

TOOLBOX TALK #39

PREVENT HEAT-RELATED ILLNESS

We all know that heat illness is serious, but sometimes we don't know exactly how severe heat stroke can be. All forms of heat illness mean the body is overheated., and milder forms might cause unpleasant symptoms such as cramps, dizziness, etc. But heat stroke happens when your body is so overheated, it loses the ability to regulate its core temperature. Left untreated, this leads to damage at the cellular level. So, saving an overheated worker depends entirely on bystanders recognizing the situation and taking emergency action. Being prepared to deal with heat stroke comes down to 3 levels of understanding; recognizing the symptoms, understanding the severity and knowing what to do.



Symptoms. The defining symptom of heat stroke is a body temperature of 105°F or higher. However, most jobsites don't have a thermometer that can measure core body temperature. So, it's important to look for:

- Staggering or physical collapse
- Strong and rapid pulse
- Profuse sweating
- Headache
- Muscle weakness
- Rapid breathing
- Confusion or irrational behavior
- Unconsciousness or seizures

Severity. Tragically, many heat stroke injuries and even deaths happen because bystanders don't recognize the severity of the situation. Training on heat illness should include the effects of heat stroke and stress the devastating potential outcomes for those who survive. Heat stroke can cause organs to swell, resulting in permanent damage. Muscle tissue can be damaged to the point of disintegration. Survivors often find that they can no longer tolerate hot conditions after a heat stroke, as their body temperature rises faster and they have symptoms of heat illness much sooner than they did in the past.

Cool first, transport second. This simple principle may be the most important to teach workers. You have a window of about 30 minutes to prevent permanent damage caused by heat stroke. So even if first responders arrive quickly, it's crucial to cool down a victim's body *before* transporting them. Cool water immersion is the gold standard in heat stroke treatment. That means immersing the victim in a tub of cold water and ice while monitoring them to make sure they aren't in need of CPR. Only when the victim's body has cooled to at least 102°F is it safe to stop and transport them. If a large tub isn't available, you can improvise by using a tarp with the sides pulled up to contain the victim and the ice water. Continue adding ice and cold water to cool the victim as you wait for the first responders to arrive.

Heat illness is preventable – don't let it happen to you or your workers.