

Template Exertional Heat Illness Policy & Procedures

Policy Area: Environmental Safety	Subject: Exertional Heat Illness
Title of Policy: Exertional Heat illness	Number: (This is a numbering system used by the organization)
Effective Date: (Date policy is to be implemented)	Page Number: (x of x)
Approved Date: (Date when policy was approved)	Approved By: (This area may contain a routing list of individuals who must review and approve)
Revision Date: (Date of most recent revision)	

I. Purpose of policy:

Exertional heat illness includes exercise-associated muscle cramps, heat syncope, heat exhaustion, and exertional heat stroke (EHS). Current best practice guidelines suggest that the risk of exertional heat injuries can be minimized with heat acclimatization and diligent attention to monitoring individuals participating in activities that place them at a higher risk for these types of injuries.¹ In the event an athlete sustains a heat illness, immediate and proper treatment is needed.

National governing bodies, such as the National Federations of High School Associations, National Collegiate Athletic Association (NCAA) and numerous state athletic/activity associations, have published guidelines for the prevention, monitoring and treatment of exertional heat illnesses. In addition, national authorities such as the National Athletic Trainers' Association and the Korey Stringer Institute have published research to support best practices in this area. The development of the organization's heat acclimatization guidelines will be based on the current best practice documents.

¹Casa DJ, Demartini JK, Bergeron MF, et al. National Athletic Trainers' Association Position Statement: Exertional Heat Illnesses. *Journal of Athletic Training*. 2015;50(9):986-1000.

II. Policy statement:

This policy describes the best practice procedures for the prevention, monitoring, and when necessary, the treatment of exertional heat illnesses for students/athletes, faculty and staff of **[Organization Name]**.

This policy will be a living, working document, that is continually reviewed and updated yearly as the organization and our community changes.

III. Definitions:

- *Acclimatization* – The process of gradually increasing the intensity of activity in a progressive manner that improves the body's ability to adapt to and tolerate exercise in the heat.
- *Wet Bulb Globe Temperature* – The WBGT is a measurement tool that uses ambient temperature, relative humidity, wind, and solar radiation from the sun to get a comprehensive measure that can be used to monitor environmental conditions during exercise. WBGT is different than heat index, as it is a more comprehensive measurement of environmental heat stress on the body.
- *Non-Practice Activities* – Activities that include meetings, injury treatment, and film study.
- *Practice* – the period of time that a student-athlete engages in coach-supervised, school approved sport or conditioning related-activity. Practice time includes from the time the players report to the field until they leave.
- *Walk Through* – A period of time where players are reviewing positional strategy and rehearsing plays. Players do not experience contact and thus they do not wear equipment and the intensity of the activity is minimal often involving walking. This period of time shall last no more than one hour. It is not considered part of the practice time regulation. It may not involve conditioning or weight room activities. Players may not wear protective equipment during the walk through.
- *Recovery Time* – This period of time is defined as non-activity time outside of practices or games. NO ACTIVITY, including non-practice activity, can occur during this time. Proper recovery should occur in an air-conditioned facility, when possible and usually is a minimum of 3 hours in duration.

- *Rest Breaks* – This period of time occurs during practice, and is a non-activity time that is in a ‘cool zone’ out of direct sunlight.
- *Exertional Heat Stroke (EHS)*– Defined as having a rectal temperature over 104°F-105°F (40.5°C), and central nervous system dysfunction (e.g. irrational behavior, confusion, irritability, emotional instability, altered consciousness, collapse, coma, dizzy, etc.).
- *Cooling Zone*- An area out of direct sunlight with adequate air flow to assist in cooling. A cold-water or ice tub and ice towels should be available to immerse or soak a patient with suspected heat illness This may be outdoors or indoors depending on proximity to field.
- *Qualified Health Care Professional (QHP)* - As defined by the American Medical Association (AMA), “is an individual who is qualified by education, training, licensure/regulation (when applicable), and facility privileging (when applicable) who performs a professional service within his/her scope of practice and independently reports that professional service.”
- *Hypohydration*- (reduced hydration status) is a deficit of body water that is caused by acute or chronic dehydration.
- *Central Nervous System dysfunction*- includes any sign or symptom that the central nervous system is not working properly, including: dizziness, drowsiness, irrational behavior, confusion, irritability, emotional instability, hysteria, apathy, aggressiveness, delirium, disorientation, staggering, seizures, loss of consciousness, coma, etc.

