

MORE HIGH-IMPACT **PERSONAL PROTECTIVE EQUIPMENT**

This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation. Featured are:

INTRODUCTION: A brief description of the program and the subject that it addresses.

PROGRAM OUTLINE: Summarizes the program content. If the program outline is discussed before the video is presented, the entire program will be more meaningful and successful.

PREPARING FOR AND CONDUCTING THE PRESENTATION: These sections will help you set up the training environment, help you relate the program to site-specific incidents, and provide program objectives for focusing your presentation.

REVIEW QUESTIONS AND ANSWERS: Questions may be copied and given to participants to document how well they understood the information that was presented. Answers to the review questions are provided separately.

INTRODUCTION

Hardhats, safety eyewear, protective gloves and safety footwear are just a few of the items designed to protect us from workplace injuries. Called personal protective equipment or PPE, it's considered the last line of defense against the hazards of your job; yet, countless injuries are suffered each year by employees who are not wearing the appropriate protection for their job. This program discusses the proper selection and use of personal protective equipment and shows painful examples of making poor decisions concerning our protection. Viewers will get the point that making excuses when it comes to wearing appropriate PPE offers no protection from workplace hazards.

Topics include knowing and understanding how to use PPE, hardhats, safety glasses, safety goggles and face shields, gloves, safety footwear and specialized protective equipment.

PROGRAM OUTLINE

BACKGROUND

- Many hazards in our workplaces have been eliminated or controlled through engineering practices such as machine guarding; however, all hazards cannot be eliminated. The primary means of protecting ourselves is through the use of personal protective equipment, commonly called PPE.
- PPE is considered the last line of defense against injury. Without it, there is no barrier between you and the hazards of your job.
- Personal protective equipment is obviously important; yet, countless injuries are suffered each year by employees who are not wearing the appropriate protection for their job.
- Your company has examined the job tasks and work environments at your facility to determine which hazards require the use of personal protective equipment.

KNOWING & UNDERSTANDING HOW TO USE PPE

- The company will provide you with the protective equipment necessary to perform your job in a safe manner and you will be trained on the selection and use of the particular equipment to be worn.
- Once trained, you will be able to properly put on and take off the equipment and understand which situations require its use.
- Different areas of a facility may have different PPE requirements. Make sure you know and understand these requirements before entering.
- Ask your supervisor any questions you may have concerning your protective equipment. Your safety is too important to be left to chance, so make sure you know and understand how to use the proper PPE before beginning any job task.

- Unfortunately, many workers know what PPE is required but still choose not to use it. They often make excuses for not wearing it, but excuses offer little protection.

HARDHATS

- You are required to wear a protective helmet, commonly called a hardhat, in all situations where there is the potential for head injuries from falling objects.
- Hardhats are also required when top or side impacts are likely.
- A hardhat consists of two parts: the outer shell and the inner suspension system. The suspension system is designed to absorb the shock of a striking object.
- Inspect your hardhat regularly to ensure all components are in good condition. Replace damaged or defective hard hats right away.
- In addition to protecting from impacts, hardhats are also required when workers may be exposed to electricity.
- There are two classes of hardhat: Class G and Class E. Class G helmets are appropriate for most work environments and provide protection against impacts and low voltages of electricity, while Class E hardhats are designed for working near high voltages.

SAFETY GLASSES

- Standard safety glasses with side shields are designed to provide a minimum of protection from various types of workplace hazards.
- Safety glasses must conform to performance standards designed by the American National Standards Institute (ANSI). Safety glasses that meet the ANSI standard will contain an ANSI mark as well as a manufacturer's mark.
- Safety glasses should be worn when there is a risk of flying or falling debris, or a risk of blunt trauma to the eye. Because small pieces of dirt, metal or other materials can easily get lodged into the eye, many companies require safety glasses be worn in all manufacturing, construction and process areas.
- All workers, whether passing through an area or performing a quick job, must take the time to protect their eyes from hazards.
- Wearing safety glasses also protects against blunt trauma hazards, such as a hand tool slipping or walking into an unexpected obstacle.

SAFETY GOGGLES & FACE SHIELDS

- As the types of eye hazards increase, the level of protection should also be increased. In many cases, the amount of debris may dictate the need for safety goggles.
- Goggles provide a complete seal around the eyes and keep out much more debris than safety glasses.
- In addition, goggles offer better protection from chemical splashes and spraying liquids.
- Some jobs require us to protect our faces as well. Jobs such as chipping, grinding or chemical line-breaking require the use of a face shield in addition to safety glasses or goggles.

GLOVES

- Injuries can happen quickly. This is why maintaining proper protection is so important, especially on the part of our bodies most frequently injured and closest to the action: our hands.
- In addition to being careful to avoid pinch points and nip points, wearing gloves is the primary method of protection for our hands.

