**REGULATION** **Black Horse Pike Regional School District**

**Section: Program**

**2431.3 Practice and Pre-Season Heat-Acclimatization for School –Sponsored Athletic and Extra –Curricular Activities**
**Date Created: June 2019**

# 2431.3 PRACTICE AND PRE-SEASON HEAT-ACCLIMATIZATION FOR SCHOOL-SPONSORED ATHLETIC AND EXTRA –CURRICULAR ACTIVITIES

**A. Pre-season Heat Acclimatization**

**1. Definitions:**

**a. 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 will begin on the first NJSIAA approved practice start date. Any practices or conditioning conducted before this time will not be considered a 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) must 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.).**

**b. 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.**

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

**conditioning and weight-room activities should be considered part of practice.**

**d. 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, lacrosse sticks, 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.**

**e. A recovery period is defined as the time between the end of one 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.**

**f. Procedure for the 14-Day Heat Acclimatization Period Core Principles:**

**1. 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 1 practice per day.**

**2. 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 1 day.**

**3. 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).**

**4. During days 1–2 of the heat-acclimatization period, in sports requiring helmets or shoulder pads, a helmet should be the only protective equipment permitted (goalies, as in the case of field hockey and related sports, should not wear full protective gear or perform activities that would require protective equipment). During days 3–5, only helmets and shoulder pads should be worn. Beginning on day 6, all protective**

**equipment may be worn, and full contact may begin. A. Football only: On days 3–5, contact with blocking sleds and tackling dummies may be initiated. B. Full-contact sports: 100% live contact drills should begin no earlier than day 6.**

5. **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.**

6. **On a double-practice day, neither practice should exceed 3 hours in duration, nor should any 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 2 practices should be separated by at least 3 continuous hours in a cool environment.**

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

## B. Heat Participation

### 1. Introduction

a. **History shows that most exertional heat stroke deaths occur during August; however, athletes will be at risk whenever in the presence of elevated ambient temperatures with high humidity. For many years, coaches have utilized the Heat Index to determine safe conditions for exercise in a hot environment. Evidence-based research, first initiated with the military, proves that Wet Bulb Globe Temperature (WBGT) should be the environmental monitoring measure during athletic participation in the heat.**

b. **The Heat Index was developed as a measurement of ambient temperatures and relative humidity while resting in the shade. It is intended to provide outdoor restrictions for the elderly and adolescents during times of elevated temperatures. It is not relevant to**

**an athletic activity settings. However; the WBGT is a measurement of ambient temperature, relative humidity, radiant heat from the sun and wind speed. When outdoor activities are conducted in the direct sun, the WBGT is the most pertinent to use. Although read in degrees, the WBGT does not reflect degrees of air temperature. A WBGT reading of 92 degrees F may equate to a Heat Index reading of 104-105 degrees F.**

**2. Method**

**a. The NJSIAA Heat Participation Regulation will be utilized in conjunction with the NJSIAA Pre-Season Heat Acclimatization. Monitoring the environmental conditions through the WBGT and making the appropriate activity modifications is an effective preventative measure in reducing the risk of exertional heat stroke. The athletic trainer, certified designee or individual (e.g. coach) appointed by the athletic director must use a scientifically-reliable WBGT measuring device and take an on-site reading 30 minutes prior to activity and a minimum of every hour during activity. Readings must be recorded on the NJSIAA Heat Participation Regulation Record Chart. All corresponding modifications must also be recorded on the chart.**

**References:**


**https://ksi.uconn.edu/prevention/wet-bulb-globe-temperature-monitoring/#**

**http://ksi.uconn.edu/high-school-state-policies/wbgt-policies/**

**https://ksi.uconn.edu/prevention/heat-acclimatization/**


## GUIDELINES FOR HEAT PARTICIPATION ACTIVITY

**Schools must follow this best practice regulation when conducting outdoor practices and games in all sports. The regulation follows modified guidelines of the American College of Sports Medicine, and is specific to New Jersey, in regard to:**

1. **The scheduling of practices during times of various Wet Bulb Globe Temperature (WBGT) levels**
2. **The ratio of workout time to time allotted for rest and hydration during times of various WBGT levels**
3. **The WBGT levels which will result in practices and contests being modified or terminated.**

**An instrument scientifically approved to measure WBGT must be utilized at each practice and game. WBGT readings must be taken on the practice and game site a minimum of every hour, beginning 30 minutes before the beginning of practice and game. All readings must be recorded, or data logged (e.g. written or electronic form). In the event that a modification or cancellation was required, documentation using the WBGT NJSIAA Heat Participation Regulation Record Chart must be completed.**

| WBGT READING | Flag | Risk for Heat Illness | ACTIVITY GUIDELINES AND REST BREAK GUIDELINES |
|---|---|---|---|
| Under 80.0 F | Green | Very Low | Normal activities – Provide at least three separate rest breaks each hour of minimum duration of 3 minutes each during workout. |
| 80.0 F - 85.0 F | Yellow | Low | Use discretion for intense or prolonged exercise; watch at-risk players carefully; Provide at least three separate rest breaks each hour with a minimum duration of 4 minutes each. |
| 85.1 F - 88.0 F | Orange | Moderate | Maximum practice time is 2 hours, For Football, Lacrosse and Field Hockey: All helmets and shoulder pads must be removed for practice and conditioning activities. If the WBGT rises to this level during practice, football players may continue to work out wearing football pants without changing into shorts. For All Sports: provide at least four separate rest breaks each hour with a minimum duration of 4 minutes each. |
| 88.1 F - 90.0 F | Red | High | Maximum length of practice is 1 hour. For Football, Lacrosse and Field Hockey: No protective equipment may be worn during practice and there may be no conditioning activities. For All Sports: there must be 20 minutes of rest breaks distributed throughout the hour of practice. |
| Over 90 F | Black | Very High | NO OUTDOOR WORKOUTS. Delay practice until a cooler WBGT level is reached. |

