

# Hydration – The Importance of Water Meeting Kit



## THE IMPORTANCE OF WATER (SAFETY TALK)

Water is one of the most important substances on Earth. All plants, animals, and people need water to survive. Water serves especially important purposes to our bodies and our bodily functions- some of which you may not even be aware of.

## INTERESTING FACTS REGARDING WATER'S ROLE TO OUR BODIES

- Water comprises more than 60% of our body weight.
- Lack of water is the #1 trigger for daytime fatigue.
- A 2% drop in water level of the body can spur problems with short term memory.
- Water naturally cleanses the body of toxins.
- Water regulates the body's cooling system.
- Water acts as a lubricant and cushion to our joints.

## HYDRATION IS IMPORTANT

Water makes up between 50 and 70 percent of our body weight and is crucial for maintaining the body's daily functions. Water helps regulate body temperature, lubricates joints, aids digestion, flushes the body of waste, and much more. The body is constantly losing fluids though, because of perspiration, sickness, heat stress, exercise, and even breathing.

When we lose too much fluid, the body protects itself to maintain the most important bodily functions. Kidneys start retaining water, the blood thickens, and the body slows or stops the process of sweating, which makes it hard to regulate internal temperature and can cause heat stress. Common signs of dehydration include thirst, dry mouth, fatigue, headache, yellow or orange urine, and dizziness, but it can be felt and seen in many other ways too. Muscle cramps, dry skin, confusion, sunken eyes, lack of energy, and irritability are all symptoms of dehydration.

## AVOID DEHYDRATION DANGERS AT WORK YEAR-ROUND

While dehydration is certainly more of a hot-button issue in the summertime when outdoor workers are spending hours in the heat, employers often underestimate the need to continue to hydrate teams effectively during the winter, too. In fact, dehydration should be as big of a concern in the cooler months as it is in the heat.

In the winter, outdoor workers often fend off the cold by layering on thick jackets,

warm long johns and big socks. Wearing heavy clothes may feel good at first – but soon, the body will begin to sweat. And because sweat evaporates more quickly in cold, dry air, workers may not realize how warm they are and will not remove clothing to help regulate temperature. We also tend to lose more water through respiration in the winter; every time you see your breath, that's water lost in the form of vapor.

## **HOW WORKERS RE-ACT TO HEAT**

Our bodies work to maintain a consistent internal temperature. When we are exposed to excess heat, our bodies respond by activating our sweat glands and switching blood circulation rates.

While sweating is a healthy response to high heat temperatures, it is not enough to effectively cool the body as the moisture needs to exit our skin through evaporation. Heavy protective clothing that workers wear, and high humidity are two elements that hinder sweat evaporation.

The amount of water workers can quickly lose through sweat is worth noting as two hours of standard work can lead to the beginning of heat stress. If initial heat stress signs are ignored, fatigue can set in before the third, and the final stage of heat stress occurs, resulting in a person collapsing.

Hydration is key in avoiding the uncomfortable and, at times, scary results of heat stress.

## **HYDRATION BEST PRACTICES**

- Drink before, during and after physical labor to replace body fluid lost in sweating.
- Anticipate conditions that will increase the need for water, including high temperature, humidity, protective clothing, and difficulty of work.
- Keep in mind that by the time you are thirsty, you are already about 2 percent dehydrated. Once you are dehydrated, it is difficult to make up for that lost hydration.
- Drink 5 to 7 ounces of fluids every 15 to 20 minutes to ensure proper hydration.
- Keep individual containers of cool, clean water within easy reach always. NIOSH recommends prohibiting communal drinking containers in workplace settings, and ACGIH recommends placing water close enough to workers so they can reach it without abandoning the work area.
- Drink cool water, which is absorbed more quickly by the body than warm or very cold fluids. NIOSH and ACGIH recommend drinking water of 50 to 59 degrees.
- Try carbohydrate/electrolyte drinks to help avoid heat cramps that can occur up to several hours after working.
- Avoid coffee, tea, or soda, which act as diuretics, further depleting the body of fluid. Never drink alcohol while working.
- Even sedentary workers should drink eight 8-ounce servings of water every day.
- When workers are properly hydrated, they are healthier, safer, and more productive, no matter what the weather or working conditions.

## **FINAL WORD**

Distribute reusable water bottles to your staff, and make sure there are conveniently placed cool water stations across the worksite. Make sure properly trained safety personnel are on hand to monitor workers and provide first aid if necessary.