- Before lifting, pulling, carrying or holding any object, give it a quick inspection for sharp edges and corners, burrs, splinters or other sharp, protruding points. If these types of hazards are present, do not handle the object without the appropriate gloves.
- When confronted with hazards to your hands, make sure to select the proper type of glove for the job at hand. Keep in mind that no single style of glove is effective for all tasks.
- Lightweight cloth gloves protect us from minor hazards, while heavy leather gloves are good for handling material with rough edges, burrs and splinters.
- Cut-resistant and metal mesh gloves can protect against an inadvertent knife stroke or a sharp edge, while heat-resistant gloves of aluminized fabric or leather can protect against flames and intense heat.
- There are countless types of special-purpose gloves, ranging from latex gloves to protect against bodily fluids to gloves for electrical workers to prevent electric shock.
- Remember, it's critical to wear the proper glove for the job. Ask your supervisor if you have any questions about selecting the correct glove for your job tasks.

SAFETY FOOTWEAR

- We often don't think much about our feet until we suffer an injury. Twisted ankles, broken toes, lacerations, puncture wounds and other injuries can be very painful and debilitating.
- Many needless foot injuries could be prevented simply by wearing proper safety footwear. At a minimum, workers should wear boots or shoes that cover the ankle and are constructed of solid leather on the top and sides.
- Also, choose a shoe that has a sole composition that provides good traction in your work environment.
- Never wear open-toed shoes or sandals in any type of manufacturing or industrial setting. Coming into contact with sharp corners, edges and other hazards with open-toed shoes can cause serious and painful injuries.
- Most industrial and manufacturing operations require workers to wear safety shoes and boots with a reinforced toe box and puncture-resistant soles.
- Generally referred to as "steel-toed" boots or shoes, the reinforced toe box must meet a minimum strength rating by ANSI. This rating will be displayed on the boot.
- There are many styles and types of safety shoes and boots to choose from, many of which look similar to regular dress and athletic shoes; however, choosing to wear athletic shoes instead of safety shoes can be a crushing decision.

SPECIALIZED PROTECTIVE EQUIPMENT

- Keep in mind that many jobs require specialized protective equipment in addition to the equipment we have discussed so far.
- When exposed to high noise levels, workers will be required to wear various types of hearing protection. This protection, when used properly, will prevent cumulative damage to our hearing.
- When working above ground, a body harness and lanyard properly connected to an approved anchor point will be a required addition to your protective equipment.
- Various types of respirators may be required to protect from harmful dusts, mists, fumes, vapors, gases and other atmospheric hazards.
- When our bodies may be exposed to extreme temperatures, harmful substances or other hazards, various types of protective suits and clothing will be required.

- No matter what type of PPE you are required to wear, you will receive specific training on its selection and use. Make sure you fully understand how to obtain a proper fit, how to properly use the equipment and how to select the correct gear for the hazards at hand.
- Above all, never forget why this equipment is necessary. When you choose not to wear required PPE, you leave yourself exposed to serious injury and death.

INCIDENTS & THEIR SAFETY LESSONS

Incident 1: Inspector Struck & Killed By Falling Flange

Bennie and Raphael were part of a work crew assigned to inspect chemical piping as part of a planned renovation project. Both men knew the site was a hardhat area, but since they were just inspecting, they didn't see why they needed to wear their hardhats. Just as some workers on a platform above accidentally dropped a flange, Raphael walked underneath them. Raphael was killed when the flange struck and lodged in his head.

Lesson: *Never ignore PPE requirements because you think they don't apply to you.*

Incident 2: Employee Passing Through Shipping Area Struck In Eye By Nail

James was checking some paperwork for a shipment in the shipping area where pallets and crates are built. As he tried to find the shipment, he approached a co-worker who was building a pallet. When James tried to get his attention, the worker took his eyes off the task and misfired his nail gun. The nail from the gun ricocheted off the floor and hit James in the eye. He wasn't wearing his safety glasses because he was only going to be in the area for a moment and didn't think he needed them.

Lessons: *Always wear the proper PPE for the hazards you will face, even if you are just passing through an area or will only be in an area for a short time.*

Incident 3: Worker Without Goggles Splashed In Eyes By Chemical

Brenda was transferring a chemical from a primary container to a smaller container. Just as the small container was almost full, she dropped it. When it hit the floor, the chemical splashed up into her face. The chemical went under her safety glasses and went into her eyes. Temporarily blinded and screaming, she was helped by a co-worker to an eyewash station where she flushed her eyes.

Lesson: *As the types of eye hazards increase, the level of protection should also be increased. Safety goggles offer better protection from chemical splashes and spraying liquids than safety glasses.*

Incident 4: Maintenance Technician Struck In Face By Bracket Brace

Toward the end of their shift, Dan and Lester were mounting a motor to a machine at the plant where they worked. Dan had put the motor in place while Lester made the brace for the bracket. When Dan came for the brace, Lester removed his glasses to inspect it and then headed to the belt sander. "This will be perfect once I knock off this little burr," said Lester. When Dan told Lester to give him the brace, he responded by saying that any job worth doing was worth doing right and then dropped the brace onto the sanding belt. When the belt hit the sander, it bounced into Lester's face, leaving a large laceration from his forehead down to his cheek.

