

Safety Alert

HEAT STRESS – KNOW THE FACTS

Please use the following information as a guide for working in the heat, proper hydration and the signs, symptoms and facts of heat stress and heat illness. Please keep in mind that you are the most important asset that we have as a company and if you feel that heat is impacting the work that you are performing, please stop your job, take a break in a cool area and properly hydrate yourself.

Q: How many workers in United States are affected by heat stress every year?

A: 10 million or about 7% of the US workforce

Q: Other than the health effects of the individual, what other problems does heat stress cause?

A: Decrease in productivity,

A: Decrease in alertness,

A: Decrease in morale,

A: Increase in proneness to accidents

Q: What is the prime cause of heat stress?

A: Dehydration

HEAT EXHAUSTION

Symptoms

1. Heavy sweating
2. Intense thirst from dehydration
3. Fatigue, weakness or loss of coordination
4. Tingling in hands and feet or headache



First Aid Treatment

1. Loosen or remove clothing and boots
2. Cool the victim as fast as possible



HEAT STROKE

Early Symptoms

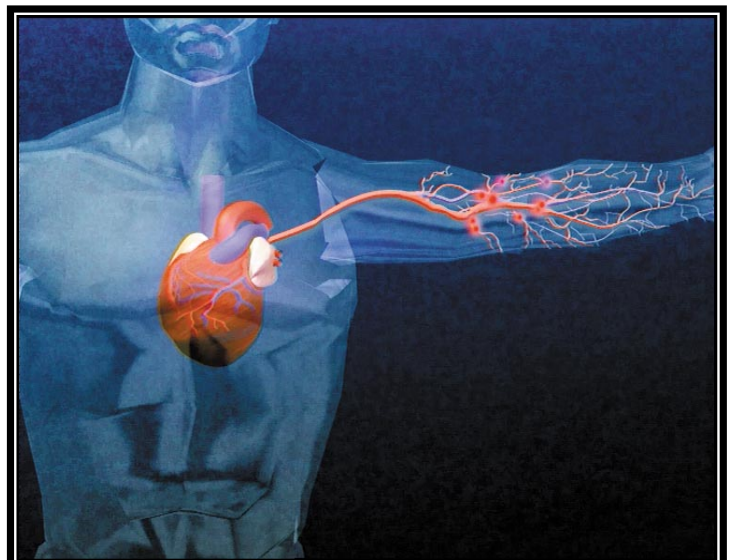
1. High body temperature
2. Hot, red or flushed, dry skin
3. Headache or dizziness
4. Confusion or delirium

Advanced Symptoms

1. Seizure or convulsions
2. Loss of consciousness
3. No detectable pulse

Treatment

1. Lower the victim's body temperature as fast as possible
2. Don't give liquids to unconscious victims



Other tips for controlling heat stress

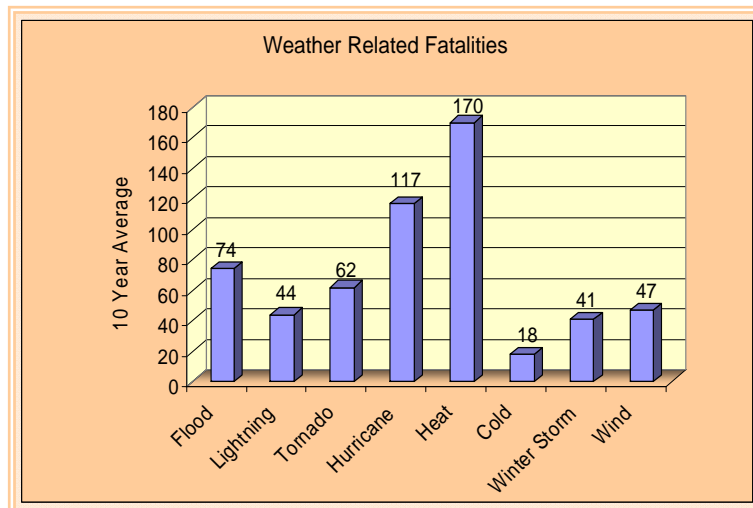
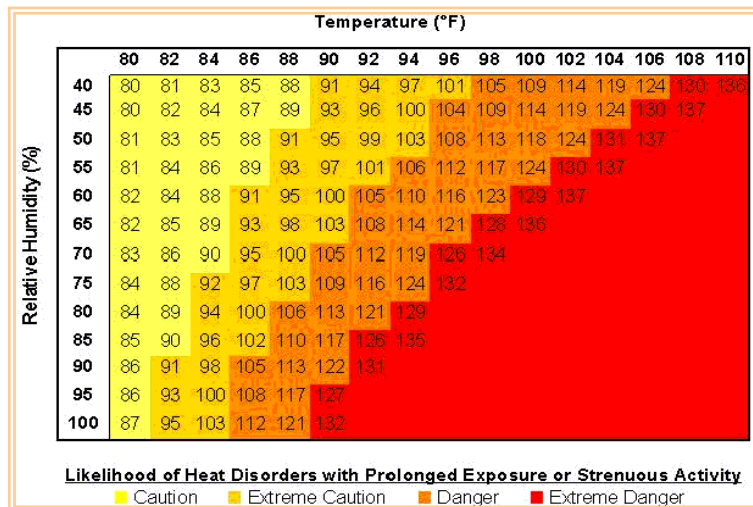
Individuals:

- Allow your body to become acclimated to your surroundings
- Follow scheduled work/rest cycles to avoid overexertion
- Drink before you're thirsty
- Drink 6-8 ounces of cool water every 15 minutes
- 1 hour of strenuous activity requires 1 liter of fluid replacement
- Avoid alcohol, coffee, tea or soda
- Consume a light, cool lunch instead of hot, heavy meals

Leadership:

- Ensure everyone is trained on the symptoms of heat stress
- Give consideration to inclusion of heat stress as a hazard when developing JSAs and ensure mitigation steps are followed

Heat Index



AM I HYDRATED?

Facts Related to Dehydration

- Our body is 60% water.
- Our brain is 85% water and has a narrow tolerance of dehydration to stay at it's peak.
- We lose about 8-10 cups (64-80 oz) of water per day (WITHOUT exercise) through breathing, perspiration and normal bodily functions.
- 75% of people are dehydrated.
- As little as 2% loss in water content begins to cause the brain to lose alertness and the body to feel fatigue. In 37% of us, the thirst mechanism is so weak it is often mistaken for hunger.
- **The number one trigger of day time fatigue and poor performance is not lack of sleep or stress but dehydration.**

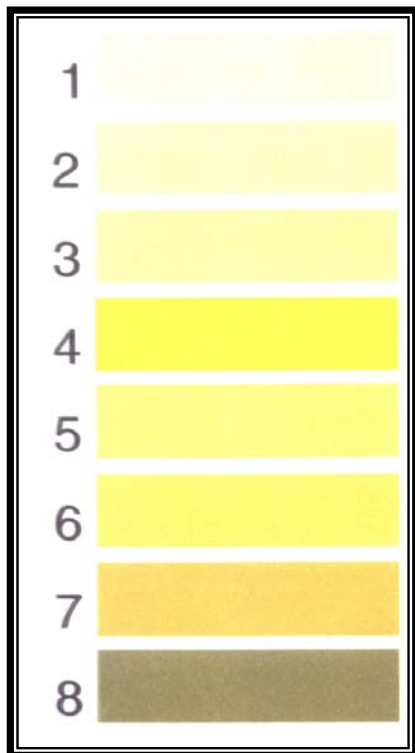
Formula

$$\left[\frac{\text{Body Weight}}{2} \right] + 12 = \text{Daily Requirement (ounces)}$$

Example

150 lb person = $(150/2)+12 = 75+12 = 87$ oz.

THE URINE COLOR CHART



This urine color chart is a simple tool you can use to assess if you are drinking enough fluids throughout day to stay hydrated.

If your urine matches the colors numbered 1, 2, or 3 you are hydrated.

If your urine matches the colors numbered 4 through 8 you are dehydrated and need to drink for more fluid.

Be Aware! If you are taking single vitamin supplements or a multivitamin supplement, some of the vitamins in the supplements can change the color of your urine for a few hours, making it bright yellow or discolored.

Electrolyte Supplements

Electrolyte supplements in addition to water will be provided to employees when deemed necessary by Dynamic Industries Inc.'s Facility Management and Safety, Health and Environmental Department during extreme heat conditions.

During extreme heat conditions, employees will be provided two (2) individual packets of Sqwincher® or equivalent electrolyte replacement supplements to be consumed at morning and afternoon break. This will be distributed to each employee by their respective foremen each morning at the SH&E Meeting. When utilizing electrolyte supplements, ensure water is still consumed in adequate quantities.

"Everyone Arrives Home Safely"

