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# Ergonomics On the Job

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## INFORMATION FOR:

- Risk Managers
- Safety Professionals
- Supervisors

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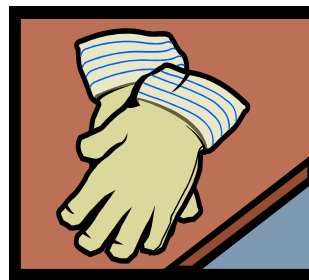
Lighting—an ergonomic hazard?

## Cal OSHA's Ergonomic Standard

Since 1997, California has had an ergonomic standard that defines the efforts employers must follow to help combat the rising tide of repetitive motion injuries on the job. Prevention of Repetitive Motion, Section 5110, focuses on reducing repetitive motion injuries through an employer's Injury and Illness Prevention program. The standard focuses primarily on two main areas: worksite evaluation and employee training. The worksite evaluation portion of the standard provides employer's with information on the focus of such evaluations, including 1) Inspection of the employee's workstations or work locations, 2) Interview of the employee and observation of the employee's work and 3) a record of the findings of

the evaluation.

The Ergonomic Standard applies to all places of employment, particularly employers who have experienced more than one re-



petitive motion injury claim in a 12 month period. One of the goals of the standard is to allow employers to design an ergonomic program that fits well with their industry and training guidelines. Employee training may

comprise large groups, handouts, posters, team meetings, supervisor lead or safety consultant lead sessions.

Regardless of the method of training, the standard notes that the following must be included in the training information:

- 1) The manner in which the employer's IIPP addresses RMI hazards
- 2) The exposures associated with RMIs
- 3) The symptoms and consequences of injuries caused by repetitive motion
- 4) The importance of reporting symptoms and injuries to the employer
- 5) Methods used by the employer to minimize RMIs.

## Lighting—An Ergonomic Hazard?

Even though most people consider ergonomics as it relates to repetitive motion disorders, there are many other factors to consider in evaluating a workstation from an ergonomic standpoint. One of these concerns relates to lighting in the workplace. There are a few different areas to focus on when trying to minimize work related hazards. Bright light behind a display screen can create contrast prob-

lems, making it difficult to clearly see the work on the screen. Direct light sources (for example, windows, overhead lights) that cause reflected light to show up on the monitor in the form of glare make images more difficult to see, resulting in eye strain and fatigue. Some solutions include:

- 1) Use blinds or drapes to eliminate bright light
- 2) Use indirect lighting or shielded lighting where possible

- 3) Reorient the workstation so bright lights from open windows are at right angles with the computer screen
- 4) Use glare screens that attach directly to monitors
- 5) Clean the monitor frequently as dust contributes to glare.
- 6) Tilt down the monitor slightly to prevent it from reflecting overhead light.



*“Many companies design tools and call them ergonomic, however, few tools have actually been tested and proven to reduce injuries.”*

## Ergonomics and Hand Tool Safety

Ergonomics is the study of the human body in relationship to the work environment. This includes how workers posture themselves in relation to their work and how they use hand tools. The tools that consumers find in the marketplace may or may not be helpful in reducing injuries. Many companies design tools and call them “ergonomic”, however, few tools have actually been tested and proven to reduce injuries. Therefore, look for tool designs that have the potential for reducing stress to the body.

There are several principles to look for in selecting hand tools:

-Does the tool help maintain a straight wrist?

Tools such as bent-nose pliers will help permit grasping or turning objects while the wrist remains in a relatively straight position. Hammers with slightly bent handles help maintain a straight wrist during the final impact position. Cylindrical handles also help in maintaining a straight wrist.

-Does the tool provide a sufficient, padded grip?

Tools with grips that are either too small or too large can lead to the tool being dropped or thrown outward. Select padded

tools. Tools should have adequate length and surface area and be covered with a compressible material such as plastic or rubber. This will improve grip force and reduce slippage.

-Does the tool protect against heat, cold and vibrations?

Gloves can protect the hands from heat, cold, and vibrations. However, they can also diminish grip force and manual dexterity. Low vibration tools are available on the market. Vibration reduction can also be achieved through routine maintenance, vibration dampening wraps on handles and vibration dampening gloves.

### Pelletier & Associates, Inc.

Pelletier & Associates, Inc. is a disability management consulting company with expertise in ergonomic workstation evaluation and ergonomics training, as well as return-to-work program development, job modification and workers’ compen-

sation. With over 18 years of experience, we target employer’s concerns over high absenteeism and workers’ comp claims by providing solutions and recommendations for worksite ergonomic problems. If you would like more informa-

tion, or for a complimentary workstation evaluation, please contact us at (949) 206-9923.

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