TOOLBOX TALK #49

HYDRATION KNOW-HOW

Although it's widely known that proper hydration is a necessary part of preventing heat-related illness on the job, keeping workers hydrated requires some knowledge and action.

NIOSH recommends drinking 1 cup – or 8 ounces – of water every 15-20 minutes while working in the heat. Consuming water regularly, instead of drinking larger quantities at random, helps regulate the body's metabolic cycles and allows it to better manage heat and heat stress. When exposed to heat, the body can sweat a lot, thus lose a lot of liquid volume. Replace that volume over small intervals throughout the day, not just when you feel thirsty. You may already be dehydrated and at greater risk of injury and illness.

Signs of dehydration include:

- Headache and fatigue
- Lightheadedness or confusion
- Flushed red skin
- Muscle cramps
- Heat intolerance or chills
- Dark-colored urine

OSHA says employers should provide cool water (less than 59º) and keep it readily available to workers. Can you drink too much water? Yes. NIOSH cautions that drinking more than 48 ounces in an hour can cause the concentration of salt in the blood to become too low and could cause the brain to swell. This condition could lead to headaches, dizziness, confusion, weakness, nausea and vomiting, seizures, coma and even death.

It's easier to stay hydrated if you show up for work already hydrated. Refrain from caffeine as it is a diuretic which causes the kidneys to produce more urine. Now, you have to keep up throughout the day. OSHA says that substantial loss of electrolytes can cause muscle cramps and other dangerous health problems. Providing electrolyte-containong sports drinks will help guard against cramping. But these drinks should complement your water intake.

Lastly, NIOSH cautions against energy drinks. These cn raise caffeine levels enough to affect your heart. And what about salt tablets to replace salt lost through sweating? NIOSH advises against it. Regular water and meal consumption will almost always maintain hydration during work in the heat.