Heat kills

In August 2010, a new laborer went to work on a jobsite in Moss Point, Mississippi, the southernmost part of the state. His job was to help install wooden formwork for concrete curb and gutter placements. By lunchtime the temperature had climbed to 97 degrees Fahrenheit, with a humidity reading of 74 percent. With no wind, the heat stress index climbed to 130 degrees.

Shortly after lunch, the new employee collapsed unconscious near a portable toilet and was found later by coworkers. Emergency medical personnel were called, but the employee was pronounced dead at 2:44 p.m. Cause of death was listed as hyperthermia.

According to OSHA reports, the employer did not protect employees from the recognized hazards of heat stress, heat exhaustion and heat stroke. OSHA also noted that the new employee was not properly acclimated to the extreme heat.

How this death could have been prevented:
• Train workers to recognize and respond to heat-related problems. Symptoms of heat exhaustion include headache, dizziness, fainting, weakness, wet skin, irritability, confusion, thirst, nausea or vomiting. Heat stroke, however, is more serious. Symptoms of heat stroke include confusion, unable to think clearly, passed out/unconscious, seizures, stop sweating/dry skin.
• Train workers and supervisors to understand and monitor the heat index.
• Provide cool water, shade or air-conditioned spaces for frequent rest breaks during the day. Workers need at least one pint of water per hour and to drink water every 15 minutes. Avoid caffeinated beverages.
• Implement a buddy system for workers to check on each other.
• Allow more frequent breaks for new workers or those who have been away from the jobsite for some time. Consider putting them on half-days outside (mornings preferably) until they have acclimated.
• Wear light colored, loose fitting clothes and a wide brim hat or ventilated hard hat.
• Note that older workers, those who are overweight or have diabetes or take some medications, may be more susceptible to heat-related illnesses than others. Make sure you know the fitness level of each worker and act accordingly.

What to do when you see heat related illness:
• Call a supervisor for help, or 911 if a supervisor is not available.
• Stay with the worker until help arrives.
• Move the worker to a shaded or cooler area.
• Remove outer clothing, fan and mist the worker with water, apply ice bags or ice towels.
• Provide cool drinking water if victim is able to drink.
• If victim is not alert or has dry skin, this may be heat stroke, which can be deadly. Make sure 911 and emergency responders are aware and use every available means to lower the worker’s body temperature immediately.

An app for that
OSHA has a free application for mobile devices that enables workers and supervisors to monitor and assess risks for workers based on the heat index. It includes reminders about protective measures that should be taken at that risk level. It is available for Android-based platforms and the iPhone in English and Spanish by visiting: http://bit.ly/OSHAheatindex