

Don't Sweat the Sun

by Debbie Feldman

You're working on a roofing job. It's noon and it's 90 degrees outside. Your head hurts, you feel weak, very thirsty, and sick to your stomach. What's going on? Chances are you have heat exhaustion. You need to get out of the sun, drink water, and rest immediately. If untreated, heat exhaustion can lead to a life-threatening condition called heat stroke.

Heat exhaustion is one of several common heat stress disorders. Heat stress also includes heat rash (prickly heat), sunburn, heat cramps and heat stroke. Certain types of workers — farmers, construction workers, road crew workers, ranchers — are especially susceptible to heat-and sun-related illnesses. But anyone who works outdoors has a greater chance of getting heat stress. People with cardiovascular disease or diabetes, who are not physically fit, have excess weight, are over the age of 50, or take certain medications (antihistamines, diuretics) have an even greater risk.

Hot bodies

Your body normally maintains a constant temperature (98.6° F) by balancing how much heat it produces with how much it loses. Your body cools itself by sweating, or evaporating fluid from your skin. But when it's very hot outside, it may not lose heat fast enough to maintain this temperature. The system breaks down and your body gains more heat than it loses. The result is heat stress. "It's the combination of heat and humidity that is dangerous," says Thomas Meloy, MD, a consultant in the Department of Emergency Medicine at the Mayo Clinic in Rochester, Minn. "As the humidity goes up, so does heat stress. When the humidity goes up, sweating becomes less



efficient in getting rid of heat."

Warning signs

Heat stress takes many forms, each with a variety of symptoms. Recognizing the signs of heat stress can help you identify what illness you may be experiencing:

- ◆ Heat Rash — small red raised blisters, skin feels itchy or prickly.
- ◆ Heat Cramps — muscle pain or muscle spasms, most common in the arms, legs, back and stomach.
- ◆ Heat Exhaustion — pale, flushed face and neck; clammy skin; heavy sweating; fatigue; shortness of breath; headache, dizziness or fainting; nausea and vomiting; rapid heart-beat and breathing.
- ◆ Heat Stroke — hot dry skin; no sweating; erratic behavior; reduced mental alertness; weakness; dilated pupils; loss of consciousness. Heat stroke is a medical emergency. If untreated, it can lead to coma and death.

Turn down the heat

To protect yourself from heat stress, it's extremely important to replenish your body fluids. Drink a quart of water (32 oz.) every hour. Be sure to drink plenty of fluids before, during, and after you work in the heat, even if you aren't thirsty. "If you wait until you're thirsty, you're probably dehydrated," says Meloy.

Electrolyte sports drinks are the best fluids to drink during the hottest summer months. These beverages replenish your body with carbohydrates and electrolytes, like sodium and

potassium. You can make your own sports drink by mixing 8 ounces of water, one teaspoon lemon juice, 1/4 teaspoon salt, and 4 teaspoons sugar.

In addition to drinking fluids, there are some other ways of combatting heat-stress related illnesses. You should:

- ◆ Wear loose, light-colored clothing that wicks moisture away from your skin.
- ◆ Wear a wide-brimmed hat.
- ◆ Take frequent rest breaks in a cool, shady area.
- ◆ Work in the coolest parts of the day (early mornings or evenings) when possible.
- ◆ Wear air-cooled suits or ice vests in extremely hot situations.

If you're not used to working in heat, you need to acclimatize yourself to it. The more you work in heat, the more your body gets used to it. It takes about four to seven days of regular exposure to heat to become acclimated. New workers should gradually expose themselves to hot conditions during their first week on the job.

Heat treatment

If you feel stressed from the heat, tell your supervisor right away. Should you develop heat stress, treat it as follows:

- ◆ Heat Cramps — Stop work, drink fluids, rest in a cool area. Drink electrolyte fluids.
- ◆ Heat Exhaustion — Move the person to a cool place to rest. Remove as much clothing as possible. Sponge them with cool water and fan them; give cool water or an electrolyte drink if they are conscious and not nauseated; seek medical attention.
- ◆ Heat Stroke — This is a medical emergency. Take the victim to an emergency room immediately. Place ice packs on the person's neck, armpits, and groin; sponge



them with cool water and fan them, or immerse them in cool water or ice. Cover them with a wet sheet if possible.

Too long in the sun

According to the University of Arizona Cancer Center, one out of six Americans will develop skin cancer in his or her lifetime, and about 1 million new cases of skin cancer are diagnosed in the United States each year. Those with fair or red hair, freckles, blue eyes, or who burn easily are at greater risk. Avoid working during the sun's brightest times of the day — between 10:00 a.m. and 3:00 p.m. Wear clothing with long sleeves, neck flaps, and hats with large brims.

The American Academy of Dermatology recommends applying a sunscreen liberally and frequently (every two hours) while working outdoors. Use a sunscreen with a sun protection factor (SPF) of at least 15. Be sure to tell your doctor that you have an outdoor job, and check your skin regularly for any change in moles, freckles or skin discoloration. Skin damage from sun exposure accumulates over a lifetime. For more information, see the American Academy of Dermatology's Website at www.aad.org/pamphlets/index.html. ◆