

Construction News Sense

FACILITIES

Management and Operations Center



Construction PPE

Construction hazards exist in every workplace in many different forms such as sharp edges, falling objects, flying sparks, chemicals, noise, fumes, and other potentially dangerous situations.

Controlling a hazard at its source is the best way to protect employees. Depending on the hazard or workplace conditions, use engineering or work practice controls to manage or eliminate hazards to the greatest extent possible. For example, building a barrier between the hazard and employees is an engineering control; changing the way employees perform their work is a work practice control.

When engineering, work practice, and administrative controls are not feasible or do not provide sufficient protection, employers must provide personal protective equipment (PPE) to employees and ensure its proper use. PPE is equipment worn to minimize exposure to a variety of hazards. Examples of PPE include gloves, foot and eye protection, protective hearing devices (earplugs, muffs), hard hats, respirators, and full body suits.

Your company program should address the following:

- ★ Understanding the range and types of PPE.
- ★ Knowing the basics of conducting a "hazard assessment" of the workplace.
- ★ Selecting appropriate PPE for a variety of circumstances.
- ★ Understanding the necessary training to ensure the proper use and care of PPE.

This article does not address PPE requirements related to respiratory protection (29 CFR 1910.134)

"Respiratory Protection." There is more information on hearing protection in the OSHA Publication 3074.

The Requirement for PPE:

The best safety programs ensure the greatest possible protection for employees in the workplace. The **cooperative efforts of both employers and employees** will help establish and maintain a safe and healthful work environment.

In general, employers are responsible for:

- ★ Performing a "hazard assessment" of the workplace to identify and control physical and health hazards.
- ★ Identifying and providing appropriate PPE for employees.
- ★ Training employees in the use and care of the PPE.
- ★ Maintaining PPE, including replacing worn or damaged PPE.
- ★ Periodically reviewing, updating and evaluating the effectiveness of the PPE program.

In general, employees should:

- ★ Properly wear PPE;
- ★ Attend PPE training sessions;
- ★ Care for, clean, and maintain PPE; and
- ★ Inform a supervisor of the need to repair or replace PPE.

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See page 2 for an article on Change



Memorial Day is traditionally the weekend that marks the beginning of the summer holiday and a time for family outings and celebrations. On the last Monday in May each year, everywhere you go there are red, white and blue decorations and flags on homes, buildings and in parks. Established in 1868 and originally known as Decoration Day, it was a day to remember all those that died in the Civil War. Memorial Day is now celebrated to remember all those Americans who fought for their country and were killed or missing in all wars. A day when people show respect for those fallen soldiers that lost their lives protecting everyone's safety.



Change — Stop, Look and Listen

Change! We hear and read about it almost every day. A quick internet search reveals dozens of quotes about change. We are faced with what seems like constant change. Some change is pleasant and satisfying, such as watching your children grow into responsible adults. And some change is annoying such as lane closures on I-40. Some change is tragic, such as the loss of a friend. Some change is planned and some change comes at us with frightening speed.

We think about change as affecting many parts of our lives, family, job, and health, but have you ever considered that change affects our safety? I have participated in numerous accident and incident investigations, and more than half those incidents involved changes that contributed to the incident. One investigation identified eight such changes. The issue of change is so important that formal change analysis is a common part of accident/incident investigations.

Construction is change. Our job is to take down, modify, or build. Change is constant even at a single location. Besides the obvious structural changes, different individuals and trades come and go, and different equipment and materials are used. Changing weather may even be a factor in incidents or accidents.

After completing a project, we have further change - we move on to the next project. Some changes may be so small we don't notice them, and some changes we do notice seem unimportant. We have all heard the adage, "Stop, Look and Listen." While that saying originally addressed safety at railroad crossings, it can also be applied to construction safety. We should

evaluate the effect of change, not only at the beginning of a project, but also throughout the project.

Some evidence suggests even something as simple as changing between standard and daylight savings time may contribute to a 3.5 to 10% increase in accidents. Changes in equipment can affect safety. For example, equipment of different ages and from different manufacturers may not have similar controls. Think of the differences in the location of controls on automobiles!

Individual workers differ widely in experience, training, physical abilities, and ways of interacting with other workers. Assuming any two workers will do a job the same way and with the same level of skill may lead to real problems. Factors such as emotional stress, fatigue, illness, and medications may temporarily change an individual's abilities.

New materials may present significant differences in toxicity, flammability, methods of use, and required control measures. There are many other examples of changes such as new methods, changes in schedules, funding, design, or project scope. Often several seemingly small changes may contribute to a single, larger change. We should analyze changes individually as well as in relation to other changes.

A little time taken to "Stop, Look and Listen," can save money, time, and other resources that would be required to complete an investigation and might prevent someone from getting hurt.

Dave Anglen, 04827

On 5/15/2008, several Sandia Electrical Inspectors, Electrical Systems Engineers, and Electrical Maintenance personnel received certification from the National Lightning Safety Institute as Inspectors of NFPA-780 Lightning Protection Systems (LPSs).

The class included rigorous study of NFPA-780 Standards for the Installation of LPSs, layout and design of an LPS, and a walk-through of existing Sandia LPSs with the goal of ensuring these systems are installed and appropriately maintained according to NFPA-780. Sandia wanted in-house capability for inspecting its own systems for remodels and new installations, and now that these personnel have been certified, they can work together to achieve consistent inspection and acceptance of lightning protection systems.

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**Have a safe
Memorial Day**

