



Personal Protective Equipment

Using safety equipment can greatly reduce or eliminate accidents.

By Jeff DeVries

Safety in the workplace is as important as doing quality work efficiently, but is often overlooked. And being careful isn't always enough.

Personal protective equipment (PPE) must be provided to employees and used by them whenever it can protect an employee from a hazard or a potential illness or injury. The Occupational Safety and Health Administration (OSHA) has required the use of PPE for eye, face, respiratory and hand protection; occupational head and foot protection; and electrical protective devices.

Selection of the proper PPE for a job is important. Employees must understand the equipment's purposes and limitations. The equipment cannot be altered or removed when it has been determined to be necessary to protect workers from hazardous conditions.

Eyes and Face

Protective eye and face equipment is required where cleaning/maintenance workers need protection from items such as flying particles, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially hazardous, light radiation.

Side protection of the eyes is required any time there is a potential hazard from flying objects. Employees who wear prescription lenses must be provided with protective eyewear that incorporates the prescription into the eyewear, or that does not interfere with the wearing of normal corrective lenses.

Eye and face protection must:

- * Provide adequate protection and reasonable comfort when worn
- * Fit snugly and not unduly interfere with movement
- * Be durable and capable of being disinfected and easily cleaned
- * Be marked with the name of the manufacturer and be in good repair.

Respirators

Each employer must have a written respiratory protection plan whenever respiratory protection is required and used. Respiratory protection is quite important because inhalation is the primary route of exposure to chemical toxins. Respirators consist of a face-piece connected to an air source or an air-purifying device.

Respirators with an air source are called atmosphere-supplying respirators. Air-purifying respirators do not have a separate air source, but they use ambient air purified through a filtering element prior to inhalation. Persons wearing respirators must be trained to handle them properly and must receive a fit test, to test its face-piece-to-face seal.

OSHA requires the use of hard hats in the case of impact and penetration from falling objects and from limited electrical shock and burns. Long hair should be protected -- against catching on moving machinery, being subjected to sparks, or snagging on objects -- by being compacted into a hard hat, tied out of the way or caught in a hair net.

Protective footwear must be worn by cleaning/maintenance employees who handle solid, weighty objects on a routine basis or where there is a high risk of such an object falling from a height. For employees working with hazardous chemicals, OSHA requires boots made of neoprene, PVC, butyl rubber, or some other chemical-resistant material.

While wearing chemical-resistant boots, the pant legs should be outside and over the boots to prevent liquids from entering. Pullover rubber boots should be used by employees working for long periods in water, mud or wet concrete.

Gloves and GFCI

Anyone in the cleaning field should wear protective gloves when their hands are in danger of becoming injured. Chemical-protective gloves should be worn when working with chemicals which could be absorbed through (or could damage) exposed skin. Also, canvas leather or cotton gloves are recommended for general maintenance work and handling of materials that could cut, splinter or otherwise damage hands.

To protect your employees from electric shock, ground fault circuit interrupters (GFCI) should be connected to all electrical equipment. These devices constantly monitor the electric current. As long as the amount of current returning from the appliance is equal to the amount that went in, the GFCI does nothing.

If there is less current coming back, such as when the current is taking another path, the GFCI cuts off the flow of electricity and shuts off the equipment. A GFCI protects by limiting the duration of a shock, not by cutting down its intensity. But because the GFCI works so fast, the shock will be over before serious injury can occur to a normally healthy person.

Before doing work that requires the use of PPE, employees must be trained to know when the equipment is necessary, what type is necessary, how to wear it, what its limitations are, and its

proper care, maintenance, useful life and disposal.

Employers are required to certify in writing that training has been carried out, and that employees who have received training have demonstrated their understanding and can completely use the equipment for which they have received training.

You and your employees should discuss "on-the-job" safety items that could be implemented. Look for obvious items such as the wearing of knee pads for crew members who work on their knees frequently, proper labeling of cleaning chemicals, and use of GFCIs with any electrical equipment.

No combination of protective equipment and clothing is capable of protection against all hazards. Safety equipment should be selected based on the hazards present and used in conjunction with engineering controls and work practices. Equipment and clothing should be selected that provides an adequate level of protection for the situation.

Employers should know the OSHA requirements pertaining to the cleaning industry and should conduct training sessions with their employees as mandated by OSHA laws.

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