

Environmental, Health & Safety News

Summer Heat - Stay Cool, Stay Hydrated

(My Thanks To An ICA Toolbox Talk For Much Of The Information This Month)

July and August typically have the hottest days of the year for our area of the Country. That means soaring temperatures and the threat of dehydration for those working or playing outside.

Dehydration occurs when your body does not have enough fluids. It can be caused by losing too much fluid, not drinking enough fluids, or both. In hot weather, your body expels a lot of water through perspiration as it tries to keep from overheating. The hotter the weather the more you perspire and the more fluids you need to replace.

A widely held misconception is that everyone needs 64 ounces (eight cups) of fluid each day. While these quantities are appropriate for most people, they do not take into account a person's body size or activity level. Though no single formula fits everyone, some nutritionists contend that a more accurate way to determine your fluid requirement is to divide your body weight in half. This is how many ounces of fluid you need daily to meet your basic needs. That translates to a 150 pound person drinking at least 75 ounces (slightly over nine cups) and a 200 pound person drinking at least 100 ounces (about 12.5 cups). I have even been told by other sources that when working in hot conditions and perspiring heavily you should drink your body weight in fluid ounces. For a 200 pound person that would translate to drinking over a gallon and half of fluids daily.

Levels of dehydration can range from mild to severe based upon how much of the body's fluids are lost and not replenished. Dehydration can escalate to become a life-threatening illness in a relatively short period if not addressed by consuming enough fluids. It is very important to recognize the signs and symptoms of dehydration:

- Dry or sticky mouth
- Low or no urine output (concentrated urine appears dark yellow)
- Light-headedness or dizziness
- Dry Skin
- Fatigue
- Confusion
- Increased heart rate and breathing



To treat dehydration, you have to rehydrate the body by drinking plenty of fluids. It is also important to recognize the fact that if you are dehydrated, you have lost sugar, salts and minerals, as well as water. Sports drinks can be very helpful in replenishing these important components.

Dehydration if not corrected by consuming fluids leads directly to the life-threatening conditions of heat exhaustion and heat stroke. Heat exhaustion and then heat stroke are the natural progression of the body becoming dehydrated and then over heated.

Heat exhaustion is a result of excessive heat and dehydration. In addition to the symptoms of dehydration mentioned previously, vomiting and a moderately increased body temperature is likely to occur. The increased temperature is not a true fever but your bodies inability to cope with the heat and dehydration. Rest and fluids may help in mild heat exhaustion and ice packs and a cool environment may also help. When a cool environment is not readily available, at least move the person to a shaded area and move the air by fanning the person. More seriously heat exhausted patients may need IV fluids, especially if vomiting keeps them from taking fluids. Medical attention is in order by this time.

If someone is suffering from a heat stroke medical attention is required immediately. This is an emergency! To identify a person suffering from a heat stroke look for:

- Hot flushed skin but no perspiration
- Very high temperature (106 degrees F or higher)
- The person may be delirious, unconscious, or having a seizure

These persons need to have their temperature reduced quickly, often with ice packs. They will also have to have bodily fluids replenished with an IV. Don't delay - get medical attention immediately.

As with all on-the-job illnesses, prevention is the key. **When heat indexes soar above 100° F make fluid consumption a practice.** Don't wait until you feel thirsty to drink fluids. Avoid alcohol as it tends to dehydrate the body. Move at a little slower pace. Wear light-weight, light-colored, breathable clothing.

Words of Wisdom!

"A mind, once expanded by a new idea never returns to its original dimensions"

-- Oliver Wendell Holmes