**The NJSIAA WBGT Guidelines are region-specific to New Jersey and are based upon evidence-based practice and a collaborative effort between the Korey Stringer Institute and the NJSIAA; therefore, should not be compared with any other WBGT guidelines or templates.**

## GUIDELINES FOR HYDRATION AND REST BREAKS

1. **Rest time must involve unrestricted access to fluids (e.g. water or electrolyte beverages).**

2. **With sports requiring helmets (e.g. football, lacrosse, field hockey), the helmets must be removed during rest time.**

3. **The site of the rest time must be in a shaded area.**

4. **When the WBGT reading is >85.0°F a. Ice towels, spray bottles filled with ice water or equivalent must be available to aid in the cooling process within the shaded area.**

**Definitions**

1. **Game: any NJSIAA sanctioned event.**
2. **Practice: the period of time that a participant engages in coach-supervised, school-approved sport or conditioning-related activity. Practices are timed from the time the players report to the field until they leave.**
3. **Walk through: this period of time shall last no more than one hour and is not considered to be a part of the practice time regulation and may not involve conditioning or weight-room activities. Players may not wear protective equipment.**

**Implementation Note to be included in NJSIAA Handbook:**

**The aforementioned regulation must be carried out by the athletic trainer, certified designee or individual as appointed by the athletic director which includes a coach or any individual responsible or sharing duties for making decisions concerning the implementation of modifications or cancellation of practices and games based on WBGT.**

**Compliance note to be included in NJSIAA Handbook:**

**In accordance with the current school compliance checks, the compliance monitors checklist will include items specific to:**

- **Presence of a WBGT device**
- **Documentation of all practices and games requiring modification on the NJSIAA Heat Participation Regulation Record Chart**
- **Proof of written and signed off Heat Participation Regulation document**

## COLD WATER IMMERSION TUB GUIDELINES

**All schools participating in interscholastic athletics must have a comprehensive, detailed Emergency Action Plan (EAP), including heat injury. When treating a potential Exertional**

**Heat Stroke (EHS), schools must be properly prepared and equipped to initiate Cold Water Immersion (CWI) or other approved cooling technique. Cooling techniques must be implemented immediately, and concurrently EMS should be contacted. This must be followed during all summer conditioning, preseason practices/contests on school grounds, or when a coach, paid or otherwise, is present. This includes the 1st 21 days of fall practice, and any day the temperature is greater than 80 Degrees Fahrenheit WBGT.**

| WBGT READING | Flag | COLD WATER IMMERSION TUB GUIDELINES |
|---|---|---|
| Under 80.0 Degrees Fahrenheit | Green | Mandatory alternative cooling measures of a cooler with ice and towels or a tarp (taco/burrito method) must be available at the practice, game and event site. |
| 80.0 - 85.0 Degrees Fahrenheit | Yellow | It is required a 150-gallon cold water immersion tub or a tarp (taco/burrito method) must be filled with water temperature of less than 60°F and accessible for cooling within 5-10 minutes of the practice/contest site. Remove external clothing/equipment prior to cooling or immediately after entering tub. Aggressively stir water during cooling process. |
| 85.1 - 88.0 Degrees Fahrenheit | Orange | It is required a 150-gallon cold water immersion tub or a tarp (taco/burrito method) must be filled with water temperature of less than 60°F and accessible for cooling within 5-10 minutes of the practice/contest site. Remove external clothing/equipment prior to cooling or immediately after entering tub. Aggressively stir water during cooling process. |
| 88.1 – 90.0 Degrees Fahrenheit | Red | It is required a 150-gallon cold water immersion tub or a tarp (taco/burrito method) must be filled with water temperature of less than 60°F and accessible for cooling within 5-10 minutes of the practice/contest site. Remove external clothing/equipment prior to cooling or immediately after entering tub. Aggressively stir water during cooling process. |
| Over 90 Degrees Fahrenheit | Black | NO OUTDOOR WORKOUTS. Delay practice until a cooler WBGT level is reached. If the WBGT rises to this level during practice, it is required a 150-gallon cold water immersion tub (or a tarp (taco/burrito method) must be filled with water temperature of less than 60°F and accessible for cooling within 5-10 minutes of the practice/contest site. Remove external clothing/equipment prior to cooling or immediately after entering tub. Aggressively stir water during cooling process. |

**TREATMENT OF EXERTIONAL HEAT STROKE If the athletic trainer/medical staff is onsite, utilize the principle of Cool First, Transport Second. When cooling, use CWI or other approved cooling technique, until core temperature is at 103°F. If the athletic trainer/medical staff is not onsite, cool immediately until the athlete starts to shiver, or for a minimum of 20 minutes based upon the known cooling rate of 1 degree per 3 minutes. If athletic trainer/medical staff is not present, EMS assumes control of the EHS patient upon arrival and continues cooling for the minimum of 20 minutes or until rectal temperature is obtained.**

**Adopted:**

**2nd Reading: 22 August 2019**