IV. Scope

This policy applies to all staff members (e.g., QHPs, athletic administrators, coaches, strength and conditioning staff, school administrators, advisors) of **[School Name]** who are associated with activities where heat illness poses a risk, including but not limited to, outdoor and indoor activities where high temperature and specifically high humidity environmental risks are present (e.g., athletics, intramurals, course instruction, marching band).

V. Procedures

Prevention

Pre-participation history and physical exam

1. A thorough medical history will be gathered (history of heat illness, sickle cell trait/disease, etc.). See organization’s Pre-participation examination policy.
2. Individuals with risk factors will be identified and counseled (see table below):

Risk Factors for Heat Illness	
<i>Intrinsic</i>	<i>Strategies to Minimize Risk</i>
High intensity exercise	Gradually phase in exercise and conditioning
Fever or illness	Monitor and remove at risk athletes as necessary
Dehydration	Educate coaches/athletes on proper hydration Provide adequate access to water
Overweight/obesity	Gradually phase in exercise and conditioning
Lack of heat acclimatization	Follow heat acclimatization program
Medications (antihistamines, diuretics, ADHD drugs)	Monitor and remove at risk athletes as necessary
Skin disorder (sunburn or malaria rubra)	Monitor athletes closely
Predisposing medical conditions	Monitor and remove at risk athletes as necessary
<i>Extrinsic</i>	<i>Strategies to Minimize Risk</i>
High ambient temperature, solar radiation or humidity	Avoid exercise in hotter parts of the day
Heavy gear or equipment	Gradually introduce equipment
Poor practice design	Educate coaches regarding strategies to minimize risk

3. The athletic trainer **[or persons responsible]** will be notified of individuals with pre-existing conditions that place the individual at risk of exertional heat illness.
4. As necessary, coaches are notified of individuals at higher risk.

Environmental Monitoring and Activity Modification/Cancellation

1. Environmental monitoring will occur utilizing a WBGT device **[insert school device here]**.

2. Environmental monitoring will occur any time it is warm outside (i.e. over 70°F).
3. Environmental monitoring and activity modifications may be necessary for certain types of indoor facilities that are not climate controlled or poorly climate controlled.
4. Monitoring of WBGT will occur every 30 minutes beginning at the scheduled practice time.
 - a. Environmental monitoring will be conducted onsite at **[insert school specific protocol for where WBGT will be measured – should be a location that represents all playing surfaces]**.
 - b. The WBGT will be measured approximately 3-4’ from the ground.
 - c. The WBGT device will be exposed to the environment for at least 15 minutes **[revise if device calibration is different]**.
 - d. **[insert WHO (athletic trainer, athletic director, coach) will monitor the WBGT] .**
 - e. **[insert WHO (athletic trainer, athletic director, coach) will make the modification/cancelation of activity]**.
 - f. All environmental monitoring will be recorded **[insert school specific recording methods here – stored within device, stored in phone, hard copy record sheet, etc. If hard copy, add “will be recorded on a hard copy log and stored in the AT facility” (Appendix A)]**.
5. Modifications will be made in accordance with the best practice guidelines for our region. We are in **[category X]**, therefore we will follow the activity guidelines for that region.
 - a. *To find what region/category your school is in, please read the Grundstein et al. Regional heat safety thresholds for athletes in the contiguous United States. Applied Geography, 2015 manuscript (https://ksi.uconn.edu/wp-content/uploads/sites/1222/2018/08/RegionalWBGT_2015_AppliedGeography.pdf)*
 - b. *The table below shows the specific modifications that will be made for each flag zone (green, yellow, orange, red, black).*
 - c. *Delete the categories that do not apply to you for a clean table*
6. All rest breaks will be in shaded locations.
7. Modifications are meant to be fluid, meaning if the environment gets more oppressive, the modifications get stricter. However, if environmental conditions improve, the modifications will be in line with the new environmental conditions.

