

# Safety Topic

Safety News

State Compensation Insurance Fund

Issue Three, 2009



## Prevent Heat Illness

**H**ot and dry weather conditions can have dangerous health effects on workers who are unprepared.

Exposure to high temperatures for long periods of time can increase the chance of illnesses such as sunburn, heat exhaustion, heat stroke or heat cramps. These illnesses can range from mild to severe and sometimes can result in death.

Knowing what to do to prepare for and prevent these heat-related illnesses is better than having to treat them.

To work comfortably and avoid getting overheated, make sure you're dressed for the warm weather. Wear

a hat, appropriate loose-weave cotton clothing, and other lightweight protective gear. Protect your skin and eyes from the sun's ultraviolet rays by using sunscreen and wearing sunglasses.

Know where drinking water or other cold drinks are located. Drink about two glasses of water before beginning work and continue to drink water during and afterward work to replace fluids you'll lose through sweating. Increase your intake of fluids (one to two quarts per hour) during high temperatures, especially when temperatures are above 100 degrees Fahrenheit and during periods of unusually high humidity. Alcohol

adds to dehydration and increases your risk of a heat-related illness.

Stay alert for early symptoms of excessive exposure to heat and let your supervisor know if you're feeling ill, weak or faint.

Make sure there are other qualified persons available who can recognize and give first aid you if you do become ill. Know

how to respond or quickly contact medical help if you experience or notice coworkers showing signs of heat illness.

Supervisors can do their part in heat illness prevention

by checking the day's temperatures and managing the work activities accordingly—setting up rest breaks in shaded areas, rotating tasks, scheduling heavy work for cooler hours, and postponing non-essential tasks during heat spells. Check the condition of workers – are they sick, on medication or appear to have been drinking alcohol? Workers who are obese, pregnant, older or on certain medications are at greater risk for heat-related illnesses.

Working in hot weather doesn't have to be a killer if you're prepared for it. Dress appropriately, remember to drink often during the day, take needed rest breaks in cool shaded areas, and recognize the signs of over-heating.



### TOPIC REVIEW

Instructor \_\_\_\_\_

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

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#### Safety Recommendations

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Please forward to the person responsible for your safety program

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News about Occupational Safety and Health in Construction

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. □

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## 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 Construction 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

STATE COMPENSATION INSURANCE FUND

## Get The Lead Out

**L**ead exposure on construction sites is a serious issue. Lead is dangerous when it's airborne as dust, fumes, or a mist because workers can then breathe it, ingest it, or take it home and expose others. Employers of job sites that might contain lead are required by Cal/OSHA to conduct sampling tests to detect exposure and provide training to workers who may be exposed.

Construction activities that could expose workers to lead include renovating or demolishing structures with lead-painted surfaces; sand-blasting, grinding, cutting, or torching metal structures painted with lead; welding, soldering, cutting or removing pipes, joints or ductwork containing or painted with lead; cutting or stripping lead-sheathed cable; and cleaning up sites where there's lead dust.

Lead dust may not be visible so it can unknowingly get on a worker's hands, face, and clothes. Adults who are lead poisoned may feel tired, irritable, or get aches and pains. They also can have serious health problems affecting the blood system, nervous system, kidneys or reproductive organs. The only way to know if a worker is exposed to lead is to have a doctor do a blood test for lead.

### What Precautions Can Workers Take To Avoid Lead Exposure?

- Use safe work practices such as wetting down paints and coatings to keep dust out of the air.

- Change clothes and wash up before eating, drinking, or smoking. Eat, drink, and smoke only in clean areas.
- Use personal protective equipment like gloves, special clothing, and a respirator.
- Make sure the respirator fits and is worn and maintained properly.
- Change clothes and wash up before going home.



Lead dust on clothes or in the car could expose the family to lead. Children are more susceptible to lead than adults.

