

HEAT SAFETY

Heat Illness is a spectrum of disorders due to environmental heat exposure. It includes minor conditions such as heat rash, heat cramps; more severe conditions are exhaustion; and the most severe condition known as heat stroke.



Normally, the body has ways of keeping itself cool by letting heat escape through the skin and by perspiration (evaporating sweat). If the body cannot cool properly or does not cool enough, the person may suffer a heat-related illness. Anyone can be susceptible, although the very young and very old are at greater risk. Heat-related illnesses can become serious or even deadly if unattended.

Stages of Heat-Related Illness

Heat Rash: Heat rash is a red or pink rash usually found on body areas covered by clothing. It can develop when the sweat ducts become blocked. This often leads to discomfort and itching. Cleaning and drying/cooling the area and replace clothing with clean dry clothing will help the discomfort, avoid lotions as this might irritate the affected area.

Heat Cramps: These cramps can be very painful. If you are caring for a person who has heat cramps, have him or her stop activity and rest. If the person is fully awake and alert, have him or her drink small amounts of cool water or a commercial sports drink. If the victim has no other signs of heat-related illness, the person may resume activity after the cramps stop.

Heat Exhaustion: Heat exhaustion is strongly related to the heat index, which is a measurement of how hot you feel when the effects of relative humidity and air temperature are combined. A relative humidity of 60% or more hampers sweat evaporation, which hinders your body's ability to cool itself.

Symptoms Are:

Confusion	Dizziness	Fainting
Fatigue	Headache	Muscle cramps
Nausea	Pale skin	Profuse sweating
Rapid heartbeat		

If you, or anyone else, has symptoms of heat exhaustion, it's essential to immediately get out of the heat and rest. If you can't get inside, try to find the nearest cool and shady place.

	10%	20%	30%	40%	50%	60%	70%	80%	90%
104	98	104	110	120	132				
102	97	101	108	117	125				
100	95	99	105	110	120	132			
98	93	97	101	106	110	125			
96	91	95	98	104	108	120	128		
94	89	93	95	100	105	111	122		
92	87	90	92	96	100	106	114	122	
90	85	88	90	92	96	100	106	114	122
88	82	86	87	89	93	95	100	106	115
86	80	84	85	87	90	92	96	100	109
84	78	81	83	85	86	89	91	95	99
82	77	79	80	81	84	86	89	91	95
80	75	77	78	79	81	83	85	86	89
78	72	75	77	78	79	80	81	83	85
76	70	72	75	76	77	77	77	78	79
74	68	70	73	74	75	75	75	76	77

Take action by: Drinking plenty of fluids (avoid caffeine and alcohol), remove any tight or unnecessary clothing, apply other cooling measures such as fans or ice towels at arm pits and ankles.



If such measures fail to provide relief within 30 minutes, seek medical attention because untreated heat exhaustion can progress to heat stroke.

Heat Stroke: Heat stroke is the most serious form of heat injury and is a medical emergency. If you suspect that someone has heat stroke ~ also known as sunstroke ~ you should call 911 immediately and render first aid until paramedics arrive.

Heat stroke results from prolonged exposure to high temperatures. Usually in combination with dehydration, which leads to failure of the body's temperature control system. The medical definition of heat stroke is a core body temperature greater than 105 degrees Fahrenheit, with complications involving the central nervous system that occur after exposure to high temperatures.

Symptoms Are:

Throbbing headache	Dizziness
Lack of sweating	Red, hot, dry skin
Rapid heartbeat	Nausea and vomiting
Seizures	Unconsciousness
Rapid, shallow breathing	Muscle weakness or cramps
Behavioral changes such as confusion & disorientation	

Take action by: Immediately calling 911 or transport the person to a hospital. Any delay seeking medical help can be fatal.

While waiting for the paramedics to arrive, initiate first aid. Move the person to an air-conditioned environment or at least a cool, shady area and remove any unnecessary clothing.

Fan air over the patient while wetting the skin with water from a sponge. Apply ice packs to the armpits, ankles, groin, neck, and back. Because these areas are rich with blood vessels close to the skin, cooling them may reduce body temperature.



HUMIDITY °F	DANGER CATEGORY	INJURY THREAT
BELOW 80°	NONE	LITTLE OR NO DANGER UNDER NORMAL CIRCUMSTANCES
80° to 90°	CAUTION	FATIGUE POSSIBLE IF EXPOSURE IS PROLONGED AND THERE IS PHYSICAL ACTIVITY
90° to 105°	EXTREME CAUTION	HEAT CRAMPS AND HEAT EXHAUSTION POSSIBLE IF EXPOSURE IS PROLONGED AND THERE IS PHYSICAL ACTIVITY
105° to 130°	DANGER	HEAT CRAMPS OR EXHAUSTION, KEY HEAT STROKE POSSIBLE IF EXPOSURE IS PROLONGED AND THERE IS PHYSICAL ACTIVITY
ABOVE 130°	EXTREME DANGER	HEAT STROKE IMMINENT!