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:

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

### The AHSAA mandated activity modifications for practice in a hot environment are as follows:

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