# Heat Related Illness (HRI)

 HRI is a physiologic response which occurs when the body cannot adequately dissipate heat.

• This leads to dysfunctional thermoregulation that can present as a variety of syndromes ranging from heat rash to heat exhaustion, and life-threatening heat stroke.







### **HRI Risk Factors**





### **Heat Rash**

### Symptoms of heat rash include:

- Red clusters of pimples or small blisters
- Usually appears on the neck, upper chest, groin, under the breasts, and in elbow creases

### Workers experiencing heat rash should:

- Work in a cooler, less humid environment, if possible.
- Keep the rash area dry.
- Apply powder to increase comfort.
- Don't use ointments and creams.







## **Heat Cramps**

### Symptoms:

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

# Workers experiencing heat cramps should:

- Drink
- Avoid salt
- Get medical help\*









# **Heat Syncope**

### Symptoms of heat syncope include:

- Fainting (short duration)
- Dizziness
- Light-headedness

### Workers with heat syncope should:

- Sit or lie down
- Slowly drink water







### **Heat Exhaustion**

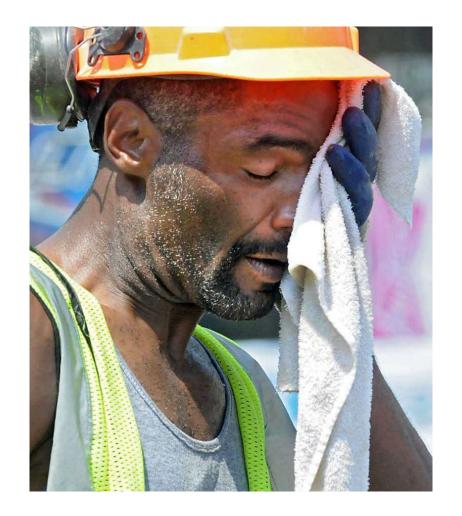
### Symptoms of heat exhaustion include:

- Headache
- Nausea
- Dizziness
- Weakness

- Thirst
- Heavy sweating
- Elevated body temperature
- Decreased urine output

### Treat heat exhaustion by:

- Seeking emergency medical treatment.
- Staying with the worker until help arrives.
- Removing unnecessary clothing
- Cooling
- Encouraging sips of water.







### **Heat Stroke**

### Symptoms of heat stroke include:

- Altered mental status
- Loss of consciousness (coma)
- Hot, dry skin or profuse sweating
- Seizures
- *Fatal* if treatment delayed







## Heat stroke is a medical emergency!

#### **Call 911 and:**

- Stay with them
- Move them
- Cool them quickly:
  - With a cold water or ice bath
  - Soak clothing with cool water
  - Circulate air
  - Place cold wet cloths or ice



#### **KNOW THE SIGNS AND CALL FOR HELP**

- Headache, nausea or vomiting
- Heavy sweating
- Agitation or confusion
- Rapid, shallow breathing
- Rapid or irregular pulse
- Possible shock or cardiac arrest
- Dizziness, weakness, fatigue, cramps, fainting or seizure
- Hot, dry skin with no sweating or cold, clammy skin



