Heat Illness Prevention & Hydration

Keeping Your Cool When It’s Hot

When temperatures and humidity rise, we are at risk for heat illnesses. Our bodies are built to naturally combat heat in order to keep our internal body temperatures at a safe level. At a certain point, our bodies are no longer able to self-sustain and we begin to experience heat cramps, heat exhaustion, and possibly even heat stroke. Factors such as age, weight, high blood pressure, and certain medications may make certain people more susceptible than others. Below is a breakdown of the warning signs and symptoms of each heat illness.

- **Heat cramps**: Considered to be the least serious of heat illnesses, heat cramps can be attributed to the loss of body salts and fluid from sweating. Those who suffer from heat cramps should expect to feel irritable. Cramps usually are the worst in the limbs and abdomen. Sometimes a heat rash may appear on the skin.

- **Heat exhaustion**: More serious than cramps but not as severe as heat stroke, heat exhaustion usually develops after exposure to high temperatures when combined with high levels of humidity and strenuous activity such as performing work outside. Symptoms include sweating profusely, rapid pulse, headache, and vomiting as your body begins to overheat.

- **Heat stroke**: Heat stroke occurs after prolonged physical exertion in high temperature areas. Symptoms include an internal temperature of at least 104°F, dry skin, swollen tongue, and a state of unconsciousness. It is critical that those experiencing heat stroke get emergency care immediately – untreated heat stroke can damage your brain, heart, kidneys, muscles, and even result in death.

Now that you know more about heat-related illnesses, we will review some ways to beat the heat and stay safe while at work.

**Tips for staying cool**

- **Preparation is key**: Monitor the latest local weather forecasts to be ready for temperature changes. Identify hydration stations as well as cool-down areas for employees to go if you work outside or will be exposed to high temperatures. Schedule strenuous activities during the times of day that the heat index is its lowest, such as mornings and evenings.

- **Keep safety in mind**: Sometimes our wellbeing takes a back seat when working to complete a job. Understand your limits and avoid overexertion by taking frequent breaks and drinking plenty of water when it is hot. It is recommended that you drink about four cups of water per hour when the heat index is between 103°F and 115°F.

- **Make good choices**: Some individuals are more susceptible to experiencing heat-related illness based on lifestyle choices. You should avoid alcoholic, caffeinated, and other beverages high in sugar, maintain a healthy weight, and become familiar with your medication’s side effects to minimize your risk.

- **Keep safety in mind**: Complete Heat Illness Prevention training at myhr.northwestern.edu.

- **Learn more**: For additional information, please review OSHA’s Heat Illness guidelines.

**Tips for Success When Talking to Your Team**

- **Preparation is Key**: Be aware of heat advisory days and plan work accordingly. Communicate where drinking fountains and air conditioned areas are located for use during breaks.

- **Stay Positive**: Be mindful that not everyone’s body responds to heat the same way. Some employees may need more frequent breaks than others.

- **Share a Story, Ask for a Story**: Have you experienced heat-related illness? Tell your coworkers what you learned and how you take precautions to ensure it does not happen again.

**Safety at Home – Heat Stroke is No Joke**

- **Did you know?** Interior temperature of cars can reach up to 130°F: Contrary to popular belief, “cracking a window” is not a sufficient means of keeping our children and pets cool. Since 1998, 819 children have died in vehicles from heat-related issues in the USA and leaving animals inside of cars is the most common cause of heat stroke. It is always recommended that you bring children with you when you leave the car and avoid bringing your pets along for the ride when you will be going somewhere that they cannot.

- **Did you know?** Exercise and sports significantly increases risk for heat illness: Heat stroke is one of the 3 leading causes of sudden death in sports or exercise activities. You should always start hydrating at least one hour before physical activity and gradually increase the intensity over time.

**For Additional Information**

Please contact Gwen Butler, Director of Environmental Health and Safety, at 847.491.4936 with any questions. Risk Management Services can be reached at 847.491.5810 or risk@northwestern.edu.

Do you or your team have a safety story you’d like to share? Contact Risk Management Services at risk@northwestern.edu for details.