

Don't take gloves for granted

Assess needs, match gloves to tasks & motivate usage

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Whenever a worker who is not wearing hand protection suffers a hand injury, the question comes up: whose responsibility is hand protection anyway? The employer? The worker? The safety officer?

Protecting workers' hands from accidental injury is not a trivial matter for U.S. employers. Every year there are more than a million emergency room visits due to hand injuries. OSHA standards 1910.138(a), General requirements and 1910.138(b), Selection clearly require employers to provide hand protection.

However, despite employer's hand protection efforts, workers often take off the provided gloves and work unprotected and vulnerable to the injuries the gloves are designed to protect against. The situation can be worsened when the wrong gloves are provided, workers feel encumbered by the gloves or when hand protection requirements are not enforced. Statistics show that glove wearing reduced risk of injury by 60 percent.

The key to a successful hand protection program is threefold:

- First: Comprehensive assessment of the hand protection requirements of every task in the work environment
- Second: Matching up the proper glove for each task
- Third: Establishing a work environment where the gloves stay on whenever the task calls for hand protection, i.e. a "safety first" culture.

Assessing the need

Most workplaces have complex hand protection needs. Often a worker will need hand protection for certain activities and not for others. Sometimes they need more than one type of hand protection. For example, the worker who wears cut-resistant protection while cutting meat often only needs disposable hand protection while packaging it. In some plants, there are areas where chemical-resistant gloves are a requirement and other areas, such as shipping and packing, where general-purpose gloves offer sufficient protection.

Safety officers can conduct their hand protection assessments in-house. However, more and more over the past few years, large industrial employers have been turning to glove manufacturers for help in assessing their hand protection needs. Leading manufacturers now staff this function and have assessment protocols. The process typically involves a site survey of every application for which the manufacturer has a current hand protection product and assessing each element accordingly:

1. What gloves are currently being used?
2. What are the associated costs?
3. What is the injury rate and cost of these injuries to the employer and employee in lost workdays, efficiency, etc?
4. What can be done to improve safety, efficiency and overall cost (short, mid and long-term)?

The goal of this assessment is to help employers protect workers and make the best use of all available hand protection options for their specific applications. This could include needs for everything from chemical-resistant or cut-resistant gloves to general purpose, thermal or disposable gloves. It also involves looking at each specific area of the plant operation and assessing needs specific to that area. At the end of a manufacturer-led assessment, the employer will have all the information needed to make informed glove selection decisions.

Selecting the gloves

The assessment is a great aid in determining which hand protection items to provide. However, if the assessment was done in-house, it is wise to work with a distributor or manufacturer in the glove selection process.

Every year, improvements are being made to existing hand protection. Fibers are being combined in new ways. Special flexibility and comfort features are being added. Old products are phased out. New coatings are being developed and existing coatings are being applied in new ways. Usually several choices are available in the marketplace for each need. Selection involves comparing performance ratings and relative costs to determine the best choice.

Most gloves for the industrial environment carry American National Standards Institute (ANSI) ratings appropriate to their use. For example, cut-resistant gloves have an ANSI rating from 0 to 5, with five being the highest level of cut resistance. Glove durability is also ANSI-rated, with abrasion levels from 0 to 6, with six being the superior rating. Likewise puncture resistance is rated. Chemical resistance is also rated based on the breakthrough time in minutes. The ratings are from 0 to 6 with 6 being the highest rating, representing no breakthrough after more than eight hours of total immersion in the test chemical.

One often-overlooked factor in glove selection is sizing. Employers cannot expect their employees to perform well in ill-fitting gloves. In work gloves, there is no such thing as one size fits all. It's important to select gloves that are available in appropriate sizes and to then stock all needed sizes. In some cases, this means stocking everything from small to extra large. Some gloves are even available in extra small and extra, extra large sizes.

A “safety first” culture

Employers who think that if they provide hand protection, the job is done, are in for a rude awakening, particularly if this is a change from prior work requirements.

Ideally, hand protection should be part of an overall, companywide Personal Protective Equipment Program that makes it easy for employees to comply. At minimum, employees must:

- 1.** Wear PPE as the employer requires.
- 2.** Complete all PPE training.
- 3.** Clean and keep all PPE in good and serviceable condition.
- 4** Tell their supervisors when PPE needs to be repaired or replaced.

Leading glove manufacturers have staff available to help with training and often provide visual tools to help keep glove wearing top of mind. For example, manufacturers will prepare individual glove boards for posting in break rooms or other gathering spots throughout the plant, warehouse or company. These “glove boards” are actually posters showing the glove to be used and its associated applications. Manufacturers will customize these glove boards or posters to the needs of the end user or company. The end result is a customized catalog of the gloves being used in the plant. In some instances the boards are done plant-wide; for others, specialized needs are developed for use within different areas, with different gloves posted where different applications warrant them.

The total package

Hand protection is a challenge to both employers and workers. Today that challenge has been made easier by the availability of task-specific gloves that workers will find both comfortable and functional. The key is for employers to meet their responsibility by matching up those gloves with workplace requirements to provide every possible assurance that workers will not suffer hand injury due to either wearing the wrong glove or wearing no glove at all.