



2026

Heat & Air Quality Guidelines

Heat and Air Quality Guidelines

Implementation of these guidelines should include the following steps:

Before the Event

1 - Determine who will be involved in decision-making for heat and air quality levels. Event staff may include the person responsible for the overall event (e.g. Tournament Director), competition and scheduling (e.g. Competition Director), and/or health and safety (e.g. medical staff). Consult with local medical staff for the event to determine whether there are any state or local laws that would supersede these guidelines (use the stricter standard if required by law).

2 - Determine which tools will be used to monitor heat and air quality readings. Those might include an on-site WBGT device (e.g. Kestrel), phone apps, or websites that monitor local outdoor conditions. If using online tools, when possible, use the nearest monitoring station to measure the most localized conditions. If using an on-site WBGT device, follow the instructions for use. Note that use of a tripod is recommended, as handheld readings may be artificially high. For heat level monitoring, determine whether you are going to use the Wet Bulb Globe Temperature (WBGT) or heat index chart (see tables below).

3 - Set up a communication plan with teams before the tournament to let them know when changes will be made and communicated.

During the Event

4 - Determine the timing of readings as well as how and when changes to the schedule and game play will be communicated.

- a) Take a reading 60 and 30 minutes before the start of a round to monitor trends. Use the 30 minute reading to determine the heat level for the round. If the temp is trending upwards near a heat threshold, take another reading 15 minutes before the round. Communicate at least 15 minutes before the round whether any game modifications will be implemented for the upcoming round. Keep this cadence going throughout the day.
- b) For heat levels 0-1-2, implement the same activity and rest-Break guidelines for the entire round, even if levels fluctuate between 0-1-2 during the round. Use whatever you start the round with unless you reach Level 3.
- c) If the WBGT reading is approaching Level 3, check the reading every 15 minutes. If a reading is above the 90.0 threshold, monitor the device continuously.
 - i) If the reading stays above 90.0 for 5 minutes, implement Level 3.
 - ii) If the reading is fluctuating above and below 90.0, take 2 more readings at 5 minute intervals. If 2 of the three are above 90.0, implement Level 3.
- d) To resume play after Level 3 suspension, monitor the WBGT device at 15-30 minute intervals. If a reading drops below 90.0, monitor the device continuously.

- i) If the reading stays below 90.0 for 15 minutes, play may be restarted with the appropriate heat level precautions (likely Level 2).

Air Quality Index - Use the same approach for implementing air quality modification levels, using local monitoring stations, websites, and/or apps.

Heat Guidelines and Air Quality Guidelines are not additive. Apply the highest number and follow those guidelines. For example, if the Heat Guidelines are in level one and the AQI is in level two, apply level two procedures.

HEAT GUIDELINES (Wet Bulb)

Wet Bulb Globe Temperature (WBGT) is preferred (Table 1), but use Heat Index (Table 2) if WBGT measurements are unavailable.

WBGT is a composite measure of environmental heat stress used to gauge how hot conditions feel to the human body in direct sunlight by factoring in temperature, humidity, wind speed, sun angle, and cloud cover (solar radiation). This differs from the heat index, which takes into consideration temperature and humidity and is calculated for shady areas. Military agencies, OSHA, and many sports use the WBGT as a guide for managing activity in direct sunlight. The following table was developed by the USA Ultimate Medical Advisory Working Group, using information from standards in other sports along with knowledge of the sport of ultimate and ultimate competitions.

