CEMEX

Fit4Life

ARE YOU READY FOR THE SUMMER?

HOW IS THE HEAT STRESS OCCURS ?

Heat stress occurs when the body's means of controlling its internal temperature starts to fail. Air temperature, work rate, humidity and work clothing are all factors which can cause heat stress. It may not be obvious to someone passing through the workplace that there is a risk of heat stress.

The body reacts to heat by increasing the blood flow to the skin's surface and by sweating. This cools the body as heat is carried to the surface from within by the increased blood flow and sweat evaporates. Heat can also be lost by radiation and convection from the body's surface.

TYPES OF HEAT-RELATED ILLNESS

HEAT ILLNESS – HEAT RASH

Signs and symptoms:

- Clusters of red bumps on skin
- Often appears on neck, upper chest, folds of skin
- Common problem in hot work environments

What to do:

- Try to work in a cooler, less humid environment when possible
- Keep the affected area dry

HEAT ILLNESS – HEAT CRAMPS

Signs and symptoms:

- Muscle spasms
- Pain
- Usually in abdomen, arms, or legs
- Can be a first sign of worsening heat-related illness

What to do:

- Have worker rest in shady, cool area
- Drink water or other cool beverages
- Wait a few hours before allowing returning to strenuous work
- Seek medical attention if cramps don't go away

HEAT ILLNESS –
HEAT EXHAUSTION

Signs and symptoms:

- Heavy sweating
- Weakness
- Cold, pale, and clammy skin
- Fast, weak pulse
- Nausea or vomiting
- Headache, dizziness, lightheadedness

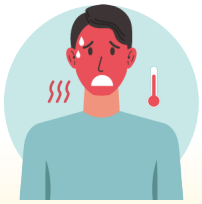
What to do:

- Move to a cooler location
- Lie down and loosen clothing
- Apply cool, wet cloths to as much of the body as possible
- Sip water
- Seek medical attention immediately for prolonged vomiting

HEAT ILLNESS – HEAT STROKE

Signs and Symptoms:

- Very high body temperature (above 103°F)



- Hot, red, dry or moist skin
- Rapid and strong pulse
- Possible fainting, confusion, or seizures

What to do:

- **Call immediately — this is a medical emergency.**
- While waiting for emergency services:
- Move the person to a cooler environment. **Do NOT give fluids.**
- Reduce the person's body temperature with cool cloths or even a bath.

WHAT DO I NEED TO DO ABOUT HEAT STRESS?

1. Water

- One quart per person, per hour (2 gallons for an 8-hr shift)
- Must be *"fresh, pure, suitably cool… free of charge"* (potable water, not ice cold)
- As close as practicable to worksite (if not plumbed or supplied at site)
- Educate workers and actively encourage them to drink small amounts of water often (up to 4 cups/hour)

WHAT DO I NEED TO DO ABOUT HEAT STRESS?

2. Shade

- Shade = blockage of direct sunlight
- *Required to be available at 80F (formerly required at 85F)*
- Must accommodate *"the number of employees" on rest or recovery break*
- Access to shade must be permitted at all times
- Must be made available upon request if <80F
- If unsafe or not feasible, define alternative procedures

3. Cool-down Rest Periods

Must be allowed and encouraged

Employees shall be monitored for symptoms and signs of heat illness (observation and inquiry is sufficient)

If symptoms or signs occur:

- First aid or emergency response is required (based on level of heat-related illness)
- Workers must not be ordered back to work, sent home, or left alone until symptoms have abated
- Observation of employees for signs and symptoms
- Mandatory 10 minutes cool-down recovery time for each two hours period of continuous work

WHAT DO I NEED TO LOOK AT IN THE RISK ASSESSMENT?

When carrying out your risk assessment, the major factors you need to consider are:

- **Work rate** – the harder someone works the more body heat they generate.
- **Working climate** – this includes air temperature, humidity, air movement and effects of working near a heat source.
- **Worker's clothing** and respiratory protective equipment – may mean that sweating and other means of the body regulating its temperature are less effective.
- **Worker's age,** build and medical factors – may affect an individual's tolerance.

HOW CAN I REDUCE THE RISK?

- **Control the temperature** using engineering solutions, e.g. change the processes, use fans or air conditioning, use physical barriers that reduce exposure to radiant heat.

- **Provide mechanical aids** where possible to reduce the work rate.

- **Prevent dehydration.** Working in a hot environment causes sweating which helps keep people cool but means losing vital water that must be replaced. Provide cool water in the workplace and encourage workers to drink it frequently in small amounts before, during (where possible) and after working.

WHAT THE MANAGMENT SHOULD DO?

1. **Adjust work schedules**. Modify work/rest schedules according to monitoring results.

2. **Rotate personnel**. Alternate job functions to minimize excessive stress or overexertion at one task. Add additional personnel to work teams. Perform work during cooler hours of the day if possible, or at night if adequate lighting can be provided.

3. **Provide shelter.** Use air conditioning, if possible, or shaded areas to protect personnel during rest periods.

4. **Maintain workers' body fluids at normal levels**. This is necessary to ensure that the cardiovascular system functions adequately. Daily fluid intake must approximately equal the amount of water lost in sweat.

HOW CAN I REDUCE THE STRESS?

1. **Know the sings and symptoms of heat stress**
   dizziness, headache, weakness, rapid heartbeat, nausea, vramps, chest pain

2. **Wear loose, bretchable clothing such as cotton.** If you must work on the sun, wear hats and use sun screen

3. **Maintain proper hydration.** Drink small amounts of water frequently. Avoid feel thirsty

4. **If it possible stay out of the sun.** Cool down whenever it is possible

SIGNS OF

HEAT EXHAUSTION

- DIZZINESS & FAINTING
- EXCESSIVE SWEATING
- RAPID, WEAK PULSE
- NAUSEA OR VOMITING
- COOL, PALE CLAMMY SKIN
- MUSCLE CRAMPS

HEAT STROKE

- THROBBING HEADACHE
- NO SWEATING
- RAPID, STRONG PULSE
- NAUSEA OR VOMITING
- RED, HOT DRY SKIN
- MAY LOSE CONSCIOUSNESS