

### 30. Heat Acclimatization

Before participating in the preseason practice period, all student-athletes should undergo a pre-participation medical examination administered by a qualified medical professional. The examination can identify predisposing factors related to a number of safety concerns, including the identification of youths at particular risk for exertional heat illness.

The heat-acclimatization period is defined as the initial 14 consecutive days of preseason practice for all student athletes. The goal of the acclimatization period is to enhance exercise heat tolerance and the ability to exercise safely and effectively in warm to hot conditions. This period should begin on the first day of practice or conditioning before the regular season. Any practices or conditioning conducted before this time should not be considered part of the heat-acclimatization period.

Regardless of the conditioning program and conditioning status leading up to the first formal practice, all student athletes (including those who arrive at preseason practice after the first day of practice) should follow the 14-day heat-acclimatization plan. During the preseason heat acclimatization period, if practice occurs on 6 consecutive days, student-athletes should have 1 day of complete rest (no conditioning, walk-throughs, practices, etc).

Days on which athletes do not practice due to a scheduled rest day, injury, or illness do not count toward the heat-acclimatization period. For example, an athlete who sits out the third and fourth days of practice during this time (e.g., Wednesday and Thursday) will resume practice as if on day 3 of the heat-acclimatization period when returning to play on Friday.

#### **Definitions**

A ***practice*** is defined as the period of time a participant engages in a coach-supervised, school approved, sport or coaching related physical activity. Each individual practice should last no more than three (3) hours. Warm-up, stretching, and cool down activities are part of the 3-hour practice time. Regardless of ambient temperature conditions, all conditioning and weight-room activities should be considered part of practice.

A ***walk-through*** is defined as a teaching opportunity with the athletes not wearing protective equipment (e.g., helmets, shoulder pads, catcher's gear, shin guards) or using other sport-related equipment (e.g., footballs, blocking sleds, pitching machines, soccer balls, marker cones). The walk-through is not part of the 3-hour practice period, can last no more than 1 hour per day, and does not include conditioning or weight-room activities.

A ***recovery period*** is defined as the time between the end of 1 practice or walk-through and the beginning of the next practice or walk-through. During this time, athletes should rest in a cool environment, with no sport or conditioning related activity permitted (e.g., speed or agility drills, strength training, conditioning, or walk-through). Treatment with the athletic trainer is permissible.

#### **Requirements**

- A. Days 1 through 5 of the heat-acclimatization period consist of the first 5 days of formal practice. During this time, athletes may not participate in more than one (1) practice per day.
- B. If a practice is interrupted by inclement weather or heat restrictions, the practice should recommence once conditions are deemed safe. Total practice time should not exceed 3 hours in any one (1) day.
- C. A 1-hour maximum walk-through is permitted during days 1–5 of the heat-acclimatization period; however, a 3-hour recovery period should be inserted between the practice and walk-through (or vice versa).
- D. During days 1–2 of the heat-acclimatization period, in sports requiring helmets or shoulder pads, a helmet is to be the only protective equipment permitted. During days 3–5, helmets and shoulder pads are permitted. Beginning on day 6, all protective equipment may be worn and full contact may begin.

- i. On days 3–5, contact with blocking sleds and tackling dummies may be initiated.
  - ii. Full-contact sports: 100% live contact drills should begin no earlier than day 6.
- E. A minimum of 1 rest day shall occur following 6 consecutive practice days.
- F. Beginning no earlier than day 6 and continuing through day 14, double-practice days must be followed by a single-practice day. On single-practice days, 1 walk-through is permitted, separated from the practice by at least 3 hours of continuous rest. When a double-practice day is followed by a rest day, another double-practice day is permitted after the rest day.
- G. On a double-practice day, neither practice shall exceed 3 hours in duration, nor shall student-athletes participate in more than 5 total hours of practice. Warm-up, stretching, cool-down, walk through, conditioning, and weight-room activities are included as part of the practice time. The two practices should be separated by at least 3 continuous hours in a cool environment.

Because the risk of exertional heat illnesses during the preseason heat-acclimatization period is high, it is strongly recommended that an athletic trainer be on site before, during, and after all practices.

### 31. **Lightning**

At all UHSAA sanctioned events that are held in outdoor venues the host school shall designate an individual to monitor weather. This individual shall meet with the head official for the event prior to the contest. At that meeting the following will be discussed:

- A. The Guidelines on Handling Contests During Lightning Disturbances which appears in all NFHS Rules Books.
- B. Responsibilities of the individual charged with monitoring the weather and those of the head official relative to possible weather disturbances.
- C. Contingencies regarding possible suspensions of play due to lightning.

The head official in consultation with the individual assigned to monitor weather will affect any suspension due to lightning.

