

# Safety Topic

Safety News

State Compensation Insurance Fund

Issue Three, 2009



## Hand And Wrist Comfort

In the course of your workday your hands grip and release, twist and bend, push and pull. They let you drill, grind, assemble parts, sort materials, and press buttons. Over time, this constant and repeated wear and tear on your hands and wrists can result in pain or injury.

Here are some suggestions to keep your hands and wrists functioning comfortably:

**Use your whole hand or as much of your hand as possible when grasping.** This limits pressure caused by pinching. Hold the tool or object near its center of gravity keeping its weight balanced on your hand and wrist.

**Work within reach.** Your hand muscles function best in a straight (neutral) position, supported at the wrist. You should be able to reach your work without bending your wrist. So, stand above the task or sit so your hand, wrist, and forearm can move straight out from your body. You might have to adjust the work surface on a slant and closer to you. When possible, support your wrists and keep your elbows in close to your waist.

**Wear flexible, properly fitting gloves** to keep hand muscles warm, facilitate grip, and reduce vibration. Tape or finger cots may also be helpful to increase grip friction and reduce force.

**Keep tools sharp and in good repair** – they'll require less force to use. Choose

in-line or pistol grip tools (depending on the position of the work surface) with textured or cushioned handles for easier grip. Single-handled tools, levers, and bars should have a grip diameter that fits comfortably in your hand reducing force during use. To avoid pressing into your palm, handles and levers should extend the full length of your hand.



**Give your hands and wrists a rest.** If you make the same hand movements continuously throughout the day without allowing time to rest and recover, the muscles can become overly tense and tired rendering them vulnerable to painful injury. Give your hands and wrists a chance to rest and use different muscles during the day by varying or rotating manual tasks and periodically massaging or gently shaking them. And, when you get home, give your hands time to recover before using them for manual recreational activities. □

### TOPIC REVIEW

Instructor \_\_\_\_\_

Date \_\_\_\_\_

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Attended By \_\_\_\_\_

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**Safety Recommendations**

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# Safety News

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Loss Control Services

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News about Occupational Safety and Health in Manufacturing

Issue Three, 2009

## Employer Education Series

State Fund continues to promote community educational outreach by increasing the quantity and frequency of employer seminars. These seminars are produced and sponsored by State Fund and are open to State Fund policyholders. The seminar topics cover all aspects of worker's compensation and are offered statewide.

As part of State Fund's Employer Education Series, the local State Fund Loss Control departments offer safety seminars dedicated to loss prevention. They feature safety training targeted to specific industries and safety topics of interest to California employers. Various programs in the series are developed in conjunction with State Fund insured Group Programs and external affiliates and partners. Some of these partners are occupational safety and health providers such as Cal/OSHA Consultation Service, the Department of Health Services, and the University of California.

The goal of State Fund's Employer Education Series is to present valuable information from recognized safety and health experts to enable employers to reduce the frequency and severity of workplace injuries, facilitate regulatory compliance, and increase business profits.

The program venues provide the opportunity for attendees to have their workplace safety questions immediately and personally answered by industry experts. The typically half-day seminars are usually held at regional State Fund offices. To learn what programs are scheduled in your area, visit [www.scif.com](http://www.scif.com) and click on Seminars. □

## Reporting Work-Related Injuries

State Fund's Claims Reporting Center (1-888-222-3211) is available 24 hours a day, 7 days a week for policyholders to report injuries as soon as they occur. Agents will do the necessary paperwork to get the claim started and refer the injured to the designated physician or provider.

Within 8 hours of any serious illness or injury (requiring hospitalization over 24 hours, other than for medical observation or where there is permanent employee disfigurement) or death occurring in the workplace or in connection with employment, employers must report the incident to the Division of Occupational Safety and Health. □

This Manufacturing Safety News is produced by the Safety and Health Services Department of State Fund to assist clients in their loss control efforts. Information or recommendations contained in this publication were obtained from sources believed to be reliable at the date of publication. Information is only advisory and does not presume to be exhaustive or inclusive of all workplace hazards or situations. Permission to reprint articles subject to approval by State Compensation Insurance Fund.

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REMEMBER TO RECYCLE  
THIS NEWSLETTER

# Safety News

ISSUE THREE, 2009

S T A T E   C O M P E N S A T I O N   I N S U R A N C E   F U N D

## Dressed For Style Or Safety?

**D**uring a workday, you may perform a variety of activities involving different kinds of machinery or situations. How you choose to dress when performing those tasks can affect your safety. Maximize your safety, know the hazards a task may present and dress appropriately for those conditions.