Cat 3	Cat 2	Cat 1	Activity Guidelines
< 82.0	< 79.7	< 76.1	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	79.9 - 84.6	76.3 - 81.0	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	84.7 - 87.6	81.1 - 84.0	Maximum practice time is 2 h. <u>For Football</u> : 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. <u>For All Sports</u> : Provide at least four separate rest breaks each hour with a minimum duration of 4 min each.
90.1 - 91.9	87.8 - 89.6	84.2 - 86.0	Maximum practice time is 1 h. <u>For Football</u> : No protective equipment may be worn during practice, and there may be no conditioning activities. <u>For All Sports</u> : There must be 20 min of rest breaks distributed throughout the hour of practice.
≥ 92.1	≥ 89.8	≥ 86.2	No outdoor workouts. Delay practice until a cooler WBGT is reached.

Acclimatization

1. As described in the scope section, this acclimatization protocol applies to ALL sports and all types of physical activity.
2. The heat acclimatization process will include 10 training sessions over 14 consecutive days. See **Appendix B** for a visual representation of the heat acclimatization protocol.
3. Days 1 through 6 of the heat acclimatization period consists of the first days of formal practice. During this time, athletes may not participate in more than 1 practice per day.
 - A. If a practice is interrupted by inclement weather or heat restrictions, the practice will recommence once conditions are deemed safe. Total practice time will not exceed 3 hours in a single day.
 - B. A 1-hour maximum walk-through is permitted during days 1–6 of the heat acclimatization period. However, a 3-hour recovery period will be inserted between the practice and walk-through (or vice versa).
 - C. ****NOTE:** all recovery periods must occur in a cool (e.g., indoor, air-conditioned) environment.
4. On days 1-7, the single practice must not exceed 120 minutes
5. Endurance sports,
 - A. Training should be based on relative intensity (i.e., same perceived exertion or percentage of maximum heart rate).
6. Equipment-laden sports,
 - A. During days 1–2 of the heat acclimatization period, in sports requiring helmets or shoulder pads, a helmet will be the only protective equipment permitted (goalies, as in the case of field hockey and related sports, will not wear full protective gear or perform activities that would require protective equipment).
 - B. During days 3–5, only helmets and shoulder pads will be worn.
 - C. Beginning on day 6, all protective equipment may be worn.
7. Beginning no earlier than day 7 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.
8. On day 7, a double-practice day may occur. However, neither practice will exceed 2 hours (120m) in duration, and student-athletes will not participate in more than 4 hours total of practice.
9. On days 8+, a double-practice day, neither practice will exceed 2.5 hours in duration, and student-athletes will not participate in more than 5 (150m) total hours of practice. Warm-up, stretching, cool-down, walk-through, conditioning, and weight room activities are included as part of the practice time.
 - A. The 2 practices will be separated by at least 3 continuous hours of rest in a cool environment.
10. For all practices with all sports, no more than 2 practices are allowed in a day.
11. Following 6 consecutive days of activity, athletes must have one complete day of rest.
12. Because the risk of exertional heat illnesses during the preseason heat acclimatization period is high, the athletic trainer must be on site before, during, and after all practices.

Hydration

1. Hypohydration represents a continuum from both a clinical perspective (mild = 1% to 5%, moderate= 5% to 10%, and severe= 10% body mass deficit) and an athletic perspective (mild= 1-3%, moderate=3-5% and severe=5% deficit).

Assessing Hydration Status:

1. To ensure that athletes are hydrated prior to exercise a pre- and post-activity, measurement of bodyweight will be recorded whenever possible.
 - a. Hydration before exercise will be maintained within + or - 1% of body mass compared to baseline values. A pre-activity hydration status of >3% body mass loss is associated with increased risk for heat illness

therefore, if an individual is moderately dehydrated >3% body mass loss the individual will not be allowed to practice.