### 32. **UHSAA State Event Guidelines**

Those attending or participating in UHSAA State Events shall adhere to the “UHSAA State Event Guidelines” outlined in the chart on the following page.

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## **Cold Water Immersion**

If exertional heat stroke is suspected, onsite cooling using cold water immersion before transport to the hospital. Cold water immersion tubs are required for onsite cooling.

Cold water immersion (usually understood as circulating, ice-water immersion) is considered the most effective strategy for rapid treatment of exertional heat stroke. The goal in any exertional heat stroke case should be to cool the athlete down to 102 degrees Fahrenheit within the first 30 minutes after collapse, prior to Emergency Medical Services (EMS) transport.

Accurate temperature measurement, via rectal thermometry, (PERFORMED BY HEALTH CARE PERSONNEL) is best practice and recommended. Exertional heat stroke is suspected if body temperature is higher than 105 degrees Fahrenheit and signs of central nervous system dysfunction are present (i.e. disorientation, confusion, dizziness, irritability, headache, inability to walk, loss of balance or muscle function, vomiting, diarrhea, loss of consciousness).

Working with EMS personnel toward a policy of "cool first, transport second" is the standard for suspected exertional heat stroke. Cooling an athlete via cold water immersion, if performed immediately, (HAS BEEN PROVEN TO) provides a 100% survival rate.

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Schools offering football have received Wet Bulb Globes (WBGT) from the NFHS/UHSAA and must be used to measure heat stress during hot weather in all outdoor activities. The UHSAA encourages all schools to have a WBGT for student safety. The WBGT device takes into account ambient temperature, humidity, wind speed, sun angle, direct sunlight and cloud cover. WBGT provides vital information for schools to use in helping administrators to determine if conditions are appropriate to hold activity programs during hot weather.

This link: [WBGT/NFHS](#) will give your school the information you need to comply with the WBGT effort.

This link: [WBGT/Video](#) is a video from the NFHS showing how-to information for your Kestrel 5400 Heat Stress Tracker.

***Please refer to the WBGT chart on the next page for Activity Guidelines.***

# Heat Acclimaization - Wet Bulb Info

Cat 3	Cat 2	Cat 1	Activity Guidelines
<82.0°F <27.8°C	<79.7°F <26.5°C	<76.1°F <24.5°C	Normal Activities – Provide at least three separate rest breaks each hour with a minimum duration of 3 min each during the workout.
82.2°-86.9°F 27.9°-30.5°C	79.9°-84.6°F 26.6°-29.2°C	76.3°-81.0°F 24.6°-27.2°C	Use discretion for intense or prolonged exercise. Provide at least three separate rest breaks each hour with a minimum duration of 4 min each.
87.1°-90.0°F 30.6°-32.2°C	84.7°-87.6°F 29.3°-30.9°C	81.1°-84.0°F 27.3°-28.9°C	Maximum practice time is 2 h. For Football: Players are restricted to helmet, shoulder pads, and shorts during practice. If the WBGT rises to this level during practice, players may continue to work out wearing football pants without changing to shorts. For All Sports: Provide at least four separate rest breaks each hour with a minimum duration of 4 min each.
90.1°-91.9°F 32.2°-33.3°C	87.8°-89.6°F 31.0°-32.0°C	84.2°-86.0°F 29.0°-30.0°C	Maximum practice time is 1 h. For Football: No protective equipment may be worn during practice, and there may be no conditioning activities. For All Sports: There must be 20 min of rest breaks distributed throughout the hour of practice.
≥92.1°F ≥33.4°C	≥89.8°F ≥32.1°C	≥76.3°-81.0°F ≥24.6°-27.2°C	No outdoor workouts. Delay practice until a cooler WBGT is reached.

## Reminders

- Be sure to know what category your venue is in.
- Set up the WBGT 15-30 minutes prior to the activity at a height of 3 to 5 feet
- Place in a sunny location at the field/venue on the playing surface away from structures the may block wind. The can impact the WBGT reading.
- Check WBGT reading no more than 30 minutes apart.
- Activity guideline are listed on the color code chart. A activity guidelines should be adjusted accordingly, if WBGT reading moves into a higher risk category for greater than 10 minutes.
- Discontinue all outdoor activities if any WBGT reading reaches  $\geq 89.8^{\circ}\text{F}$  or  $\geq 32.1^{\circ}\text{C}$  in Category 2,  $\geq 86.2^{\circ}\text{F}$  or  $\geq 30.1^{\circ}\text{C}$  in Category 1 (Black).
- Check the National Weather Service predicted WBGT for the next practice and plan ahead.

*For more information go to [uata.org](http://uata.org)*

