



# CONN-OSHA QUARTERLY

## Protecting Workers from the Effects of Heat



According to the Bureau of Labor Statistics, from 2006 to 2010, excessive heat exposure caused 175 occupational deaths in the United States. As a result, The Occupational Safety and Health Administration (OSHA) has launched a nationwide outreach campaign to raise awareness among workers and employers about the hazards of working outdoors in hot weather.

If your job requires you or your employees to work in a hot environment, it makes sense that everyone should know what the signs and symptoms of heat illness are. You should also know what you can do to protect yourselves and when to call for help.

The best protection is to stay in an air conditioned environment, but sometimes you just have to work in the heat! The body thermoregulates itself in several ways. One of our major heat control mechanisms is sweating. When the skin is moist with sweat, air movement across the skin evaporates the moisture, thus pulling heat away from the body and cooling the body. This cooling process can be impeded in many ways, some of which are listed below.

### Factors that May Cause Heat-related Illness

- ◆ High temperature
- ◆ High humidity
- ◆ Low fluid consumption
- ◆ Direct sun exposure (with no shade) or extreme heat
- ◆ Limited air movement (no breeze or wind)
- ◆ Physical exertion
- ◆ Use of bulky protective clothing and equipment
- ◆ Poor physical condition or ongoing health problems
- ◆ Some medications
- ◆ Pregnancy
- ◆ Lack of previous exposure to hot workplaces

Preparation is one of the keys to protecting yourself from heat related illnesses. Some include:

- ◆ Check the weather reports. Get ready if the heat index is expected to rise
- ◆ Review heat safety precautions
- ◆ Start hydrating by drinking water, even if you're not thirsty. Avoid drinks with caffeine or alcohol
- ◆ Wear loose fitting light colored clothing
- ◆ Slow down and take frequent breaks
- ◆ Use a buddy system to check on co-workers regularly

### Health Problems Caused by Hot Work Environments

**Heat Stroke** is the most serious heat-related health problem. Heat stroke occurs when the body's temperature regulating system fails and body temperature rises to critical levels (greater than 104°F). This is a medical emergency that may result in death! The signs of heat stroke are confusion, loss of consciousness and seizures. Workers experiencing heat stroke have a very high body temperature and may stop sweating. If a worker shows signs of possible heat stroke, get medical help immediately; call 911. Until medical help arrives, move the worker to a shady, cool area and remove as much clothing as possible. Wet the worker with cool water and circulate the air to speed cooling. Place cold wet cloths, wet towels or ice all over the body or soak the worker's clothing with cold water. If the victim is conscious, offer cool water.

**Heat Exhaustion** is the next most serious heat-related health problem. The signs and symptoms of heat exhaustion are headache, nausea, dizziness, weakness, irritability, confusion, thirst, heavy sweating and a body temperature greater than 100.4°F. Workers with heat exhaustion should be removed from the hot area and given liquids to drink, if conscious. Remove unnecessary clothing including shoes and socks.

**Heat Cramps** are muscle pains usually caused by physical labor in a hot work environment. Heat cramps are caused by the loss of body salts and fluid during sweating. Workers with heat cramps should replace fluid loss by drinking water and/or carbohydrate-electrolyte replacement liquids (e.g., sports drinks) every 15 to 20 minutes.

**Heat Rash** is the most common problem in hot work environments. Heat rash is caused by sweating and looks like a red cluster of pimples or small blisters. Heat rash usually appears on the neck, upper chest, in the groin, under the breasts and in elbow creases. The best treatment for heat rash is to provide a cooler, less humid work environment. The rash area should be kept dry. Powder may be applied to increase comfort. Ointments and creams should not be used on a heat rash. Anything that makes the skin warm or moist may make the rash worse.

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Drink water often

Rest in the shade

Report heat symptoms early

Know what to do in an emergency



**WATER.  
REST.  
SHADE.**

*The work can't get done without them.*

## ***Injury and Illness Prevention Programs (I2P2) An OSHA Priority***

OSHA believes that workers will be better protected if each employer: develops a proactive program to help them find hazards in their workplaces, develops a process to fix those hazards so that employees don't get hurt.

These "Injury and Illness Prevention Programs" (I2P2) can reduce the extent and severity of work-related illnesses; improve employee morale and productivity, and reduce workers compensation costs. David Michaels, Assistant Secretary of Labor, observes that "Injury and illness prevention programs are good for workers, good for business and good for America."

