THE HEAT EQUATION

HIGH TEMPERATURE + HIGH HUMIDITY + PHYSICAL WORK = HEAT ILLNESS

When the body is unable to cool itself through sweating, serious heat illnesses may occur. The most severe heat-induced illnesses are heat exhaustion and heat stroke. If actions are not taken to treat heat exhaustion, the illness could progress to heat stroke and possible death.

- **Danger**
- **Caution**
- Less Hazardous
HEAT EXHAUSTION

What Happens to the Body:
HEADACHES, DIZZINESS/LIGHT HEADEDNESS, WEAKNESS, MOOD CHANGES (irritable, or confused/can’t think straight), FEELING SICK TO YOUR STOMACH, VOMITING/THROWING UP, DECREASED and DARK COLORED URINE, FAINTING/PASSING OUT, and PALE CLAMMY SKIN.

What Should Be Done:
• Move the person to a cool shaded area to rest. Don’t leave the person alone. If the person is dizzy or light headed, lay them on their back and raise their legs about 6-8 inches. If the person is sick to their stomach lay them on their side.
• Loosen and remove any heavy clothing.
• Have the person drink some cool water (a small cup every 15 minutes) if they are not feeling sick to their stomach.
• Try to cool the person by fanning them. Cool the skin with a cool spray mist of water or wet cloth.
• If the person does not feel better in a few minutes call for emergency help (Ambulance or Call 911).

(If heat exhaustion is not treated, the illness may advance to heat stroke.)
**What Happens to the Body:**
DRY PALE SKIN (no sweating), HOT RED SKIN (looks like a sunburn), MOOD CHANGES (irritable, confused/not making any sense), SEIZURES/FITS, and COLLAPSE/PASSED OUT (will not respond).

**What Should Be Done:**
- Call for emergency help (Ambulance or Call 911).
- Move the person to a cool shaded area. Don’t leave the person alone. Lay them on their back and if the person is having seizures/fits remove any objects close to them so they won’t strike against them. If the person is sick to their stomach lay them on their side.
- Remove any heavy and outer clothing.
- Have the person drink some cool water (a small cup every 15 minutes) if they are alert enough to drink anything and not feeling sick to their stomach.
- Try to cool the person by fanning them. Cool the skin with a cool spray mist of water, wet cloth, or wet sheet.
- If ice is available, place ice packs under the arm pits and groin area.
How to Protect Workers

• Learn the signs and symptoms of heat-induced illnesses and what to do to help the worker.
• Train the workforce about heat-induced illnesses.
• Perform the heaviest work in the coolest part of the day.
• Slowly build up tolerance to the heat and the work activity (usually takes up to 2 weeks).
• Use the buddy system (work in pairs).
• Drink plenty of cool water (one small cup every 15-20 minutes)
• Wear light, loose-fitting, breathable (like cotton) clothing.
• Take frequent short breaks in cool shaded areas (allow your body to cool down).
• Avoid eating large meals before working in hot environments.
• Avoid caffeine and alcoholic beverages (these beverages make the body lose water and increase the risk for heat illnesses).

Workers Are at Increased Risk When

• They take certain medication (check with your doctor, nurse, or pharmacy and ask if any medicines you are taking affect you when working in hot environments).
• They have had a heat-induced illness in the past.
• They wear personal protective equipment (like respirators or suits).