Brothers and Sisters,

Summer is here so it’s time to start thinking about the dangers of working in heat and high humidity. Becoming overheated can make people very ill and, in some cases, even cause death. Everyone reacts differently to heat but we all need to know how to recognize and treat heat emergencies. Normally the body cools itself by sweating. When the outside temperature is equal to or above the temperature of the body and the humidity is high, our sweat does not evaporate and the body can become overheated. There are three kinds of heat-related illnesses: Heat cramps, heat exhaustion and heat stroke. All of these are highly possible during hot weather. All heat related injuries need prompt medical attention.

Heat cramps are muscle cramps. Usually these occur in the arms or legs but may also affect the abdominal or chest muscles as well. These cramps are caused by excessive body fluid loss through sweating. First aid includes moving the victim to a cool place, resting the cramping muscle and giving the person cool water. Treatment is simple: massage the cramped muscles and drink fluids.

Our Vision

The United Association and its local unions will apply its best practices and resources to build the best educated and safest workforce in all sectors of the piping industry.
Heat exhaustion signs include heavy sweating, weakness, fast pulse, normal body temperature, headache and dizziness, nausea and vomiting. First aid for heat exhaustion requires the worker to be moved to a cool place. Keep them lying down with their legs straight and elevated 8 to 12 inches. Apply cold packs, wet towels, or just wet their clothing to cool them. Give the victim cold water only if he or she is conscious. If the victim loses consciousness or if no improvement is noted within 30 minutes, seek professional medical attention.

Heat stroke is a true emergency! Signs and symptoms include high body temperature, unconsciousness, hot skin, rapid pulse and breathing, weakness, dizziness or headache. Immediate first aid is required. Move the victim to a cool place and immediately cool the worker by any available means (use ice and water from a jobsite cooler for example). Keep the head and shoulders slightly elevated. Monitor the airway and check to be sure the victim is breathing. Call for professional help or rush the heat stroke victim to a hospital immediately.

Prevention of heat illness is very important. Gradual adaptation to working in hot weather is a start. Get a good night’s rest, eat moderately on hot days, wear loose fitting light weight clothing and drink plenty of water. As the weather heats up, take a few short breaks during the day; and, if possible, schedule heavy work so that it does not have to be accomplished during the hottest part of the day. Keep a sharp eye out for potential heat injuries in coworkers. Try to practice prevention—it’s the name of the game—and it will keep you from becoming a victim of a heat related illness.

The Occupational Safety and Health Administration (OSHA) has worked with the National Weather Service to develop a smartphone heat safety App that allows users to calculate risk levels at a worksite and learn the protective measures needed to prevent heat illness. Almost 200,000 people have downloaded the App so far.

The App was updated this spring for Apple devices, with full screen color alerts, improved navigation and accessibility options. This improved version lets you know instantly if you are in a high-risk zone due to heat and humidity—and precautions that need to be taken to prevent heat-related illness. You can download the App at https://www.osha.gov/SILTC/heatillness/heat_index/heat_app.html.

Visit OSHA’s Heat Illness Prevention page for more information and to download or order heat illness educational materials in English or Spanish.

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Exhaust Ventilation Study

Presented with the assistance of Pam Susi, MSPH, CIH, CPUR

Dusts and fumes are pervasive on construction sites and many pose severe health hazards. Health effects are usually insidious, causing irreparable harm often not apparent until years or decades after exposure. Airborne crystalline silica can damage lung tissue and cause other disorders—some fatal but all totally preventable. Meanwhile, trades who routinely engage in welding are commonly exposed to hazardous levels of fumes from disease-causing metals.

For two decades, Pam Susi and her colleagues have documented these dangers through their pioneering research measuring hazardous exposures encountered by various trades. The published results have become required reading in the field; small wonder that two of their publications were cited in the preamble to OSHA’s proposed silica rule.

