



HEAT INDEX CHART

Indiana High School Athletic Association HEAT INDEX INFORMATION & CHART

The [heat index \(HI\)](#) is an apparent temperature felt by the human body due to the combined effects of temperature and humidity. Most people understand that as the air temperature goes up, so does the heat index. But why does humidity play a role? It's because the body's perspiration cannot evaporate as well when the humidity increases. Therefore, the cooling effects of your sweat are reduced as the humidity rises, and your body is unable to cool itself naturally. Combine high heat and high humidity and you've got trouble!

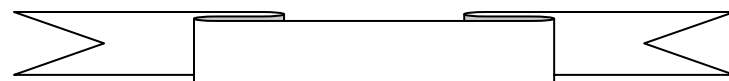
Although it is convenient to use a single number (the heat index) to describe the apparent temperature your body feels, keep in mind that heat and humidity affect every body (and everybody) differently. Several assumptions are used to calculate the heat index. The heat index assumes that the body is:

- 5' 7" tall.
- 147 pounds.
- At 98.6°.
- Clothed in long trousers and a short-sleeved shirt.
- In shade.
- Walking at a speed of 3.1 mph.
- In a breeze of 6 mph.
- Not dripping with sweat.

If any of these factors change, e.g., more exertion, more clothing, and/or more weight, the heat index will change for that individual. For example, if you weigh 250 pounds, are wearing long-sleeved work clothes, and are working outside in the sun, the heat index value you hear reported on the radio is lower than what you are personally feeling.

The rules for minimizing the heat effects are simple:

- Monitor forecasts and advisories for periods of high heat indices.
- Take frequent breaks in the shade.
- Avoid prolonged exertion.
- Drink water often - and drink more than you think you need.



Relative Humidity

Temp.	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	100%
80	80	80	81	81	82	82	83	84	84	85	86	86	87
82	81	82	83	84	84	85	86	88	89	90	91	93	95
84	83	84	85	86	88	89	90	92	94	96	98	100	103
86	85	87	88	89	91	93	95	97	100	102	105	108	112
88	88	89	91	93	95	98	100	103	106	110	113	117	121
90	91	93	95	97	100	103	106	109	113	117	122	127	132
92	94	96	99	101	105	108	112	116	121	126	131	137	143
94	97	100	103	106	110	114	119	124	129	135	137	148	155
96	101	104	108	112	116	121	126	132	135	141	146	160	168
98	105	109	113	117	123	128	134	138	144	150	157	172	181
100	109	114	118	124	129	136	141	147	154	161	168	185	195
102	114	119	124	130	137	143	149	156	164	172	180	199	210
104	119	124	131	137	144	151	158	166	175	184	193	214	226
106	124	130	137	145	153	162	172	182	193	204	216	229	243
108	130	137	144	153	162	172	182	193	205	218	231	245	260
110	136	143	150	161	171	182	194	206	219	233	247	262	278

Category	Heat Index	Possible Heat Disorders for People in High Risk Groups
Caution	80-90	Fatigue possible with prolonged exposure and/or physical activity.
Extreme Caution	91-105	Sunstroke, muscle cramps, and/or heat exhaustion possible with prolonged exposure and/or physical activity.
Danger	106-129	Sunstroke, muscle cramps, and/or heat exhaustion likely. Heatstroke possible with prolonged exposure and/or physical activity.
Extreme Danger	130 or higher	Heat stroke or sunstroke likely.