Is This the Right Way to Beat Heat Stress?



Cold drinks are essential to ward off heat. But drinking alcoholic or caffeinated beverages, such as coffee, teas, and colas, are not recommended for optimal hydration. These fluids tend to pull water from the body and promote dehydration.

The Moral: Make sure your workers keep themselves properly hydrated when they work in hot conditions.

WHAT'S AT STAKE

Meet the Late Anthony Dalton

May 20, 1992

Boilermakers Anthony Dalton and Ronald Morrissey report for their first day of work repairing pipes in a New Brunswick paper mill.

New Brunswick is in Canada. So the last thing Dalton and Morrissey are expecting is 94° F and 35% humidity. It's even hotter inside the mill where chemicals are heated in enclosed spaces—especially on the scaffolds where the men are working.

Dalton and Morrissey work all day in the heat. Dalton starts experiencing fatigue. It's the first warning of danger. But since neither man has received any training about the dangers of heat stress, it goes unrecognized. Opportunity lost.

May 21, 1992

99° F, 33% humidity. Dalton and Morrissey work the entire day. Dalton is getting worse. When the two get back to their motel after work, Dalton has muscle cramps. He's exhausted. He passes out on the bathroom floor of the motel room. He drinks a beer, not realizing that the last thing somebody in his condition should do is drink alcohol.

May 22, 1992

101° F. Dalton manages to drag himself to work. He spends the morning inside one of the tanks helping to build a scaffold. He's in big trouble. After his afternoon break, he tells the supervisor that he's just too exhausted to go back to work. He sits on the floor with his back against the base of a column. When the shift ends, he can barely stand up. He's incoherent. He stumbles about 100 yards and finally collapses. Even now, nobody knows what's wrong. The ambulance takes Dalton to the hospital. But it's too late. Dalton dies of heat stroke the next day.

The Moral

Perhaps the saddest part of the death of Anthony Dalton is that it could have been prevented. There was ample warning: Dalton's fatigue, the cramps, his passing out on the bathroom floor, etc. Anybody attuned to the signs of heat stress would have recognized what was going on and acted while there was still time. Tragically, because none of the workers or supervisors with whom Dalton worked had received any education on heat stress, every opportunity to save him was missed.

HEAT STRESS HYDRATION DO's & DON'Ts

WHEN WORKING IN THE HEAT:

- **DO** drink cold water
- **DON'T** drink:
  - Beer or other alcoholic beverages
  - Coffee or other caffeinated beverages
  - Soda or other heavily sugared beverages
  - Salty beverages
- **DO** take regular water breaks during hot work, e.g., once every 15 minutes
- **DO** step up the frequency of water breaks if the heat or workload increases
- **DO** take your water breaks in the shade or inside in an air conditioned space

- **DO** drink enough cold water during breaks—at least one pint per hour