What is Heat Index & How to Calculate It?

The heat index is a measure of the contribution that high humidity makes with abnormally high temperatures in reducing the body's ability to cool itself. For example, the heat index table shows that for an actual air temperature of 100 degrees Fahrenheit and a relative humidity of 50%, the effect on the human body would be the same as 120 degrees.

Air Temperature*	70	75	80	85	90	95	100	105	110	115	120
Relative Humidity	**Apparent Temperature***										
0%	64	69	73	78	83	87	91	95	99	103	107
10%	65	70	75	80	85	90	95	100	105	111	116
20%	66	72	77	82	87	93	99	105	112	120	130
30%	67	73	78	84	90	96	104	113	123	135	148
40%	68	74	79	86	93	101	110	123	137	151	
50%	69	75	81	88	96	107	120	135	150		
60%	70	76	82	90	100	114	132	149			
70%	70	77	85	93	106	124	144				
80%	71	78	86	97	113	136	157				
90%	71	79	88	102	122	150	170				
100%	72	80	91	108	133	166					

Danger Category	Apparent Temperature	Heat Syndrome Degree Fahrenheit
IV. Extreme Danger	Greater than 130	Heatstroke or sunstroke imminent
III. Danger	105 to 130	Sunstroke, heat cramps, or heat exhaustion likely. Heat stroke possible with prolonged exposure and physical activity.
II. Extreme Caution	90 to 105	Sunstoke, heat cramps, and heat exhaustion possible with prolonged exposure and physical activity.
I. Caution	80 to 90	Fatigue possible with prolonged exposure and physical activity.