

### Safety

#### The Heat Is On by Melinda Caldwell

The first official day of summer is right around the corner. In a number of states, it may already feel like the season has changed. For manufacturers across the country, production is in full swing, with many running multiple shifts from dawn to dusk. Summer is all about being busy and getting a lot of work done. But along with the extra demands brought by large orders and busy customers, the heat and humidity of the summer months bring added safety concerns for production employees, especially those working outside.

Now is a good time to remind plant personnel that when it comes to working in the hot sun, there is more to think about than the tan they're getting or the winter weight they're sweating off. The Centers for Disease Control reports that, "From 1979-1999, excessive heat exposure caused 8,015 deaths in the U.S. During this period, more people in this country died from extreme heat than from hurricanes, lightning, tornadoes, floods and earthquakes combined."

While an individual's susceptibility to heat-related illness is affected by a variety of factors including age, obesity, dehydration, heart disease, mental illness, poor circulation, sunburn, and the use of prescription drugs or alcohol, implementing basic guidelines and educating your people about the warning signs of heat-related illness are key to an incident-free summer.

There are four basic heat-related conditions to be mindful of.

#### SUNBURN

While sunburn is probably the most minor and easy to treat of the heat-related conditions, it should be avoided because it damages the skin and makes one more susceptible to other heat-related illnesses. Although the discomfort is usually minor and healing often occurs in about a week, a more severe sunburn may require medical attention. The well-know symptoms of sunburn include red skin that is painful and abnormally warm after sun exposure. One should consult a physician if the sunburn is accompanied by fever, fluid-filled blisters and/or severe pain. When treating sunburn remember to avoid repeated sun exposure, apply cold compresses or immerse the sunburned area in cool water, apply moisturizing lotion to affected areas (do not use salve, butter or ointment), and do not break blisters.

#### HEAT CRAMPS

Heat cramps usually affect people who sweat a lot during strenuous activity. This sweating depletes the body's salt and moisture and the resulting low salt level in the muscles causes painful cramps. Heat cramps are muscle pains or spasms—usually in the abdomen, arms or legs—

that may occur in association with strenuous activity. If the victim has heart problems or is on a low sodium diet, get medical attention for heat cramps. If medical attention is not necessary, take these steps:

- Stop activity, and sit quietly in a cool place.
- Drink clear juice or a sports beverage.
- Seek medical attention for heat cramps if they do not subside in one hour.

## HEAT EXHAUSTION

A milder form of heat-related illness that can develop after several days of exposure to high temperatures and inadequate or unbalanced replacement of fluids, heat exhaustion is most common among the elderly, people with high blood pressure and people working or exercising in a hot environment. The warning signs of heat exhaustion include heavy sweating, paleness, muscle cramps, tiredness, weakness, dizziness, headache, nausea or vomiting, and fainting. The victim's skin may be cool and moist, his or her pulse rate will be fast and weak, and breathing will be fast and shallow. To treat heat exhaustion, help the victim to rest and cool off. Seek medical attention if the victim's symptoms are severe, if he or she has heart problems or high blood pressure, or if symptoms worsen or last longer than one hour. Left untreated, heat exhaustion can progress into heat stroke.

## HEAT STROKE

The most serious heat-related illness, heat stroke occurs when the body becomes unable to control its temperature, resulting in a rapid increase in the body temperature, the failure of the sweating mechanism and an inability to cool down. Body temperature may rise to 106 degrees Fahrenheit or higher within 10-15 minutes. Heat stroke can cause death or permanent disability if emergency treatment is not given. Warning signs vary but may include an extremely high body temperature (above 103 degrees Fahrenheit, orally); red, hot and dry skin (no sweating); rapid, strong pulse; throbbing headache; dizziness; nausea; confusion and unconsciousness. The presence of any of these signs may indicate a life threatening emergency. Have someone call for immediate medical assistance and begin cooling the victim:

- Get the victim to a shady area.
- Cool the victim rapidly using whatever methods you can (e.g., immersion in a tub of cool water, spraying with cool water from a garden hose, etc.).
- Monitor body temperature and continue cooling efforts until the body temperature drops to 101-102 degrees Fahrenheit.
- If emergency medical personnel are delayed, call the hospital for further instructions.
- Do not give the victim alcohol to drink
- Get medical assistance as soon as possible.

## CONCLUSION

Keep in mind that the effects of the heat can manifest themselves in ways other than physical illness. As the mercury rises, employees can become more easily irritated and fatigued. When

emotions are running high, the likelihood of safety incidents also increases. Remind your employees to pace themselves and to be patient with coworkers.

Finally, as the busy season gets underway, take a few moments to remind your crew of the following tips for avoiding heat-related illness and injury:

- Drink more fluids (non-alcoholic, of course), regardless of your activity level. Don't wait until you are thirsty to drink. Drink two to four glasses (8-32 oz.) of cool fluids each hour. A sports beverage can replace the salt and minerals you lose in sweat.
- Don't drink liquids that contain caffeine, alcohol or large amounts of sugar—these actually cause you to lose more body fluid. Also, avoid very cold drinks because they can cause stomach cramps.
- Protect yourself from the sun by wearing a wide-brimmed hat, which also keeps you cooler, and sunglasses. Put on sunscreen of SPF 15 or higher (the most effective say “broad spectrum” or “UVA/UVB protection” on their labels).
- Wear lightweight, light-colored clothing.

While avoiding heat-related illness and injury may seem like good common sense, being proactive with your staff will help to keep you from getting burned this summer!

Sources: [www.medicinenet.com](http://www.medicinenet.com) • [www.cdc.gov/nceh](http://www.cdc.gov/nceh)

---

### [SBC HOME PAGE](#)

Copyright © 2003 by Truss Publications, Inc. All rights reserved. For permission to reprint materials from SBC Magazine, call 608/310-6706 or email [editor@sbcmag.info](mailto:editor@sbcmag.info).

The mission of Structural Building Components Magazine (SBC) is to increase the knowledge of and to promote the common interests of those engaged in manufacturing and distributing of structural building components to ensure growth and continuity, and to be the information conduit by staying abreast of leading-edge issues. SBC will take a leadership role on behalf of the component industry in disseminating technical and marketplace information, and will maintain advisory committees consisting of the most knowledgeable professionals in the industry. The opinions expressed in SBC are those of the authors and those quoted solely, and are not necessarily the opinions of any of the affiliated associations (SBCC, WTCA, SCDA & STCA).