Preventing Heat Illnesses
(Heat Exhaustion, Heat Stroke, and other Related Heat Problems)
Preventing Heat Illness –
Our Goal

☼ Recognizing the Risk Factors
☼ Knowing Heat Illnesses Signs and Symptoms
☼ How to Prevent Heat Illness
☼ What to do if a Heat Illness Occurs?
Environmental Risk Factors for Heat Illness

☀ Air Temperature and Humidity
☀ Radiant Heat from the Sun
☀ Air Current
☀ Clothing and Equipment
☀ Workload Severity and Duration
Personal Risk Factors for Heat Illness

☀ Your Body
- Health
- Age
- Degree of Acclimatization

☀ Liquids
- Water
- Alcohol
- Caffeine
  - Diuretic

☀ Prescription Medicine
- Body’s Water Retention
Heat Exhaustion

- Temperature normal or slightly above
- Clammy, moist skin
  - Pale or flushed
- Weakness, giddiness, nausea, headache
- Immediately:
  - Move victim to cool area
  - Provide water and rest
- If they lose consciousness or vomits
  - Seek Medical Aid
Heat Stroke

- Very high temperature – above 103°F
- Hot, dry skin and rapid pulse
- Confusion, delirium, convulsions or unconsciousness
- Medical emergency!

Immediately cool to reduce core temperature
- Loosen/remove extra clothing
- Pour or sponge water over person or immerse
- Fan vigorously
Emergency and First Aid

☀ Employees

- Report your or other co-worker’s signs and symptoms of heat illness to your supervisor.

☀ Supervisors

- Contact Security for Medical Assistance (x5000)
  - Provide Employee’s Work Location
Steps for Preventing Heat Illness
Preventing Heat Illness

- Acclimatize
- Dress for Heat Conditions
- Drink Plenty of Water
- Access to Shade
Importance of Acclimatizing

☀ Acclimatization

• Temporary Adaptation
  – Short Periods of Working in the Heat Gradually Increasing in Time and Intensity

• Peaks in Most People
  – Four to Fourteen Days of Regular Work for at Least Two Hours a Day
Dress for Heat Conditions

☀ Lightweight, loose-fitting clothing
  • Allows sweat to evaporate.

☀ Heavy clothing and equipment
  • Traps heat and sweat against the skin
    – Body Produces More Sweat to Cool Itself
Drink!

- Don’t Wait for Warning Signs of Heat Illness
- Need to Replace Fluids Lost During Sweating

Supervisors must:

- Provide Enough Water for Employees to Drink One Quart per Hour or Have a Means to Replenish During the Shift.
Access to Shade

☀ Strenuous Work
   • Schedule During Cooler Part of the Day
   • Try and Do in Shaded Areas

☀ Access to Shade
   • Supervisors Must Assure that Employees Have Access to Shade
     – Especially Break Times

☀ Optional Cooling methods include:
   • Ventilation, Fans
   • Vehicle Air Conditioning, if Applicable
   • Tent Shading
Supervisor Responsibilities

☀ Prevent Heat Illness

• Ensure Employees Receive Heat Illness Training
• Provide Adequate Water Supplies
• Provide Access to Shade
• Be Alert to any Employee Symptoms of Heat Illness
Employee Responsibilities

☀ Follow Heat Illness Precautions

- Drink Water – Keep Hydrated
  – One Quart per Hour
- Recognize Symptoms of Heat Illness
- Immediately Report any Symptoms of Heat Illness in Yourself or Co-Workers.
Review Questions

☀ What are the Risk Factors to Heat Illness?
  • Environmental factors such as temperature and humidity and personal factors such as health and water use

☀ How can you recognize Heat Stroke?
  • Confusion, delirium, convulsions, hot, dry skin

☀ How much water do you need to prevent heat illness?
  • At least one quart per hour per employee or two gallons per shift per employee