



5-minute safety talk

Hot Weather Safety

Awareness of heat-related illness is important regardless of what climate a person lives in or how well an individual may be conditioned. The effects of overheating often go unrecognized by the victim and are not well anticipated by safety personnel.

The human body gets rid of heat through four different mechanisms, the most important of which is sweating because of the cooling effect of its evaporation. As we exert ourselves and produce excess heat, we rid that heat by turning our sweat into dissolved moisture in the surrounding air. This process requires two crucial conditions.

1. A person must have enough fluid to accommodate the losses. They must be constantly replenishing this fluid to make up for losses throughout the cooling cycle.
2. The environment must have a low humidity level to allow the fluid to dissolve. Most people don't realize the risk of heat-related illness increases with air temperature as well as the relative humidity.

Signs of Heat-Related Illness

The signs and symptoms of heat-related illness usually start with dizziness and headache, and sometimes muscle cramping. If left untreated, the person may experience heat exhaustion, which is characterized by profuse sweating, fatigue, nausea, vomiting, and fainting. As a person becomes more dehydrated, the body will shunt blood away

from the skin to preserve vital organs. This will reduce the blood flow to the skin and markedly reduce the ability to sweat. What occurs next is a rapid rise in body temperature since there is less heat being released. The person's skin will feel very warm to the touch. This can lead to altered mental status and seizures, a condition commonly known as heat stroke.

Treatment

Treating heat-related illness starts with prevention. Steps to prevent heat-related illness include maintaining appropriate water intake prior to and during any strenuous exercise or job activity. Also, identify warm, humid conditions and avoid work or exercise during those times. If work cannot be avoided, then frequent breaks are crucial, as well as readily available fluids for rehydration. People

who know they are going to be working in warm conditions should avoid caffeinated drinks prior to going to work.

If a person begins to feel the symptoms of a heat-related illness, they should be moved to an area where the air temperature is much cooler. This could be an office away from the work site or a vehicle with an air conditioner. Cool the victim with a cool water spray or wet cloths on the forehead and body. Have the person drink a carbohydrate-electrolyte drink, such as a sports drink, or water to promote rehydration.

Urgent Medical Care

Persons who feel very warm to the touch, become agitated, confused, or have seizures are showing signs of dangerous core temperatures. These people need to be cared for immediately. First, call 9-1-1, then remove their outer clothing and immediately cooling them by any means possible, preferably by immersing the victim up to the neck in cold water. If immersion in cold water is not possible, place the victim in a cold shower, or move to a cool area and cover as much of the body as possible with cold, wet towels.

Heat-related illness can be a difficult problem to recognize. Vigilance surrounding working conditions, maintaining hydration, and good health can prevent many heat-related problems and allow people to stay productive.

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