## Wet Bulb Globe Temperature (WBGT)

**Wet Bulb Globe Temperature (WBGT)** is the gold standard for measuring heat stress during hot weather. This measurement comes from a Wet Bulb Globe—The WBGT device takes into account: ambient temperature, humidity, wind speed, sun angle, direct sunlight and cloud cover.

## Why WBGT and NOT heat index?

- The heat index is calculated in the shade, considering a standard/average sized person with normal core temperature, and that individual is walking at a 3.1 mph.
- As you can imagine, this is not an accurate measurement for someone who is doing an outdoor sport or a non-climate controlled activity.
- Even in warm ups for practice at a sporting event, a student athlete's body temperature rises above normal within minutes of starting.
- This is why professional athletic associations such as the NCAA, U.S. Military and OSHA no longer allow heat index as a measurement; they all now require WBGT for determining participation for hot weather activities.
- <u>Using local news weather forecasts</u>, <u>weather apps on your phone or smart device</u> **do NOT** provide an accurate temperature for where your conducting your outdoor or non climate controlled activity. They do not consider all of the important variables for your specific location that go into the WBGT reading.

## Will I end up canceling practices all the time because of this? Won't my athletes be unprepared for competitions?

- Most of the time, you will not be canceling practices but you may need to modify them to make sure athletes are heat-safe based on what the WBGT is and follow the policy.
- There are decades of research to support these WBGT procedures to prevent heat-related illnesses and events.
- Remember all high school sports and activities are going to be doing this at the same time under the same WBGT safety policy guidelines.
- There is no data to support following a WBGT policy will keep your student from being prepared for their activity.

**Do I still have to do heat acclimatization at the start of the season?** Yes, it is extremely important that acclimatization to heat takes place and you still follow the state guidelines for that in your sport or activity.

FOR THE WBGT POLICY, WHEN IS THE STARTING TIME FOR PRACTICE?

THE START TIME IS WHEN THE FIRST ATHLETE SETS FOOT ON THE FIELD, IN THE GYM, ETC. THAT TIME SHOULD BE NOTED TO MAKE SURE BREAKS FOR WATER, UPDATED WBGT READINGS AND PRACTICE END TIMES ARE ACCURATE.

What category is Iowa in for Heat Activity Guidelines?

Category 2 is where lowa is at and how we derived our numbers for our policy.



- The WBGT should be set up and allowed to acclimatize at the venue at least 15-20 minutes prior to starting the activity.
- The unit should be 3 ft off the ground and away from obstructions.
- The WBGT should be set up IN THE SUN (not in the shade) and on the turf if you are
  practicing on turf. If using the WBGT in a non-climate-controlled building such as a gym,
  switch it to indoor mode.
- The WBGT should be monitored <u>throughout the</u> event—taking new readings every 20 to 30 minutes and adjusting athletic participation or activities accordingly (WBGT activity guidelines may move up or down based on the readings—see policy chart).
- Readings should be taken by the medical personnel on-site (if available) or athletic director/administrator overseeing the event or principal and then readings and participation modifications communicated to the coaching staff before and during practices.
- Practice using the device before an event occurs needing a WBGT so you are familiar and ready to use the WBGT device.

<sup>\*\*</sup>Please refer to the WBGT Policy for further implementation and modification information