

# NIOSH Fast Facts

## Protecting Yourself from

# Heat Stress

Heat stress, from exertion or hot environments, places workers at risk for illnesses such as heat stroke, heat exhaustion, or heat cramps.

### **Heat Stroke**

A condition that occurs when the body becomes unable to control its temperature, and can cause death or permanent disability.

#### **Symptoms**

- High body temperature
- Confusion
- Loss of coordination
- Hot, dry skin or profuse sweating
- Throbbing headache
- Seizures, coma

#### **First Aid**

- Request immediate medical assistance.
- Move the worker to a cool, shaded area.
- Remove excess clothing and apply cool water to their body.

### **Heat Exhaustion**

The body's response to an excessive loss of water and salt, usually through sweating.

#### **Symptoms**

- Rapid heart beat
- Heavy sweating
- Extreme weakness or fatigue
- Dizziness
- Nausea, vomiting
- Irritability
- Fast, shallow breathing
- Slightly elevated body temperature

#### **First Aid**

- Rest in a cool area.
- Drink plenty of water or other cool beverages.
- Take a cool shower, bath, or sponge bath.

### **Heat Cramps**

Affect workers who sweat a lot during strenuous activity. Sweating depletes the body's salt and moisture levels.

#### **Symptoms**

- Muscle cramps, pain, or spasms in the abdomen, arms or legs

#### **First Aid**

- Stop all activity, and sit in a cool place.
- Drink clear juice or a sports beverage, or drink water with food.
  - Avoid salt tablets.
- Do not return to strenuous work for a few hours after the cramps subside.
- Seek medical attention if you have the following: heart problems, are on a low-sodium diet, or if the cramps do not subside within one hour.

### **Protect Yourself**

Avoid heavy exertion, extreme heat, sun exposure, and high humidity when possible. When these cannot be avoided, take the following preventative steps:

- Monitor your physical condition and that of your coworkers for signs or symptoms of heat illnesses.
- Wear light-colored, loose-fitting, breathable clothing such as cotton.
  - Avoid non-breathable synthetic clothing.
- Gradually build up to heavy work.
- Schedule heavy work during the coolest parts of day.
- Take more breaks when doing heavier work, and in high heat and humidity.
  - Take breaks in the shade or a cool area.
- Drink water frequently. Drink enough water that you never become thirsty.
- Be aware that protective clothing or personal protective equipment may increase the risk of heat-related illnesses.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health

[www.cdc.gov/niosh/topics/outdoor/](http://www.cdc.gov/niosh/topics/outdoor/)

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