OSHA's performance-based Injury and Illness Prevention Program proposal is in its very early stages. The I2P2 standard would require employers to develop a program to help them find and fix hazards in their workplaces. This would not be a one-size-fits-all requirement. Employers would tailor the program to the size and nature of their workplace.

Successful Injury and Illness Prevention Programs include several basic elements:

- Management commitment and employee involvement
- Worksite analysis to identify current and potential hazards
- Hazard prevention and control
- Safety and health training

OSHA currently recognizes companies that have effective comprehensive safety and health management programs through initiatives such as the Voluntary Protection Program (VPP) and Safety and Health Award Recognition Program (SHARP).

**Case Study** Scot Forge is an employee-owned company whose employees have a vested interest in the success of the company. In 2004, Scot Forge successfully completed the challenge to be-

come the first forge company in the United States to be SHARP certified. Through continually improving their comprehensive safety and health management process, coupled with a lot of effort from all 610 employees, today Scot Forge is achieving a Total Incident Rate more than 60% below the national average for their industry group. To achieve this performance, employees are working above and beyond the requirements of the OSHA standards to minimize the behavioral factors that routinely contribute to work place injuries. The company has deployed strong safety awareness, hazard analysis, communication, and observation tools that educate and involve everyone in the organization's efforts to become injury free. This comprehensive safety and health management approach has not only reduced the number of injuries, but it has also made a significant contribution to the company's productivity and profitability.

For more information on I2P2, visit OSHA's Injury and Illness Prevention Programs topic page or call CONN-OSHA at 860-263-6900 to request an on-site consultation <http://www.osha.gov/dsg/topics/safetyhealth/index.html>

Note: Some employers have implemented incentive programs that reward employees with prizes when a company has no injuries or illnesses. OSHA cautions against this type of safety and health management program because the incentives may discourage employees from reporting work-related injuries and illnesses. When employees fail to report injuries and illnesses, they may not receive early diagnosis and treatment of their ailments and the hazards that caused them are not identified. If employers want to offer incentives they should use them to reward employees when they make safety recommendations.

## ***Congratulations RockTenn***

About 100 employees and dignitaries gathered at the RockTenn Company mill in Uncasville to celebrate a major milestone on Thursday, July 19, 2012. They gathered to commemorate the passing of a decade without an accident or injury resulting in lost time. The RockTenn Uncasville mill makes paperboard products. No other mill in the RockTenn family has ever accomplished this safety goal.

The celebration at the former Smurfit-Stone plant at 12 Depot Road included Jim Rubright, President and CEO of Georgia-based RockTenn and Montville's Mayor Ronald McDaniel. Director Kenneth Tucker and Program Manager James Pierce, of the Connecticut Department of Labor, Division of Occupational Safety and Health (CONN-OSHA) were also present.

RockTenn had already earned the distinction of receiving the Safety and Health Recognition Program (SHARP) designation in 2007, which it still currently maintains. CONN-OSHA only recommends employers with exemplary safety and health programs for this prestigious honor.

At the celebration James Pierce presented John Deveau, RockTenn Safety Manager, with a Connecticut Department of Labor Commissioner's Certificate of Achievement Award signed by Acting Commissioner Dennis C. Murphy. John Deveau has been instrumental in RockTenn's success and is commended for achieving this milestone. He is personally committed to leading by example and places a high priority on employee safety in the workplace.

Congratulations to RockTenn and its employees for upholding the highest standards and making their safety and health program a role model for other companies.

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## *Employer Safety Incentive and Disincentive Policies and Practices*

Reporting a work-related injury or illness is a core employee right, and retaliating against a worker for reporting an injury or illness is illegal discrimination under section 11(c) of the OSH Act. Other whistleblower statutes enforced by OSHA also may protect employees who report workplace injuries. In particular, the Federal Railroad Safety Act (FRSA) prohibits railroad carriers, their contractors and subcontractors from discriminating against employees for reporting injuries.

If employees do not feel free to report injuries or illnesses, the employer's entire workforce is put at risk. Employers do not learn of dangerous conditions that could be corrected and injured employees may not receive the proper medical attention or workers' compensation benefits to which they are entitled. Ensuring that employees can report injuries or illnesses without fear of retaliation is crucial to protecting worker safety and health.

