OVERTIME'S Steps to Heat Stress Prevention



OVERTIME™ at Work

Heat related disorders are the number one threat to safety and health of the workforce, costing the industry millions of dollars in lost time, productivity, and profits. Vital for nerve and muscle function, electrolytes are responsible for the body's hydration and blood pH. Electrolyte balance can become unstable during hard work and sweating, leading to dehydration. OSHA recommends drinking 16 ounces of water every 30 minutes, even if you're not thirsty. OVERTIME™ helps to prevent dehydration by replenishing the body's water and electrolyte concentrations.

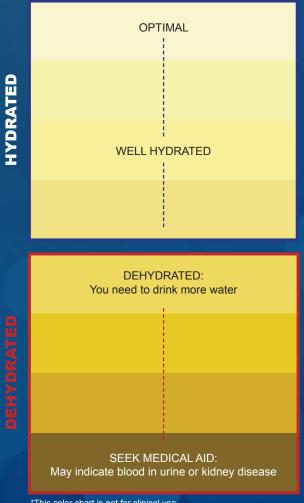
Signs of Heat Stress:

DIZZINESS / HEADACHE / WEAKNESS / RAPID HEARTBEAT NAUSEA / CRAMPS / CHEST PAIN / LABORED BREATHING

Heat Stress Prevention Starts H.E.R.E. - Hydrate Educate Remind Enforce

URINE COLOR

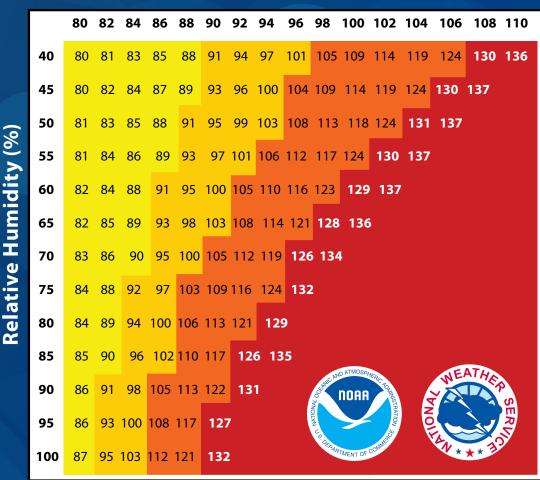
Urine color is a sign of how hydrated (or dehydrated) you are. Drink more water when indicated, using the chart below as a guide. Take extra precautions when the heat index is high and the risk of heat illness increases.



*This color chart is not for clinical use.
Source: U.S. Army Public Health Command

HEAT INDEX

TEMPERATURE (°F)



LIKELIHOOD OF HEAT DISORDERS
with Prolonged Exposure or Strenous Activity

Caution Extreme Caution Danger Extreme Danger

HOW TO REACT WHEN IN THE RED:

- 1. Watch out for your co-worker, especially new workers
- 2. Avoid strenuous work at peak heat hours (11-3) if possible
- 3. Avoid drinking caffeine and sugar as they aid dehydration



How to Combat the Cold with OVERTIME

OVERTIME™ at Work

Despite what many believe, dehydration is just as serious of a threat during cold weather as in the heat. It has been shown that sweat sodium concentration is significantly higher in the winter, increasing the need to replenish fluids and electrolytes during strenuous activity. Overtime is here to replenish your body's needs in any weather conditions you might find yourself working through. Here are some tips to remember while in cold weather:



Acclimate

Allow the body to adjust to colder weather and winter elements.



PPE Clothing

Wear protective clothing and be mindful of the insulating properties that may cause excessive sweating, which can become dangerous when frozen at the surface of the skin.



In cold weather, the body's natural thermoregulation takes priority, resulting in decreased thirst sensation. Drink fluids and replace electrolytes on a regular basis throughout the day.

Cold Illness Indicators:

Early Detection Hypothermia Frostbite

Red, swollen, itchy skin around face region, and cold wet exposure with the feet causing tingly, numbness and pain.

Response: Cover and protect areas immediately. Lotions and ointments can treat areas. Remove wet clothing and dry the feet. Warm slowly.

Freezing of the skin and/or deeper tissue causing burning, numbness and pain.

Response: Remove from the cold. Gradually warm areas without direct heat. No rubbing to prevent further tissue damage. See medical attention.

Loss of body heat causing core temperature to drop below 98.6°F. Core temperature of 82°F or below is fatal.

Response: Remove from cold immediately and dial 9-1-1. Handle patient gently, not to disturb vital organs under low core temperature. Apply any warming to body's core first and not to extremities.

Wind Chill Dangers

Wind Chill 32°F to -15°F Discomfort from cold conditions, chilblains and frostbite possible with face

Wind Chill 20°F to -40°F Hypothermia possible with prolonged exposure and frostbite occurs within 10-30

Wind Chill -40°F and below

IMMINENT

and extremities.

	Temperature (°F)																		
	Calm	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
Wind (mph)	5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52	-57	-63
	10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59	-66	-72
	15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64	-71	-77
	20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-68	-74	-81
	25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71	-78	-84
	30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-73	-80	-87
	35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76	-82	-89
Wi	40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78	-84	-91
	45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93
	50	26	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-81	-88	-95
	55	25	18	11	4	-3	-11	-18	-25	-32	-39	-46	-54	-61	-68	-75	-82	-89	-97
	60	25	17	10	3	-4	-11	-19	-26	-33	-40	-48	-55	-62	-69	-76	-84	-91	-98
	MTA ON	Oso																	

Frostbite Times 30 minutes

10 minutes

Wind Chill (°F) = $35.74 + 0.6215T - 35.75(V^{0.16}) + 0.4275T(V^{0.16})$ Where, T= Air Temperature (°F) V= Wind Speed (mph)



Frostbite within 5 minutes! Hypothermia without proper precaution.

minutes.

Effective: 11/01/01