- b. Post exercise body mass should be <2% and athletes should not gain body mass >2%.
2. In addition to body mass loss, when feasible, first morning urine specific gravity (USG) increases the validity of hydration status assessment. Generally, a USG value >1.020 is considered hypohydrated. Also, personal cues of thirst sensation, urination frequency, and urine color are valuable indicators to consider.
3. Everyone will be aware of the main signs and symptoms of hypohydration;
 - a. Thirst
 - b. Dark colored urine (similar to apple juice)
 - c. Acute body weight loss >2%
4. Hypohydration is a predisposing factor for exertional sickling and those with sickle cell trait or disease will receive targeted education and hydration monitoring.

Fluid Replacement:

1. Water breaks will be provided based on the policy on environmental-condition guidelines using work to rest ratios.
 - a. Water or other palatable fluids will be easily accessible before, during and after activity. Cool and flavored beverages are often preferred by athletes and will be made available when possible for optimal rehydration.
2. When possible, diet and rehydration beverages will include sufficient sodium (enough to replace losses) to prevent imbalances that may occur as a result of sweat and urine losses.
3. When needed, individualized hydration plans will be developed and sweat rate (see equation below)
 - a. Environment, acclimatization state, body size, exercise duration, exercise intensity, and individual fluid preference and tolerance will be considered when calculating sweat rate.
 - b. Sweat Rate Equation:
 - $\text{Sweat loss (L)} = \text{Body mass before exercise (kg)} - \text{Body mass after exercise (kg)} + (\text{Volume of fluid consumed during exercise [L]} - (\text{Urine volume, if any [L]}))$
 - $\text{Sweat rate (L/h)} = \text{Sweat loss (L)} / \text{Exercise duration (h)}$
4. When possible, fluid replacement will be optimized to prevent decreased performance. Core temp is 0.2°C to 0.25°C higher and heart rate is 3-5 bpm higher for every 1% increase in body mass loss.

Treatment in the event of hypohydration (potential medical emergency if severe):

1. If moderate (2%-5%) or severe (greater than 5%) hypohydration is identified, oral fluids will be administered.
2. If severe hypohydration is present with vomiting or diarrhea, EMS will be activated

Monitoring

1. Monitoring of student-athletes safety will be continuous during any physical activity.
2. Athletic trainers, coaches, administrators and other athletics personnel will be educated on the signs and symptoms of exertional heat illness (see training/retraining in section 6).
 - a. These signs and symptoms include (but are not limited to) the table below

Rectal temperature greater than 104 (40°C) at time of incident.	Rapid pulse, low blood pressure, quick breathing
Headache	Dehydration, dry mouth, thirst
Confusion or just look “out of it”	Decreasing performance or weakness
Disorientation or dizziness	Profuse sweating
Altered consciousness, coma	Collapse, staggering or sluggish feeling
Nausea or vomiting	Muscle cramps, loss of muscle function/balance, inability to walk
Diarrhea	Irrational behavior, irritability, emotional instability

Treatment in the event of an exertional heat stroke (medical emergency) – See Standing Orders for Organization for additional information

Recognition

1. Any athlete with signs of central nervous system dysfunction during exercise in the heat should be suspected to be suffering from EHS until a rectal temperature confirms or refutes this diagnosis.
2. Patients with suspected EHS will have a temperature obtained via rectal thermometer by a QHP.
 - a. Rectal thermometers may include a traditional thermometer (e.g. small, discrete), electronic thermometers with a rigid end (e.g. hand-held digital thermometer) or a thermistor (e.g. long, flexible thermistor).
 - b. It is important to reiterate that during and following intense exercise in the heat, temporal, aural, oral, skin, axillary and tympanic temperature are not valid and will **never** be utilized in evaluating a potential exertional heat stroke.
3. *If a QHP is not available/present, cooling will begin immediately and EMS will be called.*

