



Exercising in the Heat

Heat Exhaustion and Heat Stroke

	Signs and Symptoms	Treatment
Heat Exhaustion	<ul style="list-style-type: none"> • Weak, Rapid pulse • Low Blood Pressure • Fatigue • Headache • Nausea • Dizziness • Weakness • Paleness • Cold, Clammy Skin • Profuse Sweating • Elevated Body Core Temp ($\leq 104^{\circ}$ F / 40°C) 	<ul style="list-style-type: none"> • Stop Exercising • Move to a cool, ventilated area • Drink Fluids • Sit and elevate feet 12-18 inches • Monitor Temperature
Heat Stroke	<ul style="list-style-type: none"> • Hot, Dry Skin • Bright Red Skin Color • Rapid, Strong Pulse • Change in Mental Status (i.e. irritable, aggressive, anxious) • Labored Breathing • Elevated Body Core Temp ($\geq 105^{\circ}$ F / 40°C) 	<ul style="list-style-type: none"> • Stop Exercising • Remove as much clothing as possible • Give Fluids • Try to cool the body immediately – in any way possible (wet towels, ice, fan, etc.) • Transport to Emergency Room ASAP



Exercising in the Heat

Heat Index

Actual Thermometer Reading (°F) (°C given in parentheses)											
	70 (21)	75 (24)	80 (27)	85 (29)	90 (32)	95 (35)	100 (38)	105 (41)	110 (43)	115 (46)	120 (49)
Relative Humidity	Equivalent or Effective Temperature * (°F) (°C given in parentheses) * - Combined index of heat and humidity and what it feels like to the body										
0	64 (18)	69 (21)	73 (23)	78 (26)	83 (28)	87 (31)	91 (33)	95 (35)	99 (37)	103 (39)	107 (42)
10	65 (18)	70 (21)	75 (24)	80 (27)	85 (29)	90 (32)	95 (35)	100 (38)	105 (41)	111 (44)	116 (47)
20	66 (19)	72 (22)	77 (25)	82 (28)	87 (31)	93 (34)	99 (37)	105 (41)	112 (44)	120 (49)	130 (54)
30	67 (19)	73 (23)	78 (26)	84 (29)	90 (32)	96 (36)	104 (40)	113 (45)	123 (51)	135 (57)	148 (64)
40	68 (20)	74 (23)	79 (26)	86 (30)	93 (34)	101 (38)	110 (43)	123 (51)	137 (58)	151 (66)	
50	69 (21)	75 (24)	81 (27)	88 (31)	96 (36)	107 (42)	120 (49)	135 (57)	150 (66)		
60	70 (21)	76 (24)	82 (28)	90 (32)	100 (38)	114 (46)	132 (56)	149 (65)			
70	70 (21)	77 (25)	85 (29)	93 (34)	106 (41)	124 (51)	144 (62)				
80	71 (22)	78 (26)	86 (30)	97 (36)	113 (45)	136 (58)					
90	71 (22)	79 (26)	88 (31)	102 (39)	122 (50)						
100	72 (22)	80 (27)	91 (33)	108 (42)							

Apparent Temperature	Heat Stroke Risk w/ Physical Activity and/or Prolonged Exercise
90-105 (32-41)	Heat Cramps or heat exhaustion <i>possible</i>
106-130 (41-54)	Heat Cramps or heat exhaustion <i>likely</i> Heat Stroke <i>possible</i>
131-151 (54-66)	Heat Stroke <i>highly likely</i>

How to Use Heat Index:

1. Locate temperature across top
2. Locate relative humidity down left side
3. Follow across and down to find equivalent or effective temperature
4. Determine heat stress risk on chart at right

NOTE: This heat index chart is designed to provide general guidelines for assessing the potential severity of heat stress. Individual reactions to heat will vary. In addition, studies indicate that susceptibility to heat disorders tends to increase among children and older adults. Exposure to full sunshine can increase heat index values up to 15°F.