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
**Water**

☼ 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