Lesson: *You can't let your guard down, even for just one moment, when it comes to wearing PPE to protect yourself from workplace hazards. Also, don't allow haste and pressure from co-workers distract you from following the precautions (such as wearing PPE) designed to keep you safe on the job.*

Incident 5: Employee Suffers Tendon & Nerve Damage When Hand Is Cut

Troy was pulling some air duct material down from some shelves for a maintenance project when he asked Blake for assistance. Because the material had sharp edges, Troy asked Blake if he had his gloves. Blake replied, "Don't worry about it; let's just get it done." As they carried one of the pieces of metal, its weight caused it to slip and his hand was lacerated when he tried to get a better grip. The cut caused tendon and nerve damage on the palm side of Blake's hand that required two surgeries and months of rehabilitation.

Lesson: *Excuses such as just not wanting to bother going to get your work gloves will not protect you from injury. It is much easier to protect yourself from an injury than trying to repair it afterward.*

Incident 6: Warehouse Worker Wearing Athletic Shoes Has Foot & Toes Crushed

When Brandon arrived at the warehouse to start his shift, he realized he had left his safety shoes in his girlfriend's car. Since his basketball shoes looked similar to his safety shoes, he figured no one would notice and decided to wear them instead. While looking for some parts on a storage rack, a forklift backed into the rack from the other side. Parts from a pallet on the storage rack fell and crushed his foot and toes.

Lesson: *You should be much more concerned about your safety than trying to bypass it without getting caught. Taking the time to put on the required PPE is always worth more than the time saved if you choose not to wear it.*

PREPARE FOR THE SAFETY MEETING OR TRAINING SESSION

Review each section of this Leader's Guide as well as the videotape. Here are a few suggestions for using the program:

Make everyone aware of the importance the company places on health and safety and how each person must be an active member of the safety team.

Introduce the videotape program. Play the videotape without interruption. Review the program content by presenting the information in the program outline.

Copy the review questions included in this Leader's Guide and ask each participant to complete them.

Make an attendance record and have each participant sign the form. Maintain the attendance record and each participant's test paper as written documentation of the training performed.

Here are some suggestions for preparing your videotape equipment and the room or area you use:

Check the room or area for quietness, adequate ventilation and temperature, lighting and unobstructed access.

Check the seating arrangement and the audiovisual equipment to ensure that all participants will be able to see and hear the videotape program.

Place or secure extension cords to prevent them from becoming a tripping hazard.

CONDUCTING THE PRESENTATION

Begin the meeting by welcoming the participants. Introduce yourself and give each person the opportunity to become acquainted if there are new people joining the training session.

Explain that the primary purpose of the program is to discuss the proper use and selection of PPE while showing painful examples of making poor decisions concerning personal protection.

Introduce the videotape program. Play the videotape without interruption. Review the program content by presenting the information in the program outline.

Lead discussions about specific types of PPE used at your facility and the jobs for which it is required.

After watching the videotape program, viewers will be able to explain the following:

- Why they must understand how to select and use PPE;
- How to properly select and wear hardhats, safety glasses, safety goggles and face shields;
- What types of gloves, safety footwear and specialized equipment is available and when to wear it;
- What consequences can occur when we make poor decisions regarding our protection.

**MORE HIGH-IMPACT
PERSONAL PROTECTIVE EQUIPMENT
REVIEW QUIZ**

Name _____ Date _____

The following questions are provided to check how well you understand the information presented during this program.

1. PPE is considered the first line of defense against workplace hazards.
 - a. true
 - b. false

2. Class G hardhats are designed for working near high voltages of electricity.
 - a. true
 - b. false

3. Safety glasses that meet the ANSI standard will contain _____.
 - a. an OSHA mark
 - b. an ANSI mark
 - c. a manufacturer's mark
 - d. both answers a and b
 - e. both answers b and c

4. No single style of work glove is effective for all tasks.
 - a. true
 - b. false

5. Chipping and grinding operations require you to wear a face shield instead of safety glasses or goggles.
 - a. true
 - b. false

6. Most industrial operations require workers to wear safety footwear with a reinforced toe box and _____.
 - a. metatarsal guards
 - b. fire-resistant inserts
 - c. puncture-resistant soles

7. When working above ground, a body harness and lanyard connected to an approved anchor point must be worn in addition to your protective equipment.
 - a. true
 - b. false

ANSWERS TO THE REVIEW QUIZ

1. b
2. b
3. e
4. a
5. b
6. c
7. a