



**Taking it one step  
at a time.**

**NOTE:** Heat Index values were devised for shady, light wind conditions.

FULL SUNSHINE CAN INCREASE HI VALUES BY UP TO 15 °F.

Also, strong winds, particularly with very hot, dry air, can be extremely hazardous.

# Heat Wave: A Major Summer Killer

Heat kills by taxing the human body beyond its capabilities. Each year 400 Americans succumb to excessive heat. During the disastrous heat wave of 1980, more than 1,250 people died.

The National Weather Service has stepped up its efforts to alert the general public to the hazards of heat waves. Based on the latest research findings, the NWS has devised the "Heat Index," or HI. The HI, given in degrees Fahrenheit, is an accurate measure of how hot it really feels when relative humidity is added to the actual air temperature. To find the HI on the Heat Index Chart below, find the relative humidity on the left side of the table and the air temperature across the top of the table. The HI is at the intersection of the relative humidity row and temperature column.

**Heat Index Chart**

Relative Humidity	Actual Temperature – Fahrenheit							
	82	86	90	94	98	102	106	110
40%	81	85	91	97	105	114	124	136
45%	82	87	93	100	109	119	130	
50%	83	88	95	103	113	124	137	
55%	84	89	97	106	117	130		
60%	84	91	100	110	123	137		
65%	85	93	103	114	128			
70%	86	95	105	119	134			
75%	88	97	109	124				
80%	89	100	113	129				
85%	90	102	117	135				
90%	91	105	122					
95%	93	108	127					
100%	95	112	132					

**Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity**

Caution   
 Extreme Caution   
 Danger   
 Extreme Danger



# Heat Disorder Symptoms and Treatment

**Heat Cramps:** Painful muscle spasms may occur, generally in the legs and/or abdomen. Treat with sips of fluids, focusing on electrolyte replacement. If nausea occurs, discontinue fluids. Gently massaging cramping muscles with firm pressure may relieve muscle spasms, but won't fix the problem by itself.

**Heat Exhaustion:** Heavy sweating, weakness, skin is cold, pale, and clammy. Pulse is weak and shallow. Normal temperature is possible. Fainting and vomiting may occur. Get the victim out of the sun. Lay him or her down and loosen clothing. Apply cool, wet cloths.

**Heat Stroke (or Sunstroke):** High body temperature ( $\geq 105^\circ$ ), extreme electrolyte and fluid loss, skin is generally hot/dry but can be cool/clammy and pulse is rapid and strong. Classic heat stroke includes a high body temperature ( $\geq 105^\circ$ ) and an altered level of consciousness caused by an extreme loss of electrolytes and body fluids.

**See warning box.**



**Warning:** Heat stroke is a severe medical emergency. **Summon Emergency Medical Assistance Or Get The Victim To A Hospital Immediately.**

*Delay Can Be Fatal. DO NOT GIVE FLUIDS.*

*Move victim to a cooler environment. Reduce body temperature with cold bath or sponging. Use fans or air conditioning. If victim's temperature rises again, repeat the cooling process.*

**MONITOR CLOSELY.**



## Heat Wave Safety Tips

- **Slow down.** Strenuous activities should be reduced, eliminated, or rescheduled to the coolest time of the day and until you are acclimated to the conditions. Individuals at risk due to medical problems should stay in the coolest available place, not necessarily indoors.
- **Dress for summer.** Loose, lightweight, light-colored clothing reflects heat and sunlight and helps your body maintain normal temperatures.
- **Put less fuel on your inner fires.** Foods that increase metabolic heat production (like proteins) also increase water loss.
- **Drink plenty of water.** Your body needs water to keep cool; so drink plenty, even if you don't feel thirsty. Avoid drinks with sugar, caffeine, or alcohol. Persons who (1) have epilepsy or heart, kidney, or liver disease, (2) are on fluid restrictive diets, or (3) have a fluid retention problem should consult a physician before increasing their fluid consumption.
- **Do not drink alcoholic beverages.**
- **Do not take salt tablets unless specified by a physician.** Persons on salt-restrictive diets should consult their physician before increasing their salt intake.
- **Spend more time in air-conditioned places.** Air conditioning in homes and other buildings markedly reduces your danger from the heat. If you cannot afford an air conditioner, spending some time each day (during hot weather) in an air-conditioned environment affords some protection. Take breaks, heat effects are cumulative.
- **Don't get too much sun.** Sunburn makes the job of heat dissipation that much more difficult.



For more information call 503-649-8577 or visit our website at [www.ocem.org](http://www.ocem.org)