

TOOLBOX TALK: Heat Related Illness Prevention By: Derek Peoples, TL Wallace Construction February 2018

Heat Related Illness Prevention

Factors that may cause heat related illness

- High temperature and high humidity
- Direct sun exposure
- Limited air movement
- Physical exertion
- Use of bulky protective clothing and equipment
- Poor physical condition or ongoing health problems
- Some medications
- Previous heat-related illness

When the air temperature is close to or warmer than normal body temperature, cooling of the body becomes more difficult. Blood circulated to the skin cannot lose its heat. Sweating then becomes the main way the body cools off. But sweating is effective only if the humidity level is low enough to allow evaporation and if the fluids and salts that are lost are adequately replaced.

Health problems caused by hot work environments

Heat stroke is the most serious problem. It occurs when the body temperature reaches critical levels (greater than 103); the sweating mechanism fails and the body is unable to cool down. Heat stroke can be fatal.

Warning signs vary, but may include the following: red, hot, and dry skin (no sweating), rapid pulse, throbbing headache, dizziness, nausea, confusion, and unconsciousness.

- Call for medical assistance
- Get the victim to a shady area
- Cool them down with whatever methods you have; Example: cool water on a rag
- Monitor temperature and continue cooling until body temperature is below 103.
- Do not give the victim fluids to drink during a heat stroke

Heat exhaustion is a milder form of heat related illness that can develop after several days of exposure to heat and inadequate or unbalanced replacement of fluids (soft drinks and alcohol).

Warning signs may include: heavy sweating, paleness, muscle cramps, fatigue, dizziness, headache, nausea, fainting, increased pulse, and shallow breathing. Seek medical attention if symptoms are severe, if the victim has heart problems or high blood pressure, or if the symptoms last longer than one hour.

Prevention of heat related illness

- Drink plenty of cool water at least one cup every 15-20 mins. Avoid caffeine.
- Take frequent short breaks in shaded areas allow your body to cool down.
- Avoid eating large meals.
- Allow new employees to build tolerance to working all day in the heat.
- Keep an eye on your fellow workers and look for any of the previously discussed symptoms such as confusion, dry skin, and dizziness.