



Weekly Safety Meeting

Your Safety Is Our Business®

Volume 2, Issue 29

July 19th, 2015

Heat Disorders - Dehydration

With summer comes hot weather, so we should all be aware of some tips to prevent heat stress. Remember physical activity at high temperatures can directly affect health and indirectly be the cause of accidents.

Hot conditions put your body under a lot of stress. Physical activity stresses the body even more. When heat is combined with physical activity, loss of fluids, fatigue, and other conditions can lead to a number of heat-related illnesses and injuries. Death is even possible.

Heat Stress

It's a signal that says the body is having difficulty maintaining its narrow temperature range. The heart pumps faster, blood is diverted from internal organs to the skin, breathing rate increases, sweating increases, all in an attempt to transfer more heat to the outside air and cool the skin by evaporation of sweat. If the body can't keep up, then the person suffers effects ranging from heat cramps to heat exhaustion and, finally, to heat stroke.

Heat stress is commonly associated with warm weather. It's true that warm weather increases the number of heat stress injuries and illnesses. Warm weather isn't the only cause of heat stress, though. Heat stress can occur any time the surrounding temperature is elevated. Even if the weather is cool, you may work in warm areas, indoors or out. Be alert for conditions which could cause heat stress and take precautions to prevent it.

Six main factors are involved in causing heat stress:

- Temperature;
- Humidity;
- Movement of air
- Radiant temperature of the surroundings;
- Clothing; and
- Physical activity.

The body reacts to high external temperature by circulating blood to the skin, which, in turn, increases skin temperature and allows the body to give off its excess heat through the skin. However, if the muscles are being used for physical labor, less blood is available to flow to the skin and release the heat.

Sweating is another means the body uses to maintain a stable internal body temperature in the face of heat. However, sweating is effective only if the humidity level is low enough to permit evaporation and if the fluids and salts lost are adequately replaced.

Dehydration

Dehydration occurs when you lose more fluid than you take in and your body doesn't have enough water and other fluids to carry out its normal functions. If lost fluid remains unreplenished, you may suffer serious consequences.



Common causes of dehydration include intense bouts of diarrhea, vomiting, fever or excessive sweating. Inadequate intake of water during hot weather or exercise also may deplete your body's water stores. Anyone may become dehydrated, but young children, older adults, and people with chronic illnesses are most at risk.

Dehydration can cause symptoms such as:

- Dry, sticky mouth;
- Sleepiness or tiredness;
- Thirst;
- Decreased urine output;
- Few or no tears when crying;
- Muscle weakness;
- Headache; and
- Dizziness or light-headedness

Each day, workers should be reminded of the temperature and humidity levels and encouraged to follow OSHA's key pieces of advice:

- Drink water every 15 minutes, even if you're not thirsty.
- Rest in the shade to cool down.
- Wear a hat and light-colored clothing.
- Learn the signs of heat illness and what to do in an emergency.
- Keep an eye on fellow workers.

Fluids

Ask for ideas about what fluids are best for rehydration.

The first choice should be water.

Around 60 percent of our body's composition is water. Therefore, we should replenish our loss of fluids through perspiration by regularly drinking water. Make sure everyone understands thirst is not a good indicator that body fluids need replacement.

For acclimatized individuals, adding sliced fresh fruit to a container of water can help bolster lost electrolytes. Since many processed foods contain high amounts of salt, some experts do not recommend sports drinks.

Heat Stroke Can Kill...Take Time to Cool Down...and Hydrate!!



Safety Meeting Sign-In Sheet

Supervisor:	Subject:
Location:	Date:
Conducted By:	Trainer Signature:

Name (print clearly)	Signature	Comments / Safety Concerns / Training Requests