

Prevent Dehydration and Heatstroke

Dehydration and heat exhaustion are two very common heat-related disorders that can be life threatening if left untreated — especially if heatstroke develops.

Dehydration

Dehydration can be a dangerous side effect of working in hot conditions, such as outside under bright summer sun, without drinking enough water to replace the fluids lost by sweating. Under normal conditions, we all lose body water daily through sweat, tears, breathing, urine, and stool. In a healthy person, this water is replaced by drinking fluids and eating foods that contain water. People over the age of 55 or who have diabetes or kidney disease are particularly susceptible to dehydration and so should be especially cautious in the heat and sun.

Dehydration Symptoms:

- thirst
- less frequent urination
- dry skin
- fatigue
- light-headedness
- dizziness
- confusion
- increased heart rate

Prevention:

Take the following precautions to avoid the harmful effects of dehydration:

- Drink plenty of fluids, especially when working in the sun.
- Carry water with you and drink a few ounces every hour.



- Take more frequent breaks in the shade or air conditioning if possible.
- Limit your caffeine intake before beginning work.
- Dress appropriately: choose lightweight cotton clothing and wear a hat.

Heatstroke

Our bodies make a tremendous amount of internal heat, and we normally cool ourselves by sweating and radiating heat through the skin. However, in certain circumstances, such as extreme heat, high humidity, or vigorous activity in the hot sun, this cooling system may begin to fail. This allows heat to build up to dangerous levels, leading to heat exhaustion. If not treated, heat exhaustion can lead to the most serious heat-related condition, heatstroke, which requires emergency treatment.

Risk Factors of Heatstroke:

- the person's physical condition
- air temperature and humidity
- the person's clothing: heavy and tight-fitting vs. light and loose
- amount of physical excursion
- working in the sun vs. the shade

Symptoms of Heatstroke:

- headache
- dizziness
- fatigue
- high body temperature
- rapid heart rate



- hot dry skin that is not sweaty

Treatment:

- Get the person to a shaded area (or air-conditioned area if possible).
- Remove their clothing, gently apply cool water to their skin, and fan the wet skin.
- Apply ice packs to the person's armpits and wrists.
- Call 911 for emergency assistance if the person is confused or distressed, loses consciousness, or is unable to drink.

Prevention:

- Drink plenty of fluids during outdoor activities, especially on hot days. Water and sports drinks are the drinks of choice. Avoid caffeinated tea, coffee, soda, and alcohol, as these can lead to dehydration.
- Wear lightweight, tightly woven, loose-fitting clothing in light colors.
- Wear sunscreen.
- Wear a hat.
- Take frequent breaks to hydrate in the shade.
- Consider rescheduling intense physical work until high temperatures have subsided.

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