

HEAT INDEX READINGS & ASSOCIATED HEALTH RISKS

The heat index (see charts below) is how hot the heat- humidity combination makes it feel. As relative humidity increases, the air seems warmer than it actually is because the body is less able to cool itself via evaporation of perspiration.

As the heat index rises, so do health risks.

- When the heat index is 90°F, heat exhaustion is possible with prolonged exposure and/or physical activity.
- When it is 90°-105°F, it is probable with the possibility of sunstroke, heat cramps or heat exhaustion with prolonged exposure and/or physical activity.
- When it is 105°-129°F, sunstroke, heat cramps or heat exhaustion is likely, and heatstroke is possible with prolonged exposure and/or physical activity.
- When it is 130°F and higher, heatstroke and sunstroke are extremely likely with continue exposure. Physical activity and prolonged exposure to the heat increase the risks.

THE HEAT INDEX

Air Temp (° F)	Relative Humidity													
	40	45	50	55	60	65	70	75	80	85	90	95	100	
110°	136	143	152											
105°	123	129	135	141	148									
100°	111	115	119	124	129	135	141	147						
95°	101	104	107	110	114	117	122	126	131	136	141			
90°	92	94	96	98	100	103	106	109	112	115	119	127	132	
85°	84	85	86	88	89	91	93	95	97	99	102	104	107	
80°	80	80	81	81	82	82	83	84	84	85	86	86	87	

Exposure to full sunshine can increase Heat Index values by up to 15° F.

Heat Index	Category	Possible heat disorders for people in high risk groups
130°F or higher	Extreme Danger	Heatstroke risk extremely high with continued exposure.
105°F - 129°F	Danger	Sunstroke, Heat Cramps and Heat Exhaustion likely, Heatstroke possible with prolonged exposure and/or physical activity.
90°F - 104°F	Extreme Caution	Sunstroke, Heat Cramps and Heat Exhaustion possible with prolonged exposure and/or physical activity.
80°F - 89°F	Caution	Fatigue possible with prolonged exposure and/or physical activity.

The National Weather Service (NWS) will initiate its Heat Index Program Alert procedures when the high is expected to exceed 105° - 110° (depending on local climate) for at least two consecutive days.

The alert procedures include:

- › Adding heat index (HI) values in zone and city forecasts;
- › Issuing Special Weather Statements and/or Public Information Statements presenting a detailed discussion of (1) the extent of the hazard including HI values, (2) who is most at risk, (3) safety rules for reducing the risk;
- › Assisting state and local health officials in preparing Heat Emergency Messages in severe heat waves (meteorological information from Special Weather Statements will be included as well as more detailed medical information, advice, and names and telephone numbers of health officials); and,
- › Release of all the above information to the media and over the National Oceanic and Atmospheric Administration's (NOAA) own Weather Radio.