

## **HEAT INDUCED ILLNESSES – FACT SHEET**

### ***THE DESERT HEAT CAN BE DEADLY!***

#### **What are HEAT INDUCED ILLNESSES?**

Heat induced illnesses occur when physical exertion (hard work or physical exercise) is performed in a hot environment and the body's natural balance is thrown off kilter. Excessive sweating dehydrates the body causing evaporation of precious electrolytes. Heat induced illnesses can occur even in mild temperatures if you're overdressed for the conditions. Multiple layers of clothing can inhibit natural heat loss through sweating.

#### **Three heat induced illnesses.**

**Heat cramps** – Large muscles (usually the legs and stomach) don't get the organic chemicals they need to function and they seize up, like a car engine starved for oil.

Symptoms – Extreme PAIN in the LEGS and STOMACH

What to do - STOP WHAT YOU ARE DOING RIGHT NOW! Get out of the hot environment, stop using your large muscles, drink water, and replace electrolytes with a sports drink, if possible.

**Heat exhaustion** – Also known as heat prostration and heat collapse, the causes are the same as those that cause cramping, but the symptoms are different.

Symptoms – DIZZINESS, WEAKNESS, MUSCLE CRAMPS, HEADACHE, NAUSEA, PALE COLD/CLAMMY SKIN, SWEATING PROFUSELY, INCREASED PULSE RATE. Body temperature will be about normal.

What to do – GET OUT OF THE HEAT, take off any excessive clothing, particularly around the head and neck. Put cold towels around the neck and on the wrists. Drink a liter of water (slowly, so nausea doesn't develop), lie down with your feet up, and use a fan for cooling. DO NOT use an alcohol rub or take beverages containing alcohol or caffeine. You should feel better within 30 minutes. If not, get medical attention.

**Heatstroke** – This is a MEDICAL EMERGENCY! CALL 911 immediately! The difference from the milder illnesses is that heat overload is so overwhelming that the body's temperature controls are totally disrupted. This is the one that kills kids locked in cars on sunny days, old folks in poorly ventilated apartments during heat waves and even healthy 30 year old guys working in a humid warehouse.

Symptoms – DIZZINESS, CONFUSION, HALLUCINATIONS OR COMA, HOT / DRY SKIN, HYPERVENTILATION, EXTREME BODY TEMPERATURE of 105 degrees or higher, ELEVATED BLOOD PRESSURE at first then a drop in blood pressure as illness progresses.

What to do – ACT RIGHT NOW! CALL FOR MEDICAL HELP! Lower the core temperature by any means available. Place cold packs on the neck, armpits, and groin, cover with wet towels or sheets and get into a highly air-conditioned room. Give cool beverages by mouth only if the person has a normal mental state and can tolerate it.

#### **Sweating is NOT cooling**

Don't think that when you're dripping in sweat, your body is automatically cooling itself. Sweat has to evaporate before you can get rid of the heat.

#### **PREVENT heat induced illnesses?**

- ✓ **Pre-hydrate.** Before activity starts, drink up to 16 ounces of fluid. Then drink 8 ounces every 20 minutes during the activity even if you're not thirsty.
- ✓ **Drink flavored water.** Plain water quenches thirst too quickly, so we have a tendency to not drink enough.
- ✓ **Wear a visor instead of a hat.** A hat restricts heat loss through the head. If working in direct sunlight, wear a visor.
- ✓ **Wear loose, thin synthetic fabrics.** They help the skin stay cool through evaporation. Avoid cotton as it soaks up sweat, slowing evaporation
- ✓ **Pace yourself.** If you begin to feel bad, stop what you're are doing and rest. Alternate between light and heavy work.
- ✓ **Watch what you eat.** Food affects the body's heat-regulating systems. Spicy foods add more body heat. Heavy meals reduce your ability to get rid of heat, since blood flow is redirected to your digestive tract and not to your skin.
- ✓ **Wear your PPE.** If your job requires you to wear personal protective equipment (PPE) for safety reasons, wear it. It can't protect you if it's not on you. If it's uncomfortable, take frequent breaks.