

TOOLBOX TALK #52

HEAT-RELATED ILLNESSES

Exposure to heat can lead to any number of illnesses. Heat rash, heat cramps, heat exhaustion and heat stroke are the four most common heat-related illnesses.

Heat rash occurs when sweat ducts become clogged and sweat can't get to the surface of the skin. Symptoms include red blister-like eruptions, bumps and an itching sensation. Treating it involves keeping the skin dry and rest in a cool place.



Heat cramps happen when salt and moisture levels are depleted through perspiration. Symptoms include painful spasms, usually in the legs or abdomen. To treat heat cramps, move the victim to a cool, shaded area, apply something cool and drink plenty of fluids.

Heat exhaustion results from prolonged exposure to high temperatures and inadequate hydration causing the body temperature to rise. Symptoms include headaches, weakness, mood changes, feeling sick and having pale/clammy skin. Victims should be moved to a cool, shaded area, with something cool applied. Have the victim drink plenty of fluids and monitor them.

Heat stroke occurs when the body becomes unable to control its core body temperature. Symptoms include pale skin, nausea, vomiting and confusion. Treating heat stroke means seeking medical attention IMMEDIATELY.

You can't change the weather, but you can change your approach to working in the heat. Here are a few preventative measures to keep in mind:

- **Shelter and shade.** When work must be done in the heat of the day, taking regular breaks and meals under the cover of shelters such as canopies, umbrellas, and other temporary structures is important. Also, take advantage of extra items like portable misting systems.
- **Hydration.** It's easier than you think to get dehydrated. Heat-related illnesses are closely associated with the worker's hydration level. OSHA standards as well as various safety guidelines, mandate that adequate drinking water is available to workers at all construction sites.
- **Cooling PPE.** Evaporative cooling is a simple, effective and relatively inexpensive approach that can be used in indoor and outdoor environments, but works best in drier, low-to-moderately humid conditions with sufficient airflow. Working on the same principles as how sweat cools the body, evaporative cooling solutions draw heat from workers' bodies, using an external source of water.
- **Plan ahead.** Heat-related illnesses are 100% preventable when you know the risks, symptoms and solutions. In extreme heat, combining these solutions with smart shift scheduling to move the most intense manual labor away from the hottest part of the day can have a measurable effect in mitigating the effects of heat.