Table 1: USA Ultimate Wet Bulb Globe Temperature (WBGT) Guidelines		
WBGT	Heat Precaution Level	Activity and Rest-Break Guidelines
<82.0	Level 0	Normal activity
82.0-86.9	Level 1	1. One official hydration break per half. a) First-half break occurs when first team reaches 4, or when half cap is applied, whichever comes first. b) Second-half break occurs when first team scores the higher halftime score plus 4 (for example, if the halftime score was 5-4, the break occurs when the first team reaches 9) or when soft cap is applied, whichever comes first. c) Break extends the time between points by 3 minutes before the next pull (i.e. total of 4 minutes 20 seconds).
87.0-89.9	Level 2	1. One official hydration break per half. a) First-half break occurs when first team reaches 4, or when half cap is applied, whichever comes first. b) Second-half break occurs when first team reaches halftime score plus 4 or when soft cap is applied, whichever comes first. c) Break extends the time between points by 4 minutes before the next pull (i.e. total of 5 minutes 20 seconds). 2. Time between each point is extended by 1 minute (i.e. adds 60 seconds to existing 80 second period). 3. Maximum game length is 90 minutes. Rounds scheduled for longer will be shortened to 90 minute hard cap. Soft cap will be adjusted to 20 minutes before hard cap. 4. Minimum time between rounds is 30 minutes. Schedules with less time will be adjusted and communicated.
>=90.0	Level 3	Play suspended. Games rescheduled for cooler conditions (i.e. <90.0 WBGT).

HEAT GUIDELINES (Heat Index)

WBGT is preferred (Table 1), but use Heat Index (Table 2) if WBGT measurements are unavailable. If you don't have a device to measure WBGT, use the temperature and relative humidity measurements for your site, along with the NOAA Heat Index Chart (Table 3) to convert to a Heat Index number. Then follow the guidelines in Table 2.

Table 2: USA Ultimate Heat Index Guidelines		
Heat Index	Heat Precaution Level	Activity and Rest-Break Guidelines
<80.0	Level 0	Normal activity
80.0-89.9	Level 1	1. One official hydration break per half. a) First-half break occurs when first team reaches 4, or when half cap is applied, whichever comes first. b) Second-half break occurs when first team scores the higher halftime score plus 4 (for example, if the halftime score was 5-4, the break occurs when the first team reaches 9) or when soft cap is applied, whichever comes first. c) Break extends the time between points by 3 minutes before the next pull (i.e. total of 4 minutes 20 seconds).
90--104.9	Level 2	1. One official hydration break per half. a) First-half break occurs when first team reaches 4, or when half cap is applied, whichever comes first. b) Second-half break occurs when first team reaches halftime score plus 4 or when soft cap is applied, whichever comes first. c) Break extends the time between points by 4 minutes before the next pull (i.e. total of 5 minutes 20 seconds). 2. Time between each point is extended by 1 minute (i.e. adds 60 seconds to existing 80 second period). 3. Maximum game length is 90 minutes. Rounds scheduled for longer will be shortened to 90 minute hard cap. Soft cap will be adjusted to 20 minutes before hard cap. 4. Minimum time between rounds is 30 minutes. Schedules with less time will be adjusted and communicated.
>=105.0	Level 3	Play suspended. Games rescheduled for cooler conditions (i.e. <90.0 WBGT).

