Head Protection Meeting

Falls and falling objects can result from unstable working surfaces, ladders that are not safely positioned, and misuse of fall protection. Workers are also subject to falls or to the dangers of falling objects if sides and edges, floor holes, and wall openings are not protected.

Meeting Objectives

Understanding the potential for head injuries on the job, and the importance of wearing a hard hat as protection in the workplace, to prevent any head injuries.

Suggested Materials to Have on Hand

Examples of any hard hats used on the job.

Introduction/Overview

You may have seen wrestlers and other people on TV who use their heads as weapons or blunt instruments but most of us wouldn't think of doing that. In many instances on the job, going without a hard hat is almost as crazy. Today, we're going to look at exactly what a hard hat is designed to do and how to select, fit, and maintain a hard hat to protect your head.

General Hazards

There are about 120,000 disabling head injuries on the job every year, according to the National Safety Council. That's over 300 a day, every day of the year. Even worse, most of those injuries could have been prevented by wearing a hard hat.

Hard hats can protect you against three types of hazards:

- Bumping your head on or against something
- Electricity
- Falling or flying objects

You may think that you're too alert to get hit by a flying piece of metal or something falling off a storage shelf. You may think you're too coordinated to bump your head against something hard enough to injure you. Those 120,000 people with head injuries probably thought the same thing.

A hard hat is one of the easiest types of protection to use, and there's just no excuse for not taking advantage of that protection.

OSHA Regulations

OSHA thinks protective equipment is very important, and defines the need for it broadly enough to cover almost everyone. The general regulation (29 CFR 1910.132) says "Protective equipment, including personal protective equipment for eyes, face, head, and extremities ... shall be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment, chemical hazards,

radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact." That pretty much covers everything. OSHA then goes on to say that the equipment "shall be of safe design and construction for the work to be performed," and note that even if the employees provide their own equipment, "the employer shall be responsible to assure its adequacy."

That's the general regulation. OSHA also has something specific to say about head protection (29 CFR 1910.135): "Protective Helmets purchased after July 5, 1994 shall comply with ANSI Z89.1–1986, "American National Standard for Personnel Protection—Protective Headwear for Industrial Workers-Requirements," which is incorporated by reference, or shall be demonstrated to be equally effective. …Protective helmets purchased before July 5, 1994, shall comply with the ANSI standard "American National Standard Safety Requirements for Industrial Head Protection," ANSI Z89.1969, or shall be demonstrated by the employer to be equally effective." We'll get to those requirements in a moment.

What I'm trying to say is that if there's any risk of a head injury, OSHA expects the company to provide you with hard hats and expects you to wear them and take care of them.

Protection against Hazards

A hard hat is designed both to resist blows to the head and to absorb the shock of the blow. The one-piece outer shell takes the blow. The cradle lining attached to the headband acts as a cushion that absorbs the shock. As you know, there's a space between the shell and your head, and that's important because it's the area that takes the shock.

A hard hat should also have a chin strap to make sure it stays on if you fall, bump your head, get hit, or just get out in the wind.

Those American National Safety Requirements I mentioned appear on the label inside your hard hat. They divide hard hats into four different classes:

- Class A hard hats are the ones you usually find in a manufacturing environment. They're classified as having limited voltage resistance and are primarily designed to protect your head against impact. They're also water-resistant and slow to burn if you get caught in a fire.
- Class B hard hats are designed for people who work with electricity. They're classified as having high-voltage resistance, which means they have no metal parts and won't conduct electricity. They're also water-resistant and slow-burning.
- Class C hard hats are sometimes used in manufacturing. They offer no voltage protection and are usually made of aluminum.
- Class D hard hats are designed for use by firefighters. They are fire-resistant and won't conduct electricity.

Obviously, you have to select a hard hat that protects against the hazards you encounter on the job.

Safety Procedures

Like any personal protective equipment, a hard hat has to fit correctly. The headbands are adjustable and should fit so that the actual hat doesn't touch your head. They should also be comfortable and should not irritate the skin. Many hard hats also have a removable sweatband that goes over either the forehead or the whole head. They should, obviously, be removed and washed periodically.

Don't wear a hard hat over a hat. It won't fit right. If you're working outdoors or in any cold environment, ask

about getting a special hard-hat liner designed to keep you warm.

Hard hats are, obviously, tough, but that doesn't mean they're indestructible. You have to give them a little care.

- Don't toss your hard hat around; try to avoid getting it banged or scraped.
- Inspect your hard hat daily for dents, cracks, etc.
- Get a replacement for any hard hat that has a crack or hole, or which has taken a heavy blow but doesn't show any damage.
- It's also a good idea to clean your hard hat occasionally. It's pretty simple: the best way is to dip it in hot soapy water, scrub, rinse, and dry.
- Store your hard hat out of harm's way, avoiding sun and high heat. Leaving it on the back deck of your car, for instance, is likely to make it deteriorate over time.

Suggested Discussion Questions

- What types of hazards do hard hats protect you against?
- How does the hard hat protect you?
- What Class of hard hat do we use and what is it primarily designed to protect against?
- How should a headband be adjusted?
- Why is a chin strap important?
- When should you replace a hard hat?
- Are there any other questions?

Wrap-Up

There's nothing very complicated about hard hats or the injuries they're designed to prevent. And there's nothing very subtle about the regulations requiring them.

This is a real straightforward area of safety. A lot of people get head injuries on the job. Most of them could have been prevented by wearing hard hats. They're required and they're sensible. They're easy to wear, easy to adjust, and easy to maintain.

There's just one more thing to say. Wear them.

Sample Handout

Hard Hat Safety Checklist

- Adjust the headband so there's space between hat and head to absorb shock.
- Check the label inside the hat to determine protection capability.
- Clean the hat occasionally in soap and hot water.
- Don't abuse the hat.
- Get a liner for the hard hat during cold weather; don't wear it over a hat.
- Inspect the hat daily for dents, cracks, etc.
- Keep the hat away from sun or high heat.
- Replace a hat with cracks or holes.
- Use the chin strap; it keeps the hat on when you need it.
- Wear a Class A hard hat in most manufacturing situations.
- Wear a Class B hard hat in situations with electrical hazards.
- Wear a hard hat in any situation where there might be:
    - Falling or flying objects
    - Potential for bumping into objects
    - Electricity hazards