Staying productive in the summer heat

It's been a long time coming, but the hot days of Summer '96 are here. But there are ways to keep yourself and your crews productive no matter how high the temperature.

According to the U.S. Department of Labor, nearly 25 percent of the U.S. workforce, like the golf/landscape industry, works in high-heat environments.

In one day, a person can lose as much as two to three gallons of sweat working in a hot environment, according to the National Institute of Safety and Health (NIOSH). If salts and fluids lost through sweat are not replaced, the body becomes dehydrated. Dehydration, if left untreated, can cause heat illness, adversely affect job performance—even cause serious accidents.

Sweating is the body's natural cooling mechanism because it helps the body maintain normal functions by reducing excess body heat. When high humidity is added, the risk of heat stress increases because humid conditions prevent sweat from evaporating from the skin. (See Heat Index Chart.)

Here are symptoms that can lead to heat illness: **loss of energy, dizziness or lightheadedness, nausea, muscle cramps and/or headaches**.

"By the time your body tells your brain that it needs fluids, and your brain tells you you're thirsty, dehydration has already begun," says Dr. Bob Murray of the Gatorade Exercise Physiology Lab in Barrington, Ill. "The effects of dehydration are cumulative, yet dehydration and heat illness can be prevented if you drink enough of the right kinds of beverages."

Murray says workers should drink at least 4 to 8 oz. of fluids every 15 to 20 minutes while working in the heat. For every pound lost, workers should drink two cups (16 oz.) of fluids to fully rehydrate their bodies. Besides water, if you can get carbohydrates and electrolytes (sodium, potassium, chloride) into your body, you will perform to higher standards. Fluids like Gatorade provide both. **LM**

Hot tips to beat the heat

1) Reduce physical activity
2) Stay in the shade or wear a wide-brimmed hat.
3) Drink plenty of liquids, but...
4) Avoid alcohol, coffee and tea, or other drinks that cause fluid loss.
5) Do not take salt tablets.

HEAT INDEX

ENVIRONMENTAL TEMPERATURE (F°)

RELATIVE HUMIDITY	70°	75°	80°	85°	90°	95°	100°	105°	110°	115°	120°
	Apparent Temperature*										
0%	64°	69°	73°	78°	83°	87°	91°	95°	99°	103°	107°
10%	65°	70°	75°	80°	85°	90°	95°	100°	105°	111°	116°
20%	66°	72°	77°	82°	87°	93°	99°	105°	112°	120°	130°
30%	67°	73°	78°	84°	90°	96°	104°	113°	123°	135°	148°
40%	68°	74°	79°	86°	93°	101°	110°	123°	137°	151°	
50%	69°	75°	81°	88°	96°	107°	120°	135°	150°		
60%	70°	76°	82°	90°	100°	114°	132°	149°			
70%	70°	77°	85°	93°	106°	124°	144°				
80%	71°	78°	86°	97°	113°	136°					
90%	71°	79°	88°	102°	122°						
100%	72°	80°	91°	108°							

90°-105° Heat cramps or heat exhaustion possible

105°-130° Heat cramps or heat exhaustion likely; heatstroke possible

130° and up Heatstroke highly likely

SOURCE: NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

*Combined index of heat and humidity...what it "feels like" to the body

Note: This Heat Index chart is designed to provide general guidelines for assessing the potential severity of heat stress. Individual reactions to heat will vary. It should be remembered that heat illness can occur at lower temperatures than indicated on the chart. In addition, studies indicate that susceptibility to heat disorders tends to increase with age.