The human body is no match for the twisting, crushing or slicing force of a machine. If your hair, clothing or body part becomes entangled in a moving piece of machinery the entanglement could result in a scalping, an amputation or even a death.

When choosing clothing or protective equipment, make sure what you wear won't put your health or safety at risk.

Wear close fitting clothing. Keep your sleeves buttoned or clasped at the wrist, your shirt tucked in, and your belt tight. Loose clothing can get caught by moving parts and pull you into danger areas. Rolled sleeves can loosen or hang and baggy pants can cause a trip and fall onto moving machinery.

Keep clothes clean and in good repair. Grease or oil soaked clothing can cause skin irritation or catch fire. Holes or tears in clothing may let harmful substances get onto skin.

Choose clothing fabric wisely. Dress warm enough for cold conditions and cool enough for hot environments. Consider clothing material reaction to flammables or corrosive substances.

Keep your hair safely secured or covered. Even short or tied-back hair can get entangled in moving equipment.

Leave all jewelry at home or in your locker. Jewelry can get caught on moving parts and pull you into hazardous areas of equipment or lead to a severed extremity.

Choose and wear personal protective equipment that will provide greater protection than the minimum required for the

potential hazard. Gloves might be necessary when working with chemicals, rough surfaces, and sharps or for a better grip, but they could risk your safety near rotating or moving machinery. Make sure footwear matches the condition of the job, – steel-toed, puncture-resistant, slip-resistant, chemical, electrical or explosive hazards, etc.

If you don't know the hazards of the job or the recommended dress for your health and safety, ask your supervisor. What you choose to wear or not wear at work is not a matter of good style; it's a matter of good sense. □



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## The Expert's Corner

# Protecting Workers From Noise-Induced Hearing Loss

**B**eing in compliance with the Cal/OSHA (or Federal OSHA) noise regulations does not always prevent work-related hearing loss or a workers' compensation claim. That's because research indicates that the current regulations simply aren't protective enough.

Cal/OSHA's noise regulations have a permissible noise exposure level (PEL) of 90 dBA (decibels, A-weighted) for 8 hours. The regulations also set an "action level" of 85 dBA. When employees are exposed above this action level, the employer must implement a hearing conservation program that includes annual hearing tests to determine if employees have experienced a hearing loss.

There are two deficiencies with the current regulations that put employees at risk. First, the Cal/OSHA PEL and action level are not protective enough. Secondly, some industries (most notably construction and agriculture) are exempt from having a hearing conservation program. Without annual hearing tests, a worker may not notice (or bring to the attention of the employer) a hearing loss



until it becomes debilitating. Once hearing is lost, the damage is permanent.

There are guidelines for employers that protect employees from the damaging effects of occupational noise. One of these is the threshold limit value (TLV) set by the American Conference of Governmental Industrial Hygienists (ACGIH). Another is the recommended exposure limit (REL) set by the National Institute for Occupational Safety and Health (NIOSH). Both guidelines recommend an exposure limit of 85 dBA for an 8-hour workday.

Not only do ACGIH and NIOSH guidelines

lower the exposure limit to 85 dBA, they also lower what is called the "exchange rate" from 5 dBA to 3 dBA. When the sound level increases by the decibel value of the exchange rate, the allowed duration is halved. In other words, Cal/OSHA allows an employee to be exposed to 90 dBA for 8-hours, 100 dBA for 4-hours, etc., while ACGIH and NIOSH recommendations allow 85 dBA for 8-hours, 88 dBA for 4-hours, etc. That's quite a difference between what's allowable under the law and what's considered protective. In addition, NIOSH and ACGIH recommendations for annual hearing tests do not exempt any industries.

If you want to save workers from the debilitating effects of hearing loss, and prevent costly workers' compensation claims, protect your employees by following the ACGIH or NIOSH guidelines. □

*Mary Jo Jensen CIH, CSP, is a Certified Industrial Hygienist assigned to State Fund's Sacramento and Redding Districts.*

## Are You Getting The Point?

**C**ut and puncture injuries can be painful and lead to infection. The chance of these injuries can be lessened – or even prevented – with hazard awareness, correct handling or operating procedures, personal protection devices, machine guarding, and proper equipment maintenance.

When working with sharp tools or moving machinery and equipment always follow recommended safety procedures. Know where both of your hands are at all times. Keep your eyes and your mind on your work and

work at a safe pace. Don't allow interruptions or distractions to take your focus off of your safety.