[Note, the below text are the specific steps to obtain a rectal temperature; this may be present in your standing orders, but may not be appropriate for the policy – depending on your organization standards]

Steps to obtain a rectal temperature:

- a. Remove the athlete from the playing field, to a shaded area.
- b. Drape the patient accordingly (with towels and sheets) for privacy.
 - i. Note: It is encouraged that the medical professional ask a coach or other adult to witness the temperature measurement.
- c. Position the patient on their side with their top knee and hip flexed forward.
- d. Make sure the thermometer is cleaned with isopropyl alcohol.
- e. Make sure the probe is plugged into the thermometer (when applicable).
- f. Turn the thermometer on.
- g. Insert the probe 10-15cm past the anal sphincter.
- h. If you meet resistance while inserting, stop and remove the probe and then try again.
- i. Replace the patients clothing.
- j. Temperature duration
 - i. For use of a traditional thermometer or a hand-held digital thermometer, insert the probe for initial temperature. If temperature is at or above 104°F, initiate cooling protocol. See directions for continued monitoring in cooling protocol.
 - ii. For use of a flexible thermistor, leave the probe in for the duration of the treatment.
- k. After the treatment has ended, remove the probe gently.

Cooling

1. If rectal temperature is between 102°-104°F, initiate cooling via rotating cold wet towels.
2. If rectal temperature is at or above 104°F, initiate the exertional heat stroke treatment protocol and activate the Emergency Action Plan policy immediately.
3. The patient must be moved to a cooling zone, begin appropriate treatment and continuously monitor the patient.
 - a. For use of a traditional thermometer or a hand-held digital thermometer (any thermometer with a rigid end), obtain initial temperature, remove device, and calculate cooling rate (approximately 1°F every 3-5 minutes when using cold water immersion). When the QHP believes the temperature is within a safe range, remove patient from tub, and re-insert probe to confirm temperature. If temperature is not within the safe range, cooling will continue. Repeat procedure until temperature is confirmed to be within the safe range.
 - b. For use of a flexible thermistor, keep the probe in for the duration of treatment.
4. Excess clothing shall be removed to aid cooling.
 - a. If removal of clothing and/or equipment would cause delays of 5+ minutes, do not remove and initiate cooling.

5. Begin aggressive cooling methods.
 - a. Cold Water Immersion (CWI) Tub
 - i. Must be set up:
 1. [insert school specific decisions for when CWI will be set up]
 - a. This must include the environmental conditions for when it is set up – if applicable (if your policy is to have it set up from x month to y month that would negate this), consider the below table for CWI set up.
 2. [insert school specific guidelines for where CWI will be set up]

Cat 3	Cat 2	Cat 1	Cold-water immersion tub availability
< 82.0	< 79.7	< 76.1	Mandatory alternative cooling measures of a cooler with ice and towels or a tarp (taco/burrito method) must be available at the activity site.
82.2 - 86.9	79.9 - 84.6	76.3 - 81.0	It is required that a 100-gallon cold-water immersion tub or a tarp (taco/burrito method) must be filled with water, with a temperature of less than 60°F and accessible for cooling within 5-10 minutes of each activity site. Remove external clothing/equipment prior to cooling or immediately after entering the tub. Aggressively stir water during the cooling process.
87.1 - 90.0	84.7 - 87.6	81.1 - 84.0	It is required that a 100-gallon cold-water immersion tub or a tarp (taco/burrito method) must be filled with water, with a temperature of less than 60°F and accessible for cooling within 5-10 minutes of each activity site. Remove external clothing/equipment prior to cooling or immediately after entering the tub. Aggressively stir water during the cooling process.
90.1 - 91.9	87.8 - 89.6	84.2 - 86.0	It is required that a 100-gallon cold-water immersion tub or a tarp (taco/burrito method) must be filled with water, with a temperature of less than 60°F and accessible for cooling within 5-10 minutes of each activity site. Remove external clothing/equipment prior to cooling or immediately after entering the tub. Aggressively stir water during the cooling process.
≥ 92.1	≥ 89.8	≥ 86.2	NO OUTDOOR WORKOUTS. Delay activity until a cooler WBGT level is reached. If the WBGT rises to this level during practice, it is required that a 100-gallon cold-water immersion tub or a tarp (taco/burrito method) must be filled with water, with a temperature of less than 60°F and accessible for cooling within 5-10 minutes of each activity site. Remove external clothing/equipment prior to cooling or immediately after entering the tub. Aggressively stir water during the cooling process.

