Heat Stress

Heat stroke is the most serious heat-related health problem. It occurs when the body's temperature regulatory system fails and sweating becomes inadequate. A heat stroke victim's skin is hot, usually dry, red or spotted. Body temperature is usually 105 degrees F or higher, and the victim is mentally confused, delirious, perhaps in convulsions, or unconscious. Unless the victim receives quick and appropriate treatment, death can occur. Any person with signs or symptoms of heat stroke requires immediate hospitalization.

Heat exhaustion is caused by the loss of large amounts of body fluid by sweating, sometimes with excessive loss of salt. A person suffering from heat exhaustion still sweats but experiences extreme weakness or fatigue, giddiness, nausea, or headache. In more serious cases, the victim may vomit or lose consciousness. The skin is clammy and moist, the complexion is pale or flushed, and the body temperature is normal or only slightly elevated.

Heat cramps are painful spasms of the muscles that occur among those who sweat profusely in heat, drink large quantities of water, but do not adequately replace the body's salt loss. Drinking large quantities of water tends to dilute the body's fluids, while the body continues to lose salt.

Fainting may occur to a person not accustomed to hot environments and who stands erect and immobile in the heat. With enlarged blood vessels in the skin and in the lower part of the body due to the body's attempts to control internal temperature, blood may pool there rather than return to the heart to be pumped to the brain. Moving around prevents blood from pooling and prevents fainting.

Transient heat fatigue is a temporary state of discomfort and mental or psychological strain caused by prolonged heat exposure. Symptoms include a decline in task performance, coordination, alertness, and vigilance.

Smart Safety Rules

Don’t wear dark, tight-fitting clothes
Don’t eat heavy meals before working in the heat
Cover as much of your body as possible
Keep drinking water close by
Don't drink alcohol or drinks with caffeine
Know and react to symptoms of heat-related health problems

Drinking Water

During a day's work in the heat, a person may produce as much as 2 to 3 gallons of sweat. It is important that water intake during the workday be about equal to the amount of sweat produced. Don't depend on thirst to signal when and how much to drink. Instead, drink 5 to 7 ounces of fluids every 15 to 20 minutes to replenish the necessary fluids in the body.