

# Safety Newsletter

## February, 2013.

### This Month's Topic: Personal Protective Equipment (PPE).

When engineering and administrative controls are not feasible or effective in reducing exposure to hazards to acceptable levels, personal protective equipment reduces such exposures.

PPE includes all clothing and accessories designed to protect against safety and health hazards. To ensure your safety, an appropriate level of PPE must be worn at all times if your job task(s) exposes you to hazardous conditions, materials or equipments.

Personal protective equipment is categorized by the area of the body protected, the type of hazard, and by the type of garment or accessory needed for adequate protection.

#### Head Protection

Head injuries can result in impairments or fatalities; and despite workplace signage and abundance of instructional videos, a recent study by the Bureau of Labor and Statistics (BLS) concerning work-related accidents and injuries finds that most workers who had head injuries were not wearing head protection. If you work in locations where there are risks of receiving head injuries, wearing approved head protection is highly recommended.

Hard hats/Helmets are the most common type of head PPE. They have a hard outer shell and a shock-absorbing lining that incorporates a headband and straps that suspend the shell from 1 to 1 1/4 inches (2.54 cm to 3.18 cm) away from the head. This type of design provides shock absorption during an impact and ventilation during normal wear. In general, protective helmets or hard hats are designed to:

- ✦ Resist penetration by objects.
- ✦ Absorb the shock of a blow.
- ✦ Be water-resistant and slow burning.
- ✦ Have clear instructions explaining proper adjustment and replacement of the suspension and headband.

Inspection and maintenance of your hard hat should never be ignored. If your hard hat is going to provide you with maximum protection, it must be in good condition. Inspect it regularly and replace any part, or the entire helmet if necessary. Never take a chance with your safety.

Hard hat straps/suspension should be replaced after no more than twelve months and the entire helmet replaced after five years.

#### Eye Protection

Wearing improper or poorly fitting eye protection and not wearing eye protection accounts for most occupational eye injuries. It is very important that you wear appropriate eye protection that meets Occupational Safety and Health Administration (OSHA) standards and fits properly.

You should protect your eyes at all times on the job. Like all safety devices, eye protection is there for you and your eyes.

#### Hand Protection

Potential hand hazards include skin absorption of harmful substances, chemical or thermal burns, electrical dangers, bruises, abrasions, cuts, punctures, fractures and amputations. Typical protective equipment for hand protection include: gloves, finger guards and arm coverings or elbow-length gloves.



#### TIPS

- ✓ Prior to performing a task, ask if PPE is needed to perform your assigned task when in doubt.
- ✓ Ensure you can demonstrate full understanding on the use and limitations of your PPE.
- ✓ Wear only PPE approved and specified for the assigned task or job assignment.
- ✓ Inspect PPE for proper fit and serviceability before each use.
- ✓ Avoid altering or compromising the effectiveness of your PPE
- ✓ Clean, maintain, and store PPE assigned to you in a ready-to-use and sanitary condition at all times.
- ✓ Tell your Supervisor if the hazards of the task change.



**Be proactive about your safety!**



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You should inspect protective gloves before each use to ensure that they are not torn, punctured or made ineffective in any way. A visual inspection will help detect cuts or tears but a more thorough inspection by filling the gloves with water and tightly rolling the cuff towards the fingers will help reveal any pinhole leaks. Gloves that are discolored or stiff may also indicate deficiencies caused by excessive use or degradation from chemical exposure.

Any gloves with impaired protective ability should be discarded and replaced. A decision to reuse chemically-exposed gloves should take into consideration the toxicity of the chemicals involved and factors such as duration of exposure, storage and temperature.

### Foot Protection

Possible foot or leg injuries could result from falling, electric hazards, rolling objects, crushing, or penetrating materials. It is strongly recommended that you wear an OSHA approved foot gear while working in the field. If your job function includes exposure to electrical hazards, non-conductive footwear should be worn. On the other hand, workplace exposure to static electricity may necessitate the use of conductive footwear, so be sure you have the right PPE for the job. Common features of protective footwear/gear are:

- ✦ Steel-toed footwear and puncture-resistant soles and uppers for workers handling heavy materials or using rotating machinery near their feet.
- ✦ Rubber-soled shoes for electricians, construction workers, and others who work near live electrical conductors
- ✦ Slip-resistant shoes (usually rubber-soled with a grip pattern) for anyone who works in wet environments.

If you are ever in doubt about the use, inspection or maintenance of your PPE, contact the manufacturer directly or your industrial health and safety officer or representative for instructions and recommendations. Your PPE will take care of you in direct proportion of how well you take care of it. Properly maintaining your PPE and performing detailed inspections prior to each use are well worth the effort.

### References

1. <http://www.osha.gov/Publications/osha3151.html>
2. PG&E Safety Equipment Guide: <http://uo/ssos/shc/resources/seg.htm>
3. Lab Safety Supply: <http://www.labsafety.com>
4. <http://bls.gov/iif/>
5. NIOSH Pocket Guide Online: [www.cdc.gov/niosh/npg](http://www.cdc.gov/niosh/npg)

### Stats:

- ✓ Hard hats were worn by only 16% of those workers who sustained head injuries
- ✓ Only 1% of approx. 770 workers suffering face injuries were wearing face protection
- ✓ Only 23% of the workers with foot injuries wore safety shoes or boots
- ✓ About 40% of the workers with eye injuries wore eye protection
- ✓ Protective equipment = tools to do the job.
- ✓ Nearly 2 million disabling work-related injuries expected this year. More than ¼ will involve head, eyes, hands, feet

### Common PPE Excuses

“It’s only going to take a minute.”

“I was in a hurry.”

*“Anything that can go wrong will go wrong – Murphy’s Law. Acting proactively as opposed to reactively when it comes to our safety can reduce our chances of injury. Also, know your levels of PPE, when and how to use them and ensure you are certified, if necessary, to use the proper PPE for you task. Stay safe!”*

—Larry Buenvenida

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