But documenting the danger is just the first step. Over the past five years, Susi’s team has enlisted industry participation...
in a project to evaluate solutions for both welding fumes and silica dust generated during a masonry restoration. Occupational health experts prefer Local Exhaust Ventilation or LEV that captures dusts and fumes at the source; LEV protects not just the worker who welds or grinds but everyone in the vicinity. To find out which LEV systems are practical and effective, Susi’s group recruited knowledgeable contractors, labor union representatives, hygienists and tool and equipment manufacturers in Partnerships for Advancing Control Technologies (PACTs) focused on each hazard. The PACTs selected commercially available LEV systems for performance testing. Four of the most highly rated systems were subjected to an extensive evaluation for dust capture effectiveness. Each reduced silica exposure by more than 95 percent. The Welding PACT, with mechanical contractors, pipefitters, and boilermakers in the fore, identified and rated a number of LEV systems for capture of welding fumes. Susi’s team tested three of the most highly rated systems at union apprenticeship and training centers. Manganese and hexavalent chromium exposures were reduced between 56 percent and 94 percent. However, apprentices need instruction in proper LEV use for these systems to be effective. So the team also designed and piloted a short training curriculum on proper LEV use while welding. Pilot test results showed that not only did knowledge increase after training, but welding fume exposures decreased.

*I would like to thank Local 597, Local 420, and Local 495 for their help in this valuable research effort for the health and welfare of all our members. This article is an excerpt from CPWR “Building on what we’ve Learned”—Highlights 2014.

Fall Safety Stand-Down Campaign Takes Place Around the World

In 2012, 570 workers lost their lives to falls, and lack of fall protection remains the most frequently cited OSHA violation. For two weeks starting in early May, thousands of employers and millions of workers around the world paused their workdays to talk about preventing fatal falls as part of the Occupational Safety and Health Administration’s second annual National Fall Safety Stand-Down. Deputy Secretary of Labor Chris Lu got in on the action at an event hosted by Turner Construction, which is overseeing restoration of the U.S. Capitol Dome. Dr. David Michaels, assistant secretary of Labor for occupational safety and health joined nearly 300 workers at the construction site of the new National Museum of African American History and Culture during their stand-down event. OSHA area officers and regional directors stood down in all corners of the U.S., including major projects at Emory University in Atlanta, YouthBuild in Boston and Nippert Stadium in Cincinnati. Meanwhile, the U.S. Air Force paused at Nellis Air Force Base in Las Vegas, and 1,300 workers in Hindon, India, stopped work at a Boeing site. The stand-down ended on May 15 and was a record-breaking event, but the department’s commitment to fall safety did not end there. OSHA contin-
Training Center Safety Review

Do you have an emergency action plan? For a tornado? A fire? Do your instructors explain emergency procedures to the class? Is your shop OSHA compliant? These are just a few questions to think about both for today and when bringing in new apprentices to your school. Remind your current class of these procedures and educate your new apprentices right away.

At one of thousands events held nationwide over the past two weeks, 125 construction workers pause work to talk about safety as the McCarthy Emory partnership project in Atlanta on May 15.

Course #328 OSHA / NFPA 70E - ARC Flash Safety
August 8 - 14, 2015 ..............................................Washtenaw Community College
Ann Arbor, Michigan

Course #470 OSHA 500 Trainer Course for the Construction Industry(p)
November 2 - 6, 2015 ...........................................UA Great Lakes Training Center
Ann Arbor, Michigan

Course #471 OSHA 510 Occupational Safety and Health Standards for the Construction Industry
August 4 - 7, 2015 ..............................................UA Great Lakes Training Center
Ann Arbor, Michigan
October 5 - 8, 2015 ..............................................UA Great Lakes Training Center
Ann Arbor, Michigan

Course #474 OSHA 502 Update for Construction Industry Outreach Trainer
June 9 - 11, 2015 ..............................................Louisville, Kentucky
December 8 - 10, 2015 ..............................................UA Great Lakes Training Center
Ann Arbor, Michigan

Course descriptions for these classes can be found in the Regional Training Course Catalog on uanet.org at https://uanet.org/regional_training.asp

Below is a list of websites and links to help you with your health and safety program. Many of these sites have PowerPoints® and pictures that are free to download for your use. Please take the time to look at a few of these valuable resources.

The Department of Labor
http://www.dol.gov
OSHA Occupational Safety and Health
http://www.osha.gov
Electronic Library of Construction Safety and Health
http://www.elcosh.org
Center of Disease Control and Prevention
http://www.cdc.gov
NIOSH-National Institute Occupational Safety and Health
http://www.cdc.gov/niosh
Safety Toolbox Talks
http://www.Safetytoolboxtalks.com
EPA-Environmental Protection Agency
http://www.epa.gov
CPWR-Center for Construction Research and Training
http://www.cpwr.com
http://esmartmark.org

In Canada, the above safety regulations fall under either the Workers Compensation Board or the Provincial Safety Authority.