- ii. Proper set-up includes:
 1. A tub ½ filled with water.
 2. Two chests filled with ice next to the tub ready for treatment.
 3. Available bed sheet or large towels.
 4. Towels for placement over the head and neck.
 5. Completion of set-up within 5-10 minutes prior to the practice/competition/event site.
- iii. CWI Procedures
 1. Place patient in a cold-water (35-59°F) tub up to the neck.
 2. Wrap a towel across the chest and beneath both arms to prevent the athlete from sliding into the tub.

3. Ice shall cover the surface of the water at all times.
 4. Water shall be continuously and vigorously stirred to maximize cooling.
 5. An ice-cold towel will be placed over the head/neck and rewet and replaced every 2 minutes.
 6. Cooling shall cease when body temperature reaches 102°F.
- b. Sites that do not have access to a water source or ability to fill a cold-water immersion tub, the Tarp Assisted Cooling Onsite (TACo) method may be used.
- i. Proper set-up includes:
 1. A large tarp.
 2. Two chests filled with ice.
 3. Two water coolers filled with water.
 - ii. TACo Procedures
 1. Lay the tarp flat on the ground.
 2. Place the patient on top of the tarp.
 3. Lift up all sides of the tarp.
 4. Add the water and ice to the tarp.
 5. Occilate the patient by gently lifting the sides of the tarp.
 6. Maintain control of the head.
6. Cool First, Transport Second
- a. When a patient is diagnosed with EHS, the principle of Cool First, Transport Second will be used.
 - i. Note: EMS should not transport the patient until they reach 102°F due to the inability to continue vigorous cooling in the ambulance

Vital sign monitoring

1. The QHP will monitor vital signs including core body (rectal) temperature, heart rate, blood pressure and other vital signs.
2. **[insert school specific guidelines for when vital signs will be done and how often]**

EMS

1. EMS must be called immediately if a patient is suspected of EHS.
2. **HOWEVER**, any patient with EHS must be **cooled FIRST and then transported via EMS**.
 - a. This cool first transport second EAP protocol will be communicated/shared with EMS annually PRIOR to the first official sport practice at the school in accordance with the EAP policy and procedures.

Return to activity

Patients who have suffered an exertional heat illness must complete a rest period and obtain clearance from a physician before beginning a progression of physical activity under the supervision of a qualified medical professional. The following is the suggested protocol:

- Activity should first begin in a cool environment
- Once patient has shown success with exercise in a cool environment, patient should then complete the heat acclimatization protocol (above) for progression back into exercise in a warm environment.
- Body temperature monitoring may be recommended during the first 1-2 weeks for those returning from EHS episode.

The following personnel have been trained to ensure a safe participation environment for all individuals, coaches, employees and staff mentioned in the Scope section of this document, who are engaged in activities that could put them at risk of exertional heat injuries.

VI. Training/Retraining

This training includes, but is not limited to, the policy and protocols outlined in this document, the prevention of heat illness', identification of heat related illness', and when to initiate treatment for those believed to be suffering from an exertional heat illness. See **Appendix C and D** for training and acknowledgement forms.

VII. Policy Approvals

The signatures below indicate approval of this policy. The signature(s) and date(s) encompass the entire document. This policy is effective for one year following the date written below.

