



**WATER.
REST.
SHADE.**



Heat Illness Awareness v2021

The body cools itself by sweating. During hot weather, especially with high humidity, sweating is not enough. Without enough water and rest in the shade, body temperature can rise to dangerous levels. The result is **heat exhaustion** or **heat stroke**.

HEAT RELATED ILLNESS- KNOW THE SIGNS

Illness	Symptoms	First Aid
Heat exhaustion- The body's response to an excessive loss of water and salt, usually through sweating	<ul style="list-style-type: none"> Light headedness Weakness Thirst Irritability Fast heart beat 	<ul style="list-style-type: none"> Cool, moist skin Heavy sweating Headache Nausea or vomiting Dizziness
Heat stroke- The most serious heat-related illness and requires immediate medical attention	<ul style="list-style-type: none"> Confusion Fainting Seizures 	<ul style="list-style-type: none"> Excessive sweating or red, hot, dry skin Very high body temperature

RISK FACTORS FOR HEAT ILLNESS

Risk factors that may influence heat illness include high air temperatures and humidity, direct sun exposure, indoor radiant heat sources (ovens, hot manufacturing processes, etc.), limited air movement, physical exertion, not drinking enough fluids (dehydration), personal protective equipment or clothing, certain medications (different kinds of blood pressure pills or antihistamines), physical condition, lack of recent exposure (not acclimatized), and age.

TIPS FOR PREVENTING HEAT ILLNESS



Stay Well Hydrated- drink 8 ounces of water every 15 to 20 minutes during moderate activity in moderately hot conditions

Avoid Consumption of "Energy Drinks"- these may dehydrate the body and increase the chance for heat stress



Take Time to Acclimatize- workers returning from an absence of 2 weeks or more should be more cautious while working; if a worker has been away for more than a week, gradually increase the workload or allow more frequent breaks the first week



Set-up a Buddy System- make sure your co-workers are making use of water and shade and are not experiencing heat-related symptoms

Report signs and symptoms of heat stress immediately



Take Time to Rest and Cool Down- take regular rest periods in shaded or air-conditioned recovery areas

Remember- workers are at the greatest risk of suffering from heat related illness during the hottest part of the day (11am - 3pm), plan accordingly



Myth: The difference between heat exhaustion and heat stroke is there is no sweating with heat stroke.

Truth: Exertional heat stroke victims may continue to produce sweat. If a worker is experiencing symptoms of heat stroke (confusion, loss of consciousness, seizures, high body temperature), whether they are sweating or not, it is a life-threatening emergency! **Call 911 and try to cool the worker down.**

Get the OSHA-NIOSH Heat Safety Tool Smartphone App

For more information on heat related illness visit <https://www.osha.gov/heat>



Heat Mitigation Plan

Caution	Extreme	Danger
Heat index: 91 to 102° F	Heat index: 103 to 114° F	Heat index: 115 to 127° F
Minimum Requirements: <ul style="list-style-type: none"> Alert workers to the heat index anticipated for the day and the need to monitor for signs and symptoms of heat stress as well the need to stay hydrated. Provide adequate hydration (e.g. cool water and/or sport drinks). Provide reminders to workers to stay hydrated throughout the day. Task Supervisor will periodically check work team members for signs and symptoms of heat stress and ensure they are taking adequate breaks. Designate cooling areas (shaded areas, cooling trailers, inside air conditioned vehicle etc.). For heavy work implement work / rest cycles. 15 minutes of break for every 45 minutes worked 	Additional Requirements: <ul style="list-style-type: none"> Ensure that all workers are drinking at least 4 cups of water per every hour. For non-heavy work implement work / rest cycles. 15 minute break for every 45 minutes worked. For heavy work implement work / rest cycles. 30 minutes of break for every 30 minutes worked. 	Additional Requirements: <ul style="list-style-type: none"> Where possible. Reschedule nonessential activities involving heavy work to a day / time when the heat index is lower. For non-heavy work implement work / rest cycles of 30 minute break for every 30 minutes worked. For heavy work implement work / rest cycles of 45 minute break for every 15 minutes worked.

Additional Prevention Methods: Sun visors, work area shade canopies, adjusted work schedules, cooling bandanas or vests, air movers, add extra personnel for physically demanding tasks etc.

Note: Where work and rest cycles (i.e. during frac stages, workover, rig move) or buddy systems (i.e. lone workers) are not feasible, alternative solutions are identified by the Task Supervisor and implemented to reduce heat stress related fatigue.

Note: Examples of heavy work include: climbing, repeatedly carrying heavy equipment/supplies (40 lbs), wearing chemical PPE that covers large parts of the body or installing equipment, using hand tools for extended periods of time.

NOAA National Weather Service Heat Index Temperature (°F)

	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135								
90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

Caution
 Extreme Caution
 Danger
 Extreme Danger