



Overview

Heat stress (heat illness) is a serious medical condition that results from the body's inability to cope with a particular heat load. Symptoms include heat cramps, heat exhaustion and heat stroke.

Heat stress is a very REAL problem

It can affect anyone from iron workers to pastry chefs and can result in serious illness and sometimes in death.

Bureau of Labor Statistics data from 2008 reveal:

- 1,680 recordable injuries due to environmental heat
- Of those, 150 resulted in a recordable "heat stroke" and 26 resulted in death
- An average worker's comp claim for injuries related to excessive heat exposure is \$9,000
- A heat stress related disabling injury costs a company \$43,000 per occurrence
- A fatal accident costs a company an average of \$1.3 million per occurrence

Heat Stress is 100% Preventable

- Awareness and education are critical, combined with the use of an effective hydration product
- Symptoms are often overlooked or ignored by both supervisors and employees themselves
- 78% of heat illness victims get dehydrated even if drinking water is available at the worksite

The Power of Electrolytes

Electrolytes replace lost minerals such as sodium, potassium, calcium and magnesium. They're like antifreeze for your body. Water alone does not contain electrolytes.

Just like a car, your body overheats quickly during intense use without the proper mix of electrolytes. Without them, the harder the body is worked, the more quickly it overheats.

Awareness is the Key to Prevention

Risk of heat stress depends on many different factors:

• Physical condition of worker

- Weather, temperature and humidity
- Clothing How much and what type
- Activity How fast you're moving or how much weight you're moving
- Breeze A fan or wind is blowing
- Direct sunlight or shade

Early Warning Signs

- Headache • Dizziness or fainting
- Confusion or disorientation
- Mood swings
- Rapid heart rate
- Dark yellow urine (dehydration)
- Redness of skin or heat rashes
- Swollen lips
- Chills

Mild to moderate symptoms can quickly turn severe and result in hospitalization or even death. DO NOT WAIT. Act quickly if you notice any warning signs.



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Risks of Not Being Aware	 Worker Injury – While working under heat-related stress, cognitive abilities decrease. Slower reaction time and poor decision making can lead to injury. Operating equipment or using tools is always dangerous, but even more so when workers are impaired or under stress. Property Loss or Damage – Motor skills are often impaired when the body is under heat stress. A worker not at peak form can cause accidents and injury resulting in property loss and damage. Productivity Loss – A heat-stressed body can't work at optimum speed or performance. Worker productivity declines as the effects of heat stress increase.
Impact on Productivity	 2% dehydration factor = 20% loss of worker productivity A 200 lb. (91kg) worker only has to lose 4 lbs. (1.8kg) to lose 2% of his body weight
	• A 200 lb. (91kg) worker can lose as much as 3 gal. (8L) of sweat in an 8 hour day
The Cost of Heat Stress	20% of \$22 per hour = \$4.40 per hour in lost productivity. That adds up to \$35 over an 8 hour shift. Multiply that by the number of workers at a facility.
	Electrolyte hydration can cost as little as \$1 per day. Weigh that against the cost of a work-related injury or death.
Heat Stress is	Four simple measures can be taken to reduce the chances of heat stress: 1. Provide adequate hydration
	2. Provide protection from sun
	 Monitor the length of time workers are exposed to heat Ensure proper ventilation
	Hydrate with Sqwincher [®] Cool with ergodyne [®] apparel