

# **HEAT ILLNESS PREVENTION**

# What you can do?

- Ensure adequate sleep, hydration, and nutrition prior to training.
- Start hydrated and stay hydrated with regular intake of food and fluids.
- Avoid excessive hydration. Consume 1 quart/hour under most training conditions or a maximum of 1.5 quarts/hour under very strenuous conditions.
- Recognize early signs and symptoms of heat illness in yourself and fellow Soldiers.
- Rehydrate slowly and steadily after training and replenish salts and nutrients via food intake.
- Avoid supplements.

## Signs and Symptoms

Notify a leader or battle buddy immediately if you experience:

- Dizziness
- Headache
- Nausea
- Fatique
- Weakness
- Unsteady gait
- Muscle cramps
- Profuse Sweating
- Change in mental status (confusion or loss of consciousness



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#### WHAT IS HEAT-RELATED ILLNESS?

Heat-related illness, also called hyperthermia, is a condition resulting from exposure to extreme heat where the body becomes unable to properly cool, resulting in a rapid rise in body temperature. The evaporation of sweat is the normal way to remove body heat, but, when the humidity is high, sweat does not evaporate as quickly. This, in turn, prevents the body from releasing heat quickly. Prompt treatment of heat-related illnesses with aggressive fluid replacement and cooling of core body temperature is critical to reducing illness and preventing death.

### SUNBURN:

#### Signs of sunburn:

When you get a sunburn, your skin turns red and hurts. If the burn is severe, you can develop swelling and sunburn blisters. You may even feel like you have the flu feverish, with chills, nausea, headache, and weakness. A few days later, your skin will start peeling and itching as your body tries to rid itself of sun-damaged cells.

Sunburn treatment is designed to attack the burn on two fronts -- relieving reddened, inflamed skin while easing pain. Here are a few home remedies for sunburn:

- Compresses. Apply cold compresses to your skin or take a cool bath to soothe the burn
- · Creams or gels. To take the sting out of your sunburn, gently rub on a cream or gel containing ingredients such as: Menthol,

Camphor, Aloe. Refrigerating the cream first will make it feel even better on your sunburned skin.

- NSAIDs. Nonsteroidal antiinflammatory drugs, like ibuprofen or naproxen, can relieve sunburn swelling and pain all over your body.
- · Stay hydrated. Drink plenty of water and other fluids so that you don't become dehydrated.
- Avoid the sun. Until your sunburn heals, stay out of the sun.

#### **HEAT CRAMPS:**

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#### What to look for:

· Heavy sweating during intense exercise;

· Muscle pain or spasms;

#### What to do:

- · Stop physical activity and move to a cool place;
- · Drink water or a sports drink;
- · Wait for cramps to go away before you do any more physical activity.

#### Get medical help right away if:

- · Cramps last longer than one hour;
- · You're on a low-sodium diet;
- · You have heart problems.

#### WHAT YOU CAN DO:

- · During heat waves, frequently check on people at risk for heat-related death, such as the elderly and disabled or homebound people.
- · Never leave children alone in cars, and ensure that children cannot lock themselves in an enclosed space, such as a car trunk.
- · Limit sun exposure during midday hours and in places of potential severe exposure, such as beaches
- · Drink plenty of nonalcoholic fluids, and replace the body's salts and minerals, which sweating can release. Do not take salt tablets unless under medical supervision.
- · Dress infants and children in cool, loose clothing and shade their heads and faces from the sun with hats or an umbrella.
- · Provide plenty of fresh water for pets, and leave the water in a shady area.

#### **HEAT EXHAUSTION:**

Exposure to excessive heat can directly or indirectly cause some illnesses and can exacerbate many preexisting conditions, such as heart and respiratory disease. Of the heat-related illnesses, heat exhaustion and heat stroke are the most serious. Can occur due to loss of water and salt through sweat. The symptoms of heat exhaustion

- · Muscle cramping;
- · Fatigue;
- · Headache;
- · Nausea or vomiting;
- · Dizziness or fainting.

- Stop and rest.
- Hvdrate and get into a cool room or shade.
- Loosen clothing and apply cool wet towels or pour cool water over the head.

Prevention: Same as heat cramp prevention.

#### **HEAT STROKE:**

If untreated, heat exhaustion may progress to heat stroke. Heat stroke is a serious, lifethreatening condition characterized by the following symptoms:

- A body temperature greater than 103°F (39.4°C);
- Red, hot, and dry skin (no sweating);
- · Rapid, strong pulse;
- · Throbbing headache;
- · Dizziness;
- · Nausea:
- · Confusion:
- Unconsciousness.

Very high body temperatures can damage the brain or other vital organs. In severe cases, the problem can progress to multiple organ system failure and death. A serious condition when the body's cooling system stops working and core temperature rises to dangerous levels.

#### Treatment:

- · Reduce body temperature by cooling the body.
- Rémove unnecessary clothing.
- Apply water, cool air, wet sheets, or ice on the neck, groin, and armpits to accelerate cooling.
- Seek professional medical attention immediately!

#### Prevention:

· Same procedure concerning heat cramps or heat exhaustion.

#### RESOURCES

- · CDC: http://www.cdc.gov/extremeheat/
- EPA: http://www.epa.gov/naturaldisasters/ extremeheat.html
- · READY GOV: https://www.ready.gov/heat
- NOAA: http://www.nws.noaa.gov/
- American Red Cross: http://www.redcross.org/ prepare/disaster/heat-wave
- · https://www.webmd.com/skin-problems-andtreatments/guide/sunburn#1



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