



**Kentucky Medical Association
Medical Aspects of Sports Committee
Recommendation to the Kentucky High School Athletic
Association and KHSAA Member Schools**



**RECOMMENDATIONS FOR COOLING METHODS DUE TO
HEAT RELATED ILLNESS**

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Exertional heat stroke (EHS) is relatively uncommon among exercise associated medical conditions, but is a frequent cause of exercise related death. 3 athletes have died of EHS in Kentucky in the past 5 years. The majority of medical evidence shows that early institution of body cooling is the most effective method of decreasing mortality in EHS. This paper contains recommendations regarding the methods of body cooling, including tubs, ice bags, iced towels (towels with water that have been frozen) water, fans, and shade. The recommendations are classified as essential (foundational to the implementation of treatment, should have resources and personnel directed towards implementation), and desirable (important in maximal implementation, should have resources and personnel directed towards implementation as budget and resources allow). The recommendations are only guidelines, are not intended as a standard of care, and should not be considered as such. These guidelines should be considered in the care of athletes who can be expected to be at risk of EHS due to the sport or the environmental situation of the activity. Sports especially at risk include football with and without equipment, soccer, and long distance track. Other sports and activities, such as cycling, golf, baseball, tennis, track and field, and band, may also be at risk due to long duration exposure to extreme environmental conditions.

It is essential that the school and school officials:

- Establish a written plan for emergency treatment of EHS, and conduct drills in the implementation of the plan
- Know how to assess environmental conditions and determine when extreme conditions exist
- Identify a specific spot at the athletic facility that has shade
- Have immediate access to ice and bags to contain ice
- Have access to water, and provide water breaks as outlined in the KMA/KHSAA Heat Illness and Prevention Policy
- Know the most effective sites for application of ice to the body

It is highly desirable that the school and school officials

- Obtain and use, when environmental conditions are determined to be extreme, a tub or pool, filled with water and ice before practice or game, to be used in body immersion for maximal cooling, and how have personnel trained in this technique.

It is desirable that schools and school officials:

- Have a certified athletic trainer (AT,C) on staff to develop and implement these guidelines
- Have immediate access to water
- Provide shade breaks
- Provide fans when environmental conditions are determined to be extreme
- Have close access to an air conditioned room
- Have access to and use iced towels that can be rotated to appropriate areas of the body, including the axilla, groin, and back of the neck

REFERENCES

1. Binkley HM et al. NATA Position statement: Exertional heat illness. J Ath Training 2002; 37: 329- 343.
2. Casa DJ et al. Survival strategy: Acute treatment of exertional heat stroke. J Strength Conditioning Res 2006; 20: 462.
3. Armstrong LE et al. ACSM position stand: Exertional heat illness during training and competition. Med Sci Sports Exerc 2007; 41: 556- 572