Dress for protection by wearing appropriate personal protective equipment (PPE) such as gloves, hardhat, goggles, boots, etc. Use the right tool for the task and use it as it was intended. Inspect, maintain, and replace tools or equipment, as necessary. Check to see that machine guards are in place and functioning properly. Strictly follow all company lock-out/blockout procedures.

Practice good housekeeping by sheathing and storing sharp and cutting tools properly. Use a broom and a dustpan or pieces of cardboard to pick up broken glass or metal shards. Dispose of sharp objects properly in rigid sided containers that will not puncture or spill. Label these containers to warn others of the hazard. Never reach into a garbage can with your hands or try to "tamp" it down with your hands or booted feet.

*Continued on next page*

# Respiratory Protection

The best method of controlling exposures to hazardous airborne substances is to prevent the air from becoming contaminated in the first place. This should be accomplished as much as possible by engineering controls, such as local exhaust ventilation. But, when airborne exposures cannot be controlled, or while controls are being installed, appropriate respirators may be used.

Respirators are a type of personal protective equipment used to provide protection against worker exposure to airborne substances and allow workers to breathe safely in those environments. It's an employer's responsibility to determine if the work their employees do should be performed while wearing a respirator. The employer should provide their workers with the right respirator for their job. It should be made clear to workers that they should not use any other respiratory protective device at work without the full understanding and agreement of their employer. Before a worker may use a respirator, he/she must pass a medical evaluation, be trained in the use, maintenance, inspection, and care of the respirator, and be fit-tested.

There are three basic types of respirators: air-purifying respirator, supplied-air respirator, and self-

Contained Breathing Apparatus (SCBA). The proper selection and use of respiratory protection is essential to controlling airborne exposures with respirators. A written respiratory protection program must be established and implemented.

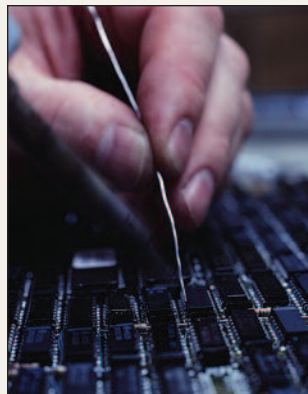
Prior to the use of respiratory protection, selection of the proper type of respirator by the employer should be based on the following:

- Identify the substance or substances against which protection is necessary.
- Determine the hazards of each substance.
- Evaluate the conditions of exposure and the air concentrations of the substances.
- Verify that there is adequate oxygen in the air.
- Provide each employee who will be wearing a respirator with a medical evaluation prior to using a respirator.
- Fit the respirator carefully and instruct the worker in its use.
- Know the limitations of the respiratory protective device.

State Fund has a staff of Industrial Hygienists available to its insured for respirator consultation and recommendation. □

## Continued from previous page

If you receive a puncture or cut on the job, notify your supervisor immediately. If you can, gently wash the area with soap and water. To stop bleeding, apply gentle pressure to the wound with clean gauze, cotton, or other absorbent material. When bleeding has stopped, apply an antibacterial ointment and a clean dressing to the wound. If you cannot stop the bleeding, if the wound is very large, or if you are impaled with an object, seek medical attention. Watch the wound for signs of infection including fever, severe pain, and



redness beyond the wound edge, swelling, warmth, or pus drainage. Get medical attention immediately, if you suspect an infection.

If the wound was caused by a nail or other sharp object, you may be exposed to the bacteria that cause tetanus. Consider getting regular boosters for tetanus every five to ten years. Consider a Hepatitis B vaccination, if you may be exposed

to needlesticks and if the needlestick was potentially exposed to bloodborne pathogens, seek medical testing. □

# October is National Ergonomics Month

October has been designated *National Ergonomics Month (NEM)* by the Human Factors and Ergonomics Society (HFES) with the goal of raising awareness about the principles and benefits of applied ergonomics. Simply put, ergonomics is the science of making tools, tasks, products, environments, and systems safer and more comfortable for human use. The October campaign strives to educate the public about how to make the changes that can improve their safety, performance, and comfort.

State Fund encourages its insureds to participate in NEM. To get you started, we have developed a comprehensive ergonomics educational CD-ROM, *"Ergonomics: How May We Help You?"* available free of charge to State Fund policyholders. The CD has everything you need to get your ergonomics program started and maintained:

- General information
- Tools to identify risk factors
- Training material
- Steps to develop a written program
- Cost benefits of an ergonomics program
- Effective medical management

To get your copy of the CD and find out what other safety information is available to you (such as ErgoMatters® and bilingual Safety Meeting Topics) visit [www.scif.com](http://www.scif.com) or contact the Loss Control Department of your local State Fund office. □