If a jobsite is a lead exposure risk, employers are required to conduct air sampling. Until actual exposures are determined, workers are required to

wear approved respirators. The detection of any amount of lead will trigger various Cal/OSHA requirements including engineering controls, proper housekeeping, hand and face washing facilities, additional worker training, respiratory protection, medical monitoring, and additional air sampling. The employer must also develop a written compliance plan.

For more information on lead and lead poisoning, see the Occupational Lead Poisoning Prevention Program (OLPPP) of the California Department of Public Health Services at <http://www.cdph.ca.gov/programs/olppp/Pages/default.aspx>. □

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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.*

## Keep Up Your Guard At Elevated Locations

**A** fall from elevation can seriously injure or kill a worker. Employers should implement a fall prevention safety program by identifying potential fall hazards on the job, providing workers with training and fall protection equipment, and placing guardrails around elevated locations.

Guardrails protect workers from falls and act as a barrier to prevent tools and equipment from falling on workers below. Guardrails are required on all open sides

of elevated work locations that are 7 ½ feet or more above the floor, ground, or other working areas. The elevated work locations include all built-up scaffolds, rolling scaffolds, surfaces, wall or roof openings, elevated platforms, runways, and ramps.

To protect employees from falls, guardrails and their connections and anchorages must withstand a force of 200 pounds applied outward or downward on the top rail. For heavy stresses from employees trucking or handling

materials, additional strength is required by use of heavier stock, closer spacing of posts, bracing, or other methods.

Wood, metal pipe, structural metal, and other suitable materials may be used to construct guardrails. They should have a smooth top rail, midrail, and posts. The top rail's upper surface should be 42 to 45 inches tall. The midrail needs to be halfway between the top rail and

*Continued on next page*

# What You Should Know About Flaggers

**M**any construction operations require equipment and worker activity to take place in areas of moving traffic. So, how can workers and equipment be protected while working in these traffic areas? And, how do workers know when a flagger should be in place?

According to the Construction Safety Orders of the California Code of Regulations, flaggers are required at construction locations where barricades and warning signs can't effectively control moving traffic. In these situations, flaggers must be placed in relation to the equipment or operation so they can give effective warning.

Before being assigned as a flagger, the individual must be trained by someone with the qualifications and experience necessary to effectively instruct the employee in the proper fundamentals of flagging moving traffic. Training, instruction, and signaling directions used by flaggers should conform to the "Manual of Traffic Controls for Construction and Maintenance Work Zones," published by the State Department of Transportation. And, as with all employee training, it should be documented and kept on file in accordance with the company Injury

and Illness Prevention Program (IIPP).

Training should take into account the particular worksite conditions and include the following:

- Flagger equipment which must be used
- The layout of the work zone and flagging station
- Methods to signal traffic to stop, proceed or slow down
- Methods of one-way control
- Trainee demonstration of proper flagging methods
- How to respond to emergency vehicles traveling through the work zone
- How to handle emergency situations
- Methods of dealing with hostile drivers
- Flagging procedures when only a single flagger is used

A flagger must wear warning clothes in specific, highly visible colors. They can wear a vest, jacket or shirt in colors of orange, strong yellow-green or fluorescent versions of these. These garments must be worn rain or shine. If it's dark, the flagger should wear reflectorized garments, visible from a minimum distance of 1,000 feet. □

# 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. □

## Continued from previous page

the surface. The ends of the rails must not overhang the terminal posts except where such overhang does not constitute a projection hazard.

Toeboards are required on all open sides and ends of railed scaffolds at locations where employees are required to work or pass under the scaffold and at all interior floor, roof, and shaft openings. They may be made of any substantial material, either solid, or with openings not over one inch in greatest dimension. The toeboard should be 3 1/2 inches tall. The



bottom clearance (or gap) must not exceed 1/4-inch.

There are some exceptions to the guarding rules

for specific industries and situations. For information on exceptions, see the full text of *California Title 8, Construction Safety Orders, Article 16: Standard Railings.*

Falls must be taken seriously on the job. Guardrails, along with other fall protection measures, can protect workers when they are working at heights. □

