

Recognize symptoms, prevent heat injury

Sam Reynolds, U.S. Army Combat Readiness/Safety Center

Recognize symptoms, prevent heat injury

The weather forecasters are predicting another hot summer. We already know that July, August and September are the hottest months of the year, so it's best that everyone prepare for the summer's heat.

Each year, heat illness and injury pose a significant threat to Army personnel, both on and off duty. Soldiers are exposed to hot environments during deployments and training events and, when off duty, they and their Families are exposed to the summer heat during outdoor activities.

Between 2004 and 2008, heat-related injuries were diagnosed at more than 300 medical facilities worldwide. However, 14 facilities treated at least 200 cases each and accounted for approximately 60 percent of all cases. Since 2005, rates of heat stroke have been fairly stable, and rates of heat exhaustion have slightly declined. In recent years, annual numbers of hospitalized cases (the most clinically severe) of both heat stroke and heat exhaustion have been stable.

Military activities in hot and humid environments are persistent, significant threats to the health and operational effectiveness of servicemembers. Of all servicemembers, the youngest and most inexperienced are at highest risk of heat related injuries. It is especially important for Soldiers to remember how to protect themselves, their battle buddies and their Families from heat-related injuries. Early recognition of heat injuries is critical to prevent progression to more serious heat injury and death, according to Col. John Campbell, U.S. Army Combat Readiness/ Safety Center command surgeon.

Minor heat illnesses such as heat cramps are the first sign of heat injury and can lead heat exhaustion which can in turn lead to a major heat injury like heat stroke. Heat cramps are painful muscle spasms that occur in the abdomen, arms or legs. They affect those who sweat profusely in the heat and drink large quantities of water, but fail to adequately replace the body's salt loss. Heat exhaustion is the most common heat injury. A person suffering from heat exhaustion still sweats but experiences extreme weakness or fatigue, nausea or headache. An individual suffering from heat exhaustion may have clammy and moist skin, pale or flushed complexion with a normal or slightly elevated body temperature. Other warning signs may include heavy sweating, unsteady walk, dizziness, giddiness, rapid pulse and shortness of breath.

Heat stroke is the most serious heat injury associated with hot environments. It occurs when the body's

temperature regulatory system fails and sweating becomes inadequate. The body's only effective means of removing excess heat is compromised with little warning to the victim that a crisis stage has been reached. A heat stroke victim's skin is hot, usually dry with no sweating, red or spotted and their body temperature is usually 104oF or higher. Other warning signs include rapid, strong pulse, mental confusion, throbbing headache, dizziness or nausea. Symptoms can quickly progress to loss of consciousness, coma or seizure. Heat stroke is a medical emergency and can lead to death.

"Leaders and Soldiers must do more than just have water available," said Campbell. "Heat injury prevention is a command and leadership as well as a personal responsibility. Learn to recognize the signs and symptoms of heat injuries and what you can do to protect yourself and your Family."

Additional information and valuable heat injury prevention resources such as posters, videos, and pocket guides are available on the U.S. Army Combat Readiness/Safety Center's Web site at <https://safety.army.mil> or through the U.S. Army Center for Health Promotion and Preventive Medicine Web site at <http://chppm-www.apgea.army.mil/heat/>