There are several types of workplace policies and practices that could discourage reporting and could constitute unlawful discrimination and a violation of section 11(c) and other whistleblower protection statutes. Some of these policies and practices may also violate OSHA's recordkeeping regulations, particularly the requirement to ensure that employees have a way to report work-related injuries and illnesses. A few of the most common potentially discriminatory policies is below. OSHA has also observed that the potential for unlawful discrimination under all of these policies may increase when management or supervisory bonuses are linked to lower reported injury rates. While OSHA appreciates employers using safety as a key management metric, we cannot condone a program that encourages discrimination against workers who report injuries.

In this first situation, OSHA received reports of employers who have a policy of taking disciplinary action against employees who are injured on the job, regardless of the circumstances surrounding the injury. Reporting an injury is always a protected activity. OSHA views discipline imposed under such a policy against an employee who reports an injury as a direct violation of section 11(c) or FRSA.

In another situation, an employee who reports an injury or illness is disciplined, and the stated reason is that the employee has violated an employer rule about the time or manner for reporting injuries and illnesses. Such cases deserve careful scrutiny. Because the act of reporting the injury directly results in discipline, there is a clear potential for violating section 11(c) or FRSA. OSHA recognizes that employers have a legitimate interest in establishing procedures for receiving and responding to reports of injuries but such procedures must be reasonable and may not unduly burden the employee's right and ability to report.

In this third situation, an employee reports an injury, and the employer imposes discipline on the grounds that the injury resulted from the violation of a safety rule by the employee. OSHA encourages employers to maintain and enforce legitimate workplace safety rules in order to eliminate or reduce workplace hazards and prevent injuries from occurring. In some cases, however, an employer may attempt to use a work rule as a pretext for discrimination against a worker who reports an injury. a careful investigation is needed.

Finally, some employers establish programs that unintentionally or intentionally provide employees an incentive to not report injuries. For example, an employer might enter all employees who have not been injured in the previous year in a drawing to win a prize, or a team of employees might be awarded a bonus if no one from the team is injured over some period of time. Such programs might be well-intentioned efforts by employers to encourage their workers to use safe practices. However, there are better ways to encourage safe work practices, such as incentives that promote worker participation in safety-related activities, such as identifying hazards or participating in investigations of injuries, incidents or "near misses". OSHA's voluntary Protection Program (VPP) guidance materials refer to a number of positive incentives, including providing tee shirts to workers serving on safety and health committees; offering modest rewards for suggesting ways to strengthen safety and health; or throwing a recognition party at the successful completion of company-wide safety and health training. Incentive programs that discourage employees from reporting their injuries are problematic because, under section 11(c), an employer may not "in any manner discriminate" against an employee because the employee exercises a protected right, such as the right to report an injury. FRSA similarly prohibits a railroad carrier, contractor or subcontractor from discriminating against an employee who notifies, or attempts to notify, the railroad carrier or the Secretary of Transportation of a work-related personal injury.

Please contact the Office of Whistleblower Protection Programs at (202) 693-2199 if you have further questions. Excerpts for this article were taken from a March 12, 2012 memorandum Employer Safety Incentive and Disincentive Policies and Practices. The full article may be found at:

<http://www.osha.gov/as/opa/whistleblowermemo.html>

### *Protecting Workers From Heat* cont. from page 1

#### **Work Practices to Prevent Heat-related Health Effects**

- ◆ Train workers and supervisors about the hazards leading to heat stress and ways to prevent them.
- ◆ Allow workers to get used to hot environments by gradually increasing exposure over a 5-day work period.
- ◆ Provide workers with plenty of cool water. Water should have a palatable taste, be convenient and the water temperature should be 50- 60°F if possible.
- ◆ Remind workers to frequently drink small amounts of water *before* they become thirsty to maintain good hydration.
- ◆ Be aware that you can drink too much water. Generally you should not drink more that a total of 12 quarts of fluid in a 24 hour period. The OSHA Fact Sheet "Protecting Workers from the Effect of Heat" provided the proceeding information. The entire fact sheet in not represented here and can be found at [http://www.osha.gov/OshDoc/data\\_Hurricane\\_Facts/heat\\_stress.pdf](http://www.osha.gov/OshDoc/data_Hurricane_Facts/heat_stress.pdf)

## Hazard Corner....Board of Education Building Maintenance / Custodial Workers



Every year numerous injuries occur in Connecticut schools and typically, it is not the students who are sustaining these injuries. It is the building maintenance and custodial employees who get injured keeping your child's school clean and operational. Building

maintenance and custodial staff perform a multitude of activities that expose them to a variety of hazards.

