National Federation of State High School Associations





A Guide to Heat Acclimatization & Heat Illness Prevention

Available FREE at www.nfhslearn.com

Exertional Heat Stroke is the leading cause of preventable death in high school athletics. Exertional Heat Stroke also results in thousands of emergency room visits and hospitalizations throughout the nation each year. This FREE course is designed to give you the critical information you need to minimize the risk of Exertional Heat Stroke. Coaches can start and complete a course immediately after ordering and will have up to one year to review and access all printable resources.







A Guide to Heat Acclimatization and Heat Illness Prevention

Course Objectives:

- Recognize that Exertional Heatstroke (EHS) is the leading preventable cause of death among athletes.
- Know the importance of a formal pre-season heat acclimatization plan.
- Know the importance of having and implementing a specific hydration plan, keeping your athletes wellhydrated, and providing ample opportunities for, and encouraging, regular fluid replacement.
- Know the importance of appropriately modifying activities in relation to the environmental heat stress and contributing risk factors (e.g., illness, overweight) to keep your athletes safe and performing well.
- Know the importance for all staff to closely monitor all athletes during practice and training in the heat, and recognize the signs and symptoms of developing heat illness.
- Know the importance of, and resources for, establishing an Emergency Action Plan and promptly implementing it in case of suspected EHS or other medical emergency.

Unit 1: Go slow and progressive

- Acclimatization can take up to 10-14 days
- Build a period of acclimation into the first 2 weeks of practice.

Unit 2: Allow for individual conditioning and medical status

- Factors contributing to higher risk for heat illness
 - Equipment
 - Body composition
- Athletes with Sickle Cell trait

Unit 3: Adjust intensity and rest

• Be aware of weather and humidity levels

Unit 4: Start sessions adequately hydrated

- Dehydration can impair athletic performance
- There isn't a "one-size-fits-all" hydration approach
- Dehydration occurs when a person loses more fluid than he or she consumes
- Know the warning signs of dehydration
- Monitor urine color
- Weigh in/weigh out
- Know what your athletes drink
 - o Water
 - o Sports drinks

Unit 5: Recognize signs early

Unit 6: Recognize more serious signs

Unit 7: Have an Emergency Action Plan

Resources: 3 Types of Heat Illness; 7 Fundamentals Summary; 2011 NFHS Sports Medicine Handbook on Sickle Cell; Coach Smart App from Vanderbilt University Medical Center Website; Emergency Action Plan; Emergency Care Plