

Learning Activity

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Warning: Extreme Heat is Coming!

Wow! What a scorcher! You knew it was going to be a hot day, but with the humidity it must be 120 degrees. As you reach for your drill to finish up on the machine you're working on, you start to feel a little lightheaded and you have a sharp muscle cramp in your arm. You think, "It must be because I didn't have breakfast and I'm tired. Lunch is only an hour and a half a way. I can make it."

Eleven thirty rolls around and you don't feel any better. In fact, you feel worse. You're breathing heavily and sweating a lot. Plus your mouth is really dry and you're feeling kind of weak. You only have a half hour until lunch, so you decide to stick it out.

Noon is finally here! You stopped sweating but you feel horrible. You figure things will get better once you're in the shade, so you begin to climb down from the machine. But as you start to move, you find you're really weak. Then you feel like you're going to get sick. The two steps down from the machine looks like it's two stories down. You can faintly hear your co-worker calling to you, but you can't turn your head to look at him. All of a sudden everything turns to black.

When you come to, you find you're lying on the ground and your manager is on the phone with 911. What just happened?

Heat Stress Disorders

Heat Stress Disorders include Heat Cramps, Heat Exhaustion, and Heat or Sun Stroke. All of these conditions are caused by not taking in enough fluids, sodium and electrolytes to replace those lost through sweating.

Heat Cramps are painful muscle spasms which occur when you drink large quantities of water, but consume too little salt or electrolytes (like those in sports drinks). The arm cramp in our scenario was a heat cramp, the first symptom of a Heat Stress Disorder.

Heat Exhaustion is the second phase of a Heat Stress Disorder. Symptoms usually include:

- Moist, clammy, or pale skin
- Lots of sweating
- Extreme weakness or fatigue
- Dry mouth
- Dizziness
- A racing pulse with rapid breathing
- Muscle cramps
- Nausea

If you experience any of these symptoms, get out of the sun and into a cool, air conditioned room. Slowly drink a sports drink or water to begin re-hydrating yourself. Consider going to see a doctor.

Heat or Sun Stroke is the last phase of a Heat Stress Disorder. Symptoms usually include:

- A very high body temperature (104° F or higher)
- Lack of sweating

- Mental confusion or hallucinations
- Deep breathing and a rapid pulse
- Hot, dry, red or mottled skin
- Dilated pupils

If you experience any of these symptoms, seek medical help immediately!

Tips for Prevention

Now you know the symptoms. What's the best way to prevent a Heat Stress Disorder from happening to you?

First, slowly get your body used to the heat through short periods of exposure. It may take 5-7 days of hot weather exposure before your body can handle being in the heat for an extended amount of time.

Second, drink lots of water and fluids! Replenish all liquids lost through sweating. Drink water as well as sport drinks to rehydrate and replenish electrolytes such as sodium, potassium and calcium.

Third, know the signs and symptoms of Heat Stress Disorder. And don't ignore them. Act quickly if you experience any symptoms.

Fourth, seek medical help if needed. Don't take your life into your own hands when dealing with heat or sun stroke.

Heat Stress Disorders are serious conditions that can cause death or serious injuries to your body's key internal organs. Keeping cool, drinking plenty of liquids and knowing the symptoms will help keep you safe in the heat this summer.

Revision History

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001	June 27, 2008	Initial Release.	Rene Casas/Libby Craver