HEAT INDEX EXERCISE RESTRICTIONS

As we know, exercise in the heat can increase risk for exercise associated heat illness such as heat exhaustion and exertional heat stroke. In the summer months when the temperature and humidity can be at their highest point, this risk is intensified and activity modifications must be made available for middle school and high school athletes that are practicing in a hot environment.

The most accurate way to measure the heat stress on an individual is by an instrument called a Wet Bulb Globe Thermometer. This somewhat expensive instrument measures ambient temperature, humidity, wind speed, and radiant temperature among others. Due to the limited availability of these instruments at the secondary school level, the next best way to ascertain the heat stress on athletes is by using a Heat Index chart. The ambient temperature and humidity are readily available on an hourly basis from most weather services and the Heat Index can then be accurately assessed using the chart below:

	Heat Index Temperature (°F)																
		80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
	40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
	45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
	50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
5	55	81	84	86	89	93	97	101	106	112	117	124	130	137			
	60	82	84	88	91	95	100	105	110	116	123	129	137				
ומווומווא (20)	65	82	85	89	93	98	103	108	114	121	128	136					
	70	83	86	90	95	100	105	112	119	126	134						
	75	84	88	92	97	103	109	116	124	132		•					
	80	84	89	94	100	106	113	121	129								
ואכומרו אכ	85	85	90	96	102	110	117	126	135								
	90	86	91	98	105	113	122	131									
	95	86	93	100	108	117	127										
	100	87	95	103	112	121	132										

NOAA's National Weather Service

Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

Caution Extreme Caution Danger Extreme Danger

Activity modifications are then made based on the Heat Index and should guide practice schedules including the number of breaks and clothing worn.

Recommended activity modifications for practice in a hot environment are as follows:

Heat Index	Risk Level	Protective Measures
Less than 91°F	Lower (Caution)	Basic heat safety and planning. Provide at least three separate rest breaks of a minimum of four minutes each for each hour of practice. Watch at-risk athletes.
91° to 103°F	Moderate	Maximal practice time is 2 hours. <i>For</i> <i>football</i> : equipment limited to helmet, shorts, and shoulder pads. All equipment removed for conditioning. For <i>all other</i> <i>sports:</i> provide at least four separate rest breaks lasting four minutes for each hour.
103° to 125°F	High	Maximal length of practice is 1 hour. For football: helmets only. All other sports: there must be 20 minutes of breaks distributed throughout the hour.
Greater than 126-136°F	Very High to Extreme	No outdoor practice. Delay practice until cooler heat index.