

# PREVENT HEAT RELATED ILLNESSES

Wayne State University (WSU) employees and students performing activities in hot environments may be at risk of developing heat illnesses. Hot environments exist both indoors and outdoors. If one is unable to maintain his or her normal body temperature, a heat related illness can occur. If heat illnesses are not timely treated they can progress to more serious medical conditions and cause permanent disability or death. Preventing heat illness is much easier than treating: drink water and cool down.

## Safety Tips for Activities in Hot Environments

- ✚ Know signs & symptoms of heat illnesses and how to manage the effects
- ✚ Drink lots of water: at least a cup every 15-20 minutes while working in hot environments
- ✚ Take frequent rest periods in cool areas away from heat source and direct sunlight
- ✚ Be aware of personal health conditions that can increase risk of illness due to heat exposure
- ✚ Be aware of interaction between medications and heat exposure
- ✚ Avoid drinking alcoholic and caffeinated beverages in place of water
- ✚ Wear loose breathable clothing; protect exposed skin from sources of radiant heat, e.g., sunlight
- ✚ Report hot machinery malfunctions or other heat hazards to managers
- ✚ Watch for signs of heat illness in self and co-worker
- ✚ Know how to seek medical attention and arrange emergency transportation

## Examples: Jobs That Can Result in Heat Illnesses

- ✚ Working on outside facilities and grounds
- ✚ Working on roofs, in boiler rooms, or warm rooms with poor ventilation
- ✚ Working near hot machines and equipment or in rooms that retain heat or humidity

## Factors That Contribute to Heat Illness Risk

- ✚ High temperature and humidity
- ✚ Direct sun exposure
- ✚ Limited air movement: no breeze or ventilation
- ✚ Physical exertion with inadequate rest periods
- ✚ Heavy or constricting protective clothing and equipment
- ✚ Personal illnesses, diets, and medications
- ✚ Inadequate water intake
- ✚ Drinking caffeinated or alcoholic beverages

## How to Seek Medical Attention

- **Emergencies:** Call WSU Police (313 577 2222), report to Henry Ford Hospital-ER at 2799 W. Grand Blvd. or Detroit Receiving Hospital-ER at 4201 St. Antoine
- **Non-emergencies during business hours:** M-F 8 AM to 4 PM: Henry Ford Harbortown Occupational Health, SUITE 100, 3300 E. Jefferson, 313-656-1618 (walk-in clinic)
- **Non-emergencies after hours:** Henry Ford Hospital-ER or Detroit Receiving-ER
- After seeking medical attention, complete and submit a Report of Injury form to: Enterprise Risk Management & Insurance Programs, 313-577-3112, risk.wayne.edu

## More Information on Heat Illness Prevention:

[OSHA Quick Card: Heat Stress](#)

[NOAA: Heat Wave - A Major Summer Killer](#)

[OSHA Fact Sheet: Protecting Workers from Effects of Heat](#)

## ILLNESSES RELATED TO HEAT STRESS



**Heat Stroke:** The most serious heat illness. Heat stroke occurs when the body's temperature regulating system fails. The body temperature rises to critical levels up to 104°F or higher. This is a **medical emergency** that can result in permanent disability or death!

### Heat Stroke: Signs & Symptoms

- ✚ Irrational behavior
- ✚ Slurred speech
- ✚ Hot skin or chills
- ✚ Headache
- ✚ Convulsions or loss of consciousness

### Promptly Do This for Heat Stroke

- ✚ Call WSU Public Safety 313-577-2222 for transportation to Emergency Room
- ✚ Take them to cool area
- ✚ Lie them down and elevate their feet
- ✚ Remove unnecessary clothing
- ✚ Wet them down with water: spray, or sponge
- ✚ Fan their body
- ✚ If unconscious do not attempt to give fluids

**Heat Exhaustion:** A serious medical condition if not treated immediately can progress rapidly to heat stroke. This is also a **medical emergency** that can result in permanent disability or death!

### Heat Exhaustion: Signs & Symptoms

- ✚ Profuse sweating
- ✚ Nausea
- ✚ Weakness
- ✚ Confusion
- ✚ Headache
- ✚ Dizziness or fainting

### Promptly Do This for Heat Exhaustion

- ✚ Encourage them to sit or lay down in cool area
- ✚ Elevate their feet
- ✚ If conscious give sips of water
- ✚ Call WSU Public Safety, 313-577-2222 for transportation to Emergency Room
- ✚ Remove unnecessary clothing
- ✚ Wet them down with water: spray or sponge

**Heat Cramps:** Muscle contractions caused by loss of fluids and minerals while sweating

### Heat Cramps: Signs & Symptoms

- ✚ Pain in muscles in the legs, arms, or abdomen.

### Promptly Do This for Heat Cramps

- ✚ Rest in cool area
- ✚ Drink water
- ✚ Apply pressure to cramping muscles
- ✚ Seek medical attention after cramps subside
- ✚ If cramps progress to **unconsciousness** call WSU Public Safety 313-577-2222 for transportation to Emergency Room
- ✚ Remove unnecessary clothing, elevate their feet
- ✚ Wet them down with water: spray or sponge

**Heat Rash:** Irritated skin caused by unevaporated sweat on the skin due to high humidity and heat.

### Heat Rash: Signs & Symptoms

- ✚ Itchy clusters of red pimples or small blisters

### Promptly Do This for Heat Rash

- ✚ Leave hot humid area
- ✚ Rest and drink water
- ✚ Dry the affected areas with clean cloth
- ✚ Seek medical care if the rash persists, worsens or becomes infected