Role: _____

Date: _____

Name (printed): _____

Signature: _____

Role: _____

Date: _____

Name (printed): _____

Signature: _____

Role: _____

Date: _____

Name (printed): _____

Signature: _____

Role: _____

Date: _____

Name (printed): _____

Signature: _____

Appendix A. Monitoring of the Environmental Conditions

Monitoring location	Details of monitoring location	Date of monitoring	Time of Monitoring	Measured WBGT	WBGT Flag Level (green, yellow, orange, red, black)	Activity modification necessary? (y/n)	Additional personnel notified (list)

Appendix B. Heat Acclimitization Chart

Day	Equipment Laden/Intermittent Aerobic Sports					Endurance/Aerobic Sports	
	Number of Practice Sessions Permitted	Practice Duration	Instructional Walk Through Permitted	Rest Period Between Walk-through and/or Practice Sessions	Protective Equipment	Practice Duration	Practice Intensity
1					Helmets/headgear only		
2							
3					Helmets and shoulder pads only		
4	1	120 min	1, 60 min session			60 min	
5							
6							
7							
8	2			3 h			Relative/individual (eg, percent HR maximum)
9	1						
10	2				Full pads permitted		
11	1	150 min (5 h maximum on double session days)	No			90 min	
12	2						
13	1						
14	2						

^a Equipment-laden sports include but are not limited to American football, baseball, field hockey, lacrosse, and softball.

^b Intermittently aerobic sports include but are not limited to basketball, soccer, swimming and diving, tennis, volleyball, and wrestling.

^c Endurance or aerobic sports include but are not limited to cross-country and track and field.

Appendix C. Training Logs

The following training logs outline when stakeholders were educated on the EHI Policy and Procedures.

Qualified healthcare professional training(s):

Includes environmental monitoring review and set up, heat acclimatization, hydration and re-hydration, recognition (i.e., rectal temperature skill development) and management strategies, cold water immersion tub set up, etc.

Name	Title	Responsibility	Date
Example: Joe Smith	Physician	Medical director for high school; responsible for review of protocols, trained in all aspects of EHI policy and procedures	12/5/00

Athletic administrators, coach, other non QHP professional(s) training(s):

Include environmental monitoring review and set up, heat acclimatization protocol, prevention strategies, education on signs and symptoms of patients with exertional heat illness, management of exertional heat illnesses. Education will be performed by athletic trainer or other sports medicine healthcare professional, or athletic director.

Name	Title	Responsibility	Date
Example: Denise Smith	Head Soccer Coach	Coach responsible for monitoring of soccer field WBGT, soccer coach	12/5/00

Appendix D. Exertional Heat Illness Policy and Procedure Acknowledgement Form.

[ORGANIZATION NAME]

The Exertional Heat Illness Policy for **[organization name]** has been developed and approved by all necessary individuals at the organization. The protocols in this document are research-based, peer-reviewed documents that specify required practices for preventing, recognizing and managing exertional heat illnesses, including exertional heat stroke. These protocols were discussed with the stakeholders of **[organization name]** during the annual meeting. Exertional heat stroke is one of the top 3 causes of sport-related death. Therefore, it is imperative that all stakeholders potentially involved in the management and care of a patient with exertional heat stroke fully understand the protocols to carry out. Prompt recognition and care can result in a 100% survival rate. This form is meant to facilitate discussion with stakeholders about the protocols to carry out, including but not limited to:

- Pre-participation examinations for exertional heat illness risk factors
- Environmental monitoring using a WBGT device
- Heat acclimatization for all sports
- Hydration procedures
- Monitoring for exertional heat illnesses
- Recognition of exertional heat illnesses, including obtaining a core body temperature via rectal thermometry
- Management of exertional heat illnesses, including use of a cold-water immersion tub for aggressive, whole-body, cold-water immersion
- Return to Participation

Acknowledgement

I _____ (print name) serve as the
_____ (role) and have read and understand the Exertional Heat Illness policy for **[organization name]** athletics. I understand my roles and responsibility to prevent and manage an exertional heat illness. This includes understanding of my role in the event a patient is suffering from an exertional heat stroke. I have reviewed this policy and understand how my role changes/does not change with a QHP present and without presence. I have been given the opportunity to ask all questions and have received the proper answers to my questions.

Stakeholder Name (print): _____

Role: _____

Signature: _____

Date: _____

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