Building maintenance work involves a broad scope of projects: interior painting, roof repair; gutter cleaning, Heating Ventilation Air Conditioner maintenance, etc.. The maintenance staff uses equipment such as ladders, scissors lifts, hand tools and floor strippers. One day staff may be exposed to asbestos while drilling through walls or replacing floor tiles and be exposed to lead based paint or mold on another day. There is exposure to electricity when they repair or replace electrical outlets, light ballasts, electrical panel work, work with extension cords, Ground Fault Circuit Interrupters (GFCI's), and on-site generators. A large part of their day can revolve around using hazardous chemicals/solvents for cleaning, disinfecting, maintenance and operation of equipment/facilities. These hazardous chemicals, some corrosive, can cause serious injuries to the skin and eyes from acute exposure.

When employees are exposed to hazardous chemicals, the employer needs to comply with the standard CFR 1910.1200 Hazard Communication. This includes a written program, proper labeling of chemicals, comprehensive collection of material safety data sheets (MSDS's), the use of Personal Protective

Equipment, and appropriate employee training. There are additional standards for electrical hazards or when working at a job that exposes them to fall hazards. The following is a list of some standards that may apply to maintenance/custodial activities. Some standards may not apply depending on exposure to hazards by employees. (i.e., if the noise level does not exceed the action level of 85 decibels, a hearing conservation program would not be required).

- ◆ Subpart D – Walking-Working Surfaces
- ◆ Subpart I – Personal Protective Equipment
- ◆ Subpart L – Fire Protection
- ◆ Subpart S - Electrical
- ◆ 1910.95 Occupational Noise Exposure
- ◆ 1910.134 Respiratory Protection
- ◆ 1910.146 Permit-Required Confined Spaces
- ◆ 1910.147 The Control of Hazardous Energy (Lockout/Tagout)
- ◆ 1910.1001 Asbestos
- ◆ 1910.1030 Bloodborne Pathogens
- ◆ 1910.1200 Hazard Communication
- ◆ 1904 Recording and Reporting Occupational Injuries and Illnesses

\* This list is NOT all-inclusive.

In conclusion, schools are a very dynamic and challenging workplace. A majority of these jobs are last minute or “get them done as soon as possible” assignments, some possibly for the first time. As in any job, work smart, plan accordingly and be safe.



## Connecticut-OSHA ~ Training Update...

**Fall Protection in the Residential Construction Industry** August 28, September 9 or September 11, 2012 from 3:00 p.m. to 4:30 p.m. *This is a unique opportunity.* CONN-OSHA and U.S. Department of Labor OSHA will discuss and answer questions related to changes in the residential fall protection regulations. If your work involves residential construction, don't miss this opportunity to learn what the residential construction regulations require and what employers must do to protect their employees,.

**OSHA Recordkeeping** August 24 (this class is full) and November 6, 2012 from 8:30 a.m. to noon At this workshop, you will learn how to fill out the OSHA 300 Log of Work-Related Injuries and Illnesses accurately and correctly.

**Powered Industrial Trucks** August 28, 2012 from 10:00 a.m. to noon This workshop includes the basic requirements of the OSHA 29 CFR 1910.178 Powered Industrial Truck Standard which affects both General Industry and Construction material handling operations. *This class is full, we will be scheduling another for sometime this fall.*

**Construction Site Safety** October 2, 2012 from 9:00 a.m. to noon Construction managers, first line supervisors, and construction employees will be provided with an overview of four areas of concern on the construction site: fall protection, scaffolding and ladder safety, electrical hazards, and excavation & trenching safety.

**Breakfast Roundtable** This discussion group meets the third Tuesday of every month from 8:15 am to 9:45 am. Pre-registration is required. To be placed on the e-mail distribution list, contact John Able at [able.john@dol.gov](mailto:able.john@dol.gov)

Classes are free and held at 200 Folly Brook Boulevard, Wethersfield, CT in Conference Room A/B. To register, contact John Able at [able.john@dol.gov](mailto:able.john@dol.gov) or Catherine Zinsser at [zinsser.catherine@dol.gov](mailto:zinsser.catherine@dol.gov). Pre-registration is required. A Photo I.D. is required to allow entry into a public building. For more training information, visit the CONN-OSHA web site [www.ctdol.state.ct.us/osha/osha.htm](http://www.ctdol.state.ct.us/osha/osha.htm)