

Understanding how worker performance & efficiency is affected by environmental conditions is critical to reducing dehydration-related illnesses & accidents. At Hydration Depot, we are committed to providing hydration education & solutions that help companies meet the needs of all workers – 365 days a year.

FACTS: THE BODY IS 60-70% WATER*

Maintaining & balancing the body's fluid level is imperative. Factors that contribute to fluid loss include:




- Sweating between skin & winter clothing
- Exhaling
- Urination (increases in cold weather)
- Diuretic intake
- Natural body exertion to maintain core temperature (e.g. shivering)

* Varying factors: age, gender, environment & conditioning

FLUID LOSS	RESULT
2%	Impaired performance
4%	Muscular function & capacity declines
6%	Fatigue & exhaustion
8%	Hallucination & disorientation
10%	Circulatory collapse & hypothermia

HYDRATION LEVEL CHART

Use the color chart to identify hydration level:

PROPERLY HYDRATED		Maintain level
DEHYDRATED		Needs improvement
SEVERELY DEHYDRATED		Requires immediate attention

HEAT FACTORS:

Contributing to elevated body temperature & rapid fluid loss:



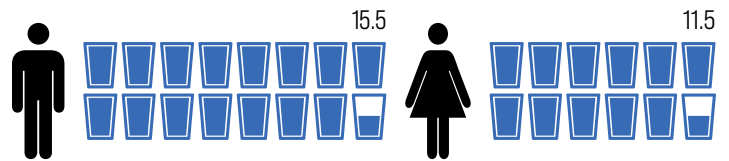
- High temperature & humidity
- Level of exertion/work load or strain
- PPE & heavy clothing
- Poor airflow & circulation
- Machine/equipment heat
- Direct sunlight exposure
- Medical precondition
- Lack of physical conditioning

HEAT INDEX: APPARENT DANGERS POSED BY STRESS

90° to 100°F	101° to 129°F	130°F +
Possible sunstroke, heat cramps & heat exhaustion with prolonged exposure & physical activity.	Probable sunstroke, heat cramps & heat exhaustion & possible heat stroke with prolonged exposure and physical activity.	Imminent heat stroke or sunstroke.

RECOMMENDATION FOR PROPER HYDRATION

WATER (cups per day)



In colder environments &/or strenuous activity, an increase in fluid intake may be necessary.

ELECTROLYTES



6-10 oz. every 15-20 minutes during strenuous activity, especially in hot environments.

*Individual circumstances may vary. Include water with electrolyte consumption.

Water is necessary, but water alone will not replace lost nutrients & minerals such as electrolytes. Electrolytes consist of minerals such as sodium, potassium, magnesium & calcium, which are critical for cell & muscular function.



¹Increase intake in hotter environments &/or during strenuous activity. Source: Water: How much should you drink every day?

<http://www.mayoclinic.com/health/water/NU00283>

²Source: Role of Carbohydrate-Electrolyte Fluid Replacement in the Industrial Environment. Human Performance Laboratory, University of Alabama, Tuscaloosa, AL.