

HEAT INDEX CHART

		AIR TEMPERATURE (°F)																				
		80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110	112	114	116	118	120
DEW POINT TEMPERATURE (°F)	60	81	83	85	87	89	91	93	95	97	99	102	104	106	108	111	113	115	117	119	121	123
	62	82	83	85	87	89	92	94	96	98	101	103	105	107	110	112	114	116	119	121	123	125
	64	82	84	86	88	90	93	95	97	99	102	104	107	109	111	113	116	118	120	122	124	127
	66	83	85	87	89	91	94	96	98	101	103	106	108	110	113	115	117	120	122	124	126	128
	68	83	85	88	90	92	95	97	100	102	105	107	110	112	115	117	119	122	124	126	128	130
	70	84	86	89	91	94	96	99	101	104	107	109	112	114	116	119	121	124	126	128	130	132
	72	85	87	90	93	95	98	101	103	106	109	111	114	116	119	121	123	126	128	130	133	135
	74	86	88	91	94	97	100	102	105	108	111	113	116	119	121	124	126	128	131	133	135	137
	76	87	90	93	96	99	102	105	108	110	113	116	119	121	124	126	129	131	133	136	138	140
	78	89	92	95	98	101	104	107	110	113	116	119	121	124	127	129	132	134	137	139	141	143
	80	90	94	97	100	103	107	110	113	116	119	122	125	127	130	133	135	138	140	142	144	147
	82		96	99	103	106	110	113	116	119	122	125	128	131	134	136	139	141	144	146	148	150
84			103	106	110	113	117	120	123	126	129	132	135	138	140	143	145	148	150	152	155	
86				110	114	117	121	124	127	131	134	137	140	142	145	148	150	152	155	157	159	
88					118	122	125	129	132	136	139	142	145	147	150	153	155	157	160	162	164	
90						127	131	134	138	141	144	147	150	153	156	158	161	163	165	167	169	

With Prolonged Exposure and/or Physical Activity

Extreme Danger

Heat stroke or sunstroke highly likely

Danger

Sunstroke, muscle cramps, and/or heat exhaustion likely

Extreme Caution

Sunstroke, muscle cramps, and/or heat exhaustion possible

Caution

Fatigue possible

What is the Heat Index?

"It's not the heat, it's the humidity". That's a partly valid phrase you may have heard in the summer, but it's actually both. The heat index, also known as the apparent temperature, is what the temperature feels like to the human body when relative humidity is combined with the air temperature. This has important considerations for the human body's comfort. When the body gets too hot, it begins to perspire or sweat to cool itself off. If the perspiration is not able to evaporate, the body cannot regulate its temperature. Evaporation is a cooling process. When perspiration is evaporated off the body, it effectively reduces the body's temperature. When the atmospheric moisture content (i.e. relative humidity) is high, the rate of evaporation from the body decreases. In other words, the human body feels warmer in humid conditions. The opposite is true when the relative humidity decreases because the rate of perspiration increases. The body actually feels cooler in arid conditions. There is direct relationship between the air temperature and relative humidity and the heat index, meaning as the air temperature and relative humidity increase (decrease), the heat index increases (decreases).

In order to determine the heat index using the chart on the next page, you need to know the air temperature and the relative humidity. For example, if the air temperature is 100°F and the relative humidity is 55%, the heat index will be 124°F. When the relative humidity is low, the apparent temperature can actually be lower than the air temperature. For example, if the air temperature is 100°F and the relative humidity is 15%, the heat index is 96°F (use this calculator). In the Panhandles, we commonly see hot temperatures during the summer, but the low relative humidity values make it somewhat unusual to see dangerous heat index values (i.e. 103°F or greater). A full heat index chart for a larger range of temperatures and relative humidity values can be found at this link.

It surprises many people to learn that the heat index values in the chart above are for shady locations. If you are exposed to direct sunlight, the heat index value can be increased by up to 15°F. As shown in the table below, heat indices meeting or exceeding 103°F can lead to dangerous heat disorders with prolonged exposure and/or physical activity in the heat.

TEMPERATURES ABOVE 100°

