**Policy for Exertional Heat Related Illnesses**

**Policy:**

While following the recommended 16-day heat acclimatization period, Mercy Sports Medicine Athletic Trainers (ATs) will continue to monitor the environmental conditions and will provide appropriate modifications to practices and games if warranted. Heat related environmental conditions are only a component in the determination of continued participation during practices and/or games. We will continue to utilize the WBGT Index and the associated Scale below.

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| **WBGT READING** | **ACTIVITY GUIDELINES & REST BREAK GUIDELINES** |
| **UNDER 82.0** | Normal activities – Provide at least three separate rest breaks each hour of minimum duration of 3 minutes each during workout. |
| **82.0 – 86.9** | Use discretion for intense or prolonged exercise; watch at-risk players carefully; Provide at least three separate rest breaks each hour of a minimum of 4 minutes duration each. |
| **87.0 – 89.9** | Maximum practice time is 2 hours. For Football: players restricted to helmet, shoulder pads, and shorts during practice. All protective equipment must be removed for conditioning activities. 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 of a minimum of 4 minutes each. |
| **90.0 – 92.0** | Maximum length of practice is 1 hour. For Football: 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 92** | NO OUTDOOR WORKOUTS. Delay practice until a cooler WBGT level is reached. |

**GUIDELINES FOR HYDRATION AND REST BREAKS:**

1. Rest time should involve both unlimited hydration intake (water or electrolyte drinks) and rest without any activity involved.
2. For football, helmets should be removed during rest time.
3. The site of the rest time should be a “cooling zone,” and not in direct sunlight.
4. When the WBGT reading is over 86:
   1. Ice towels and spray bottles filled with ice water should be available at the “cooling zone” to aid the cooling process.
   2. Cold immersion tubs must be available for practices for the benefit of any player showing the early signs of heat illness.

**Procedure:**

The following procedures shall be adhered to on a daily basis when the ambient temperature is 80° Fahrenheit or greater at our contracted high schools and when deemed appropriate at any community outreach event. Each day shortly before the beginning of a practice/event the athletic training staff will use a WBGT to obtain a WBGT index.

* Practice/event modifications will be made according to the Heat Modification Chart. The WBGT index should be documented along with the date, time and corresponding modifications on the WBGT recording log and will be communicated to the appropriate coach, administrator, and/or game officials. These findings (WBGT index, AT recommendations, and actual modifications made) should also be reported on the WBGT recording log to be kept on file in the athletic training room. As conditions change throughout practice/event, the AT shall reassess the WBGT index, make modifications as needed and update the record for file.
* During the fall semester, the AT will report the environmental conditions directly to the head football coach prior to each practice. Since all other fall sports practice at various times and places, the AT needs to communicate with the head coaches regarding the best procedure for determining the WBGT index and appropriate recommendations to ensure safety of the athletes. This method could be the athletic trainer posting the WBGT index in a designated spot accessible to all coaches, or the head coach calling the AT to obtain the WBGT index.
* The AT will make an effort to communicate the WBGT index readings and appropriate modifications to all head coaches.
* The AT will ensure before the beginning of high school practices that a weight chart is made and ready to use, as it is mandatory for all football athletes to weigh in before each practice/game and weigh out after each practice/game. It is the AT’s responsibility to maintain the weight charts and to make sure weighing in and out is occurring properly on a daily basis. Athletes losing 2% or more of their total body weight, as compared to their original weight, will be held from that practice/game. They may participate in the next scheduled practice/game when their weight returns within the 2% range. If weight charts are not being maintained accurately then the AT must report this to the administrator at the school. It is at the discretion of the head coaches for all other fall sports as to whether or not they utilize a weight chart. If they choose to use a weight chart, it will be up to the head coach to monitor the chart. Weight charts will be used depending on the environmental conditions or on a special needs basis.
* On the first day of practice, the AT should ask for some time to speak with the athletes of all outdoor sports regarding proper prevention of exertional heat illness.
* Each high school will have a 100-150 gallon water tank to be filled with water and have ice readily available for rapid cooling of athletes exhibiting signs and symptoms of exertional heat stroke. Temperature of tank water at the time of dunking an athlete must be between 35° and 59° F. It is the AT’s responsibility to find the best location for the tank and make sure it is ready for use during each practice/event covered by the AT in which the temperature is greater than 85º F.
  + The use of the dunk tank at sites other than the contracted schools will be determined by the sports medicine staff on an individual basis and will depend upon location, availability of ice and water, and portability of the tank.
  + While traveling with varsity football, each AT will carry a 7’x9’ tarp to utilize the “Taco Method” for rapid cooling. Additional ice coolers will need to be taken to ensure an adequate amount is available.

**Management:**

Once an athlete exhibits signs and symptoms of an exertional heat related illness, the onsite AT will remove the athlete to a cooler area that is appropriate for treatment. Continue to monitor symptoms and remove unnecessary equipment and clothing. If conditions do not improve or deteriorate then central nervous system (CNS) function and core temperature will be assessed. Core temperature will be assessed using datatherm probe inserted 6 inches or 15 centimeters into athlete’s rectum. All attempts will be made to protect the athletes’ privacy. An athlete exhibiting a core temperature reading of greater than 103.9° will be immersed in a tank to begin rapid cooling, and EMS will be activated. Once a core temperature reading of 102.0° is reached the athlete will be removed from the tank and the core temperature will continue to be monitored and they will be transported to the hospital via EMS. The athlete will not be transported until their core temperature is below 102.0˚. If the athlete becomes hypothermic all attempts will be made to re-warm.

**COOL FIRST TRANSPORT SECOND!**

**Equipment:**

DataTherm Thermometer

140Gal Dunk Tank

7’x9’ Tarp

Wet Bulb Globe Thermometer and tripod

Towels

Sheet

Ice

Blood Pressure Cuff

Pulse Oximeter

Tank thermometer

References:

Miller, K., Long, B., Casa, D. *Validity of Core Temperature Measurement at 3 Rectal Depths During Rest, Cold-Water Immersion, and Recovery*. Journal of Athletic Training, 52(4): 332-338, 2017.