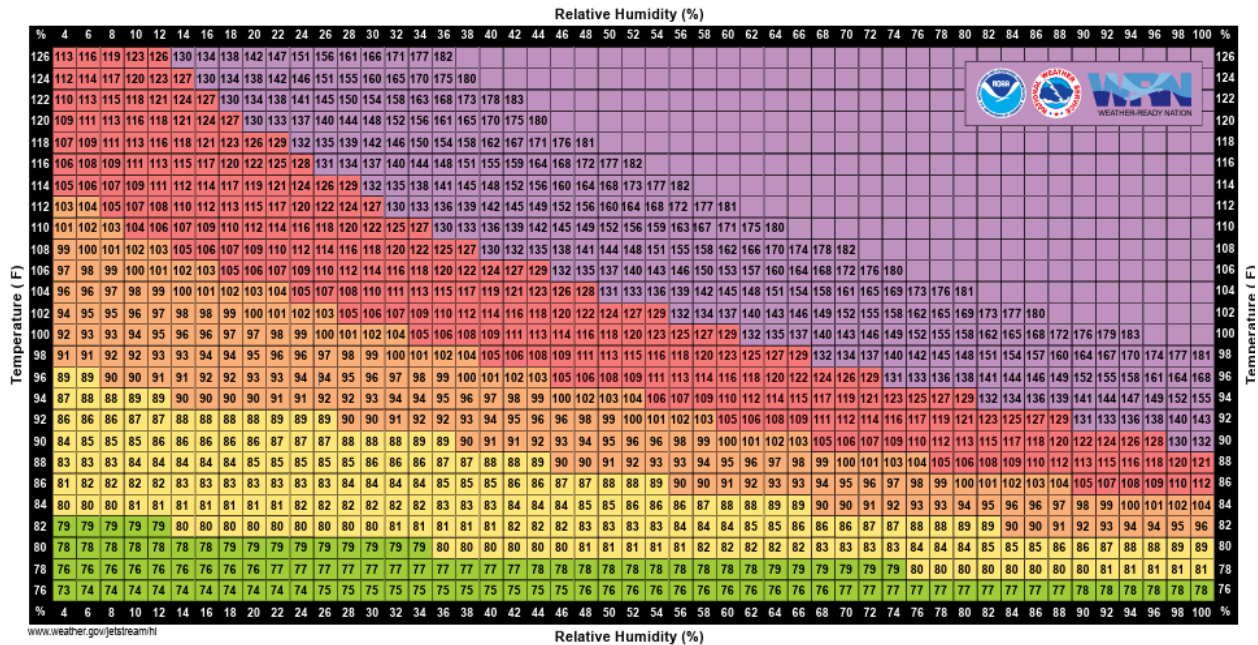
Table 3: NOAA Heat Index Chart

Heat Index Chart

The 'Heat Index' is a measure of how hot weather "feels" to the body. This table uses relative humidity and air temperature to produce the "apparent temperature" or the temperature the body "feels". These values are for shady locations only. Exposure to full sunshine can increase heat index values by up to 15°F. Also, strong winds, particularly with very hot, dry air, can be extremely hazardous as the wind adds heat to the body.

Temperature & Relative Humidity

Classification	Heat Index/Apparent Temperature	General Effect on People in High Risk Groups
Extremely Hot	≥130°F	Heat/Stroke HIGHLY LIKELY with continued exposure
Very Hot	105°F - 129°F	Stroke, heat cramps, or heat exhaustion LIKELY, and heatstroke POSSIBLE with prolonged exposure and/or physical activity
Hot	90°F - 104°F	Stroke, heat cramps, or heat exhaustion POSSIBLE with prolonged exposure and/or physical activity
Very Warm	80°F - 89°F	Fatigue POSSIBLE with prolonged exposure and/or physical activity



AQI GUIDELINES

Table 4: USA Ultimate Air Quality Index Guidelines (https://www.airnow.gov)		
AQI	Air Precaution Level	Activity and Rest-Break Guidelines
≤50	Level 0	Normal Activity
51-100	Level .5	- Sensitive athletes* - Reduce heavy or prolonged exertion - Consider removing from competition - Closely monitor all athletes for respiratory difficulty**
101 – 150	Level 1	- Sensitive athletes* - Avoid outdoor activity - Closely monitor all athletes for respiratory difficulty** - One official respiration break per half. - First-half break occurs when first team reaches 4, or when half cap is applied, whichever comes first. - Second-half break occurs when first team reaches the higher half time score plus 4 (for example, if the halftime score was 5-4, the break occurs when the first team reaches 9) or when soft cap is applied, whichever comes first. - Break extends the time between points by 4 minutes before the next pull (i.e. total of 5 minutes 20 seconds).
151 – 200	Level 2	- Level 2 Recommendations and... - Time between each point is extended by 1 minute (i.e. adds 60 seconds to existing 80 second period). - Maximum game length is 90 minutes. Rounds scheduled for longer will be shortened to 90-minute hard cap. Soft cap will be adjusted to 20 minutes before hard cap. - Minimum time between rounds is 30 minutes. - Schedules with less time will be adjusted & communicated.
≥201	Level 3	Outdoor play suspended. Games rescheduled for indoor venue or improved conditions (i.e. <200 AQI).

***Athletes with asthma should follow their asthma action plans and keep their quick-relief medicine handy.**

****Symptoms of asthma include coughing, wheezing, difficulty breathing, and chest tightness. Even athletes who do not have asthma could experience these symptoms. If symptoms occur: The athlete might need to take a break, do a less intense activity, stop all activity, go indoors, or use quick-relief medicine as prescribed. If symptoms don't improve, get medical help.**

The EPA has an AirNow app available for smartphones that provides AQI readings.