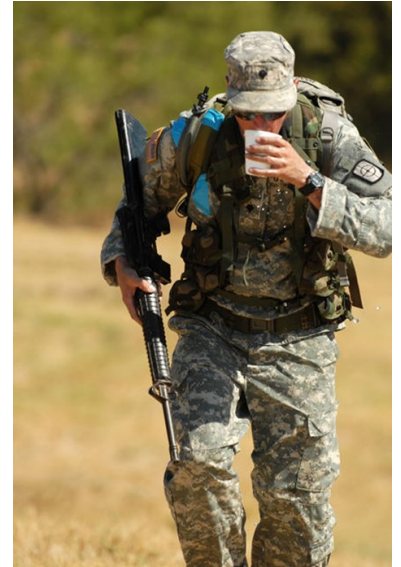


## Heat Illness

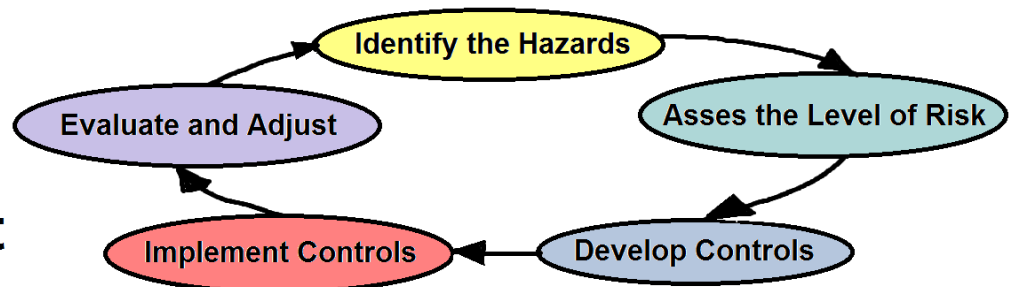
By Shannon Smith

The United States Army has conducted a great deal of research and investigation on how heat illness affects soldiers and methods to prevent it. They used this data to develop a standardized risk management matrix to determine the risk of heat illness based on several known factors. Risk is assessed prior to training and operations and Extremely High Risk conditions avoided.

Unit commanders are required to conduct heat illness training for their troops and the buddy system is used for soldiers to evaluate each other's condition during these events. Despite these efforts, over 1,000 soldiers become ill enough to be removed from duty and two or three soldiers die each year from heat illness.



### 5 Steps of Risk Management



Exertional Heat Illness (EHI) refers to a wide range of symptoms (muscle cramps, heat exhaustion, heat injury and heat stroke) resulting from total body heat stress. The steps of managing risk are the same whether you are managing illness or preventing injuries:

**Key Risk Factors for Heat Illness include:** temperature and humidity of the environment, exertion, heavy loads/ gear, repeated strenuous days, lack of experience with the specific type of work and lack of acclimatization to the environment.

**Risk factors for the individual person include:** fitness level, age, minor illness, consumption of alcohol in the past 24 hrs, prior heat injury, skin rash or sunburn and sleep deprivation.

**Common medications that can interfere with body temperature regulation are:** Antihistamines (Benadryl, motion sickness medications), decongestants such as Sudafed, high blood pressure medications and antidepressants.

*Loss of only 4% of your body weight to dehydration can happen in less than 2 hours and degrade physical performance by 50%.*

### TOP Safety Card Hits (Fleetwide last month)

**Housekeeping 2**

**Communications 1**

## Heat Illness (Continued)

**Heat Exhaustion:** “Canaries in the coal mine” - identify possible heat casualties early before they progress to severe types of heat illness - catch early as they need rest/water/evaluation and possible medical care.



### Heat Illness prevention:

- Wear lightweight, light colored clothes that are loose but not so loose as to get caught in rotating machinery
- Drink plenty of water throughout the day—even if you are not thirsty.
- Avoid or limit caffeinated drinks and use sports drinks in moderation.
- Take frequent breaks in the shade and if possible, work during the cooler part of the day.

## Heat Exhaustion

### Symptoms:

- \* Dizziness
- \* Headache
- \* Nausea
- \* Weakness
- \* Clumsy, Unsteady walk
- \* Muscle cramps

### Treatment:

- \* Rest in the shade
- \* Loosen clothing, remove hardhat, PPE
- \* Have person drink 2 quarts of water over the next hour
- \* If no improvement in 30 minutes, call **ISOS Emergency Medical** for advice

## Heat Stroke- **MEDICAL EMERGENCY!!**

### Symptoms:

- \* Hot and dry skin - OR
- \* Profuse sweating
- \* Convulsions, chills
- \* Vomiting
- \* Confusion, mumbling
- \* Combative, angry
- \* Passing out

### Treatment:

- \* **COOL** person down and **CALL ISOS!!** (the faster you cool down, the less damage to organs)
- \* Remove all outer clothing
- \* Cover all but person's face with sheets or towels soaked in ice water
- \* Fan the entire body