoes and boots should be selected to provide both impact and compression protection. When necessary, safety shoes must also provide puncture protection. In some special work situations, safety shoes should also provide metatarsal protection or electrical insulation safety.
• **Impact-resistant shoes or boots**
  Safety shoes or boots with impact protection are required for carrying or handling materials such as packages, objects, parts, or heavy tools that can be dropped or other activities where objects might fall onto the feet.

• **Compression protection shoes or boots**
  Safety shoes or boots with compression protection are required for work activities involving skid trucks and manual material handling carts, such as around bulk rolls of materials (e.g., paper) and heavy pipes, all of which could roll over an employee’s feet.

• **Puncture-resistant shoes or boots**
  Safety shoes or boots with puncture protection are required when sharp objects such as nails, wire, tacks, screws, large staples, and scrap metal can be stepped on by employees causing a foot injury.

**Hand Protection**

Hand protection is required when employees' hands are exposed to hazards such as those from:

- skin absorption of harmful substances;
- severe cuts or lacerations;
- severe abrasions;
- punctures;
- chemical burns;
- thermal burns; and
- harmful temperature extremes.

One type of glove will not work in all situations. **Gloves selection** should be based on:

- the material being handled;
- the particular hazard involved; and
- their suitability for the operation being conducted.

Most accidents involving hands and arms can be classified under four **main hazard categories**:

- chemicals;
- abrasions;
- cutting; and
- heat.

Gloves are available that can protect workers from any of these individual hazards or a combination of hazards. However, for the **best protection**, gloves should be:

- replaced periodically based on their frequency of use and permeability to the substance(s)
handled;
• rinsed and then carefully removed after use; and
• worn whenever it is necessary to handle rough or sharp-edged objects and very hot or very cold materials.

The type of glove materials to be used in these situations include:

• leather;
• welder’s gloves;
• aluminum-backed gloves; and
• other types of insulated glove materials.

Careful attention must be given to protecting your hands when working with tools and machinery. Power tools and machinery must have guards installed or incorporated into their design that prevent the hands from contacting the point of operation, power train, or other moving parts. To protect the hands from injury due to contact with moving parts, it is important to ensure that:

• guards are always in place and used;
• machines are locked out or tools are disconnected from the power before making repairs;
• machinery without guards is considered inoperative; and
• gloves are never worn around moving machines, such as drill presses, mills, lathes, and grinders.

Selection of hand PPE should be based on:

• the task(s) to be performed;
• conditions present;
• duration of use; and
• the hazards identified

No glove protects against all potential hand hazards. Commonly available glove materials provide only limited protection against many chemicals. Therefore, it is important to select the most appropriate glove for a particular task, determine how long it can be worn, and whether it can be reused. It is also important to know the performance characteristics of gloves relative to the specific hazard, such as chemical hazards, cut hazards, flame hazards, or others.

Before purchasing gloves, request documentation from the manufacturer that the gloves meet the appropriate test standard(s) for the hazard(s) anticipated.

For more information on personal protection, review the PPE publications on the OSHA or DWC websites.
APPENDIX D:
Sample Training Record Log

PERSONAL PROTECTIVE EQUIPMENT (PPE) TRAINING RECORD

Date: __________

The following employees have reviewed the Hazard Assessment Certification Form and have been trained in the uses and limitations of Personal Protective Equipment (PPE) for this job site. The employees have been observed and demonstrated an understanding of the following: donning, doffing, working with PPE in place, maintaining, and disposing of PPE. These employees have had an opportunity to ask questions and have signed below to attest to their training.

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td></td>
</tr>
</tbody>
</table>

I attest that the individuals above attended the entire training session.

________________________________________________
Practice Manager's Signature

Important: Retain for 3 years per OSHA.
PPE TRAINING RECORD

SUMMARY OF TRAINING

This is a record of employee training per OSHA 29 CFR 1910.132, General Requirements, Subpart I, Personal Protective Equipment.

Topics Covered:

- Application of Personal Protective Equipment (PPE) when necessary due to hazards encountered that are capable of causing injury or impairment in the function of any part of the body through absorption, inhalation, or physical contact.
- Maintenance of PPE in sanitary and reliable condition.
- Hazard assessment for each individual.
- Equipment selection.
- Practice use of the types of PPE that will protect the employee from the hazards identified in the hazard assessment.
- Proper fit of PPE.
- When PPE is necessary.
- What PPE is necessary.
- How to properly don, doff, adjust, and wear PPE.
- The limitations of the PPE.
- The proper care, maintenance, useful life, and disposal of the PPE.
- Each employee shall demonstrate an understanding of the training to use PPE properly before being allowed to perform work requiring the use of PPE.

Retraining Requirements:

Training will be repeated when the employer has reason to believe that any employee does not have the understanding and skill required. Circumstances where retraining is required include, but are not limited to:

- Changes in the workplace that render previous training obsolete.
- Changes in the types of PPE to be used that render previous training obsolete.
- Inadequacies in an employee’s knowledge or use of assigned PPE indicate that the employee has not retained the requisite understanding or skill.

Important: Retain for 3 years per OSHA.