

IHSAA / IGHSAU/IHSMA/IHSSA Wet Bulb Globe Thermometer (WBGT) Heat Modification Guidance

Heat illness is the leading cause of preventable death in high school athletes. Heat production during intense exercise is 15 - 20 times greater than at rest and can raise body core temperature 1 – 2 degrees Fahrenheit every 5 minutes unless heat is dissipated.

The IHSAA, IGHSAU, IHSMA, and IHSSA, under the guidance of the IA Sports Medicine Advisory Committee, have approved the Wet Bulb Globe Thermometer (WBGT) as the recommended measurement practice and device for measuring acceptable heat/humidity levels for practices and contests. The use of WBGT is recommended throughout the calendar year when the ambient temperature is above 80 degrees (indoors or outdoors).

WBGT Reading (Region 2)	Activity Guidelines / Required Modifications for Grades 9-12
< 79.7	Normal activities 3 separate rest/water breaks (3-5 minutes each) / hour
79.8 – 84.6	Use discretion for intense / prolonged practice 3 separate rest/water breaks (4-6 minutes each) / hour Monitor at-risk athletes closely <i>Cold water immersion available – see additional info sheet</i>
84.7 – 87.6	Maximum practice time is 2 hours <i>Reduce equipment to partial uniform</i> Remove all additional equipment if conditioning (football) <i>*if WBGT rises to this level during practice, players may continue practicing in football pants</i> 4 separate rest/water breaks (4-6 minutes each) / hour Monitor at-risk athletes closely <i>Cold water immersion available – see additional info sheet</i> CONTESTS: Implement additional/extended timeouts for rest/water breaks
87.7 – 89.7	Maximum practice time is 1 hour <i>Reduce equipment to out of uniform</i> No conditioning allowed There must be 20 minutes of rest breaks distributed throughout the one hour of practice Monitor athletes closely <i>Cold water immersion available – see additional info sheet</i> CONTESTS: Consider moving start times earlier or postponing; Implement additional/ extended timeouts for rest/water and shade.
> 89.7	No (outdoor) activities Cancel or delay outdoor practices / contests until lower WBGT is recorded

Additional information: Participants should ALWAYS have unrestricted access to water / fluids

- WBGT should be measured every 30 minutes (where the activity is being held)
- The same person should monitor WBGT throughout the event
- WBGT reading at the start of practice/contest is the lowest category directions to follow, if WBGT increases to a higher category modifications will follow that category.
- Individual reactions to heat will vary per athletes and/or position/role
- Schools should have an exertional heat illness emergency action plan
- At-risk athletes should always be monitored closely.
- See Appendices for additional activity-specific recommendations

WBGT is an all-inclusive measure of heat stress in direct sunlight, which takes into account ambient temperature, humidity, sun angle, wind speed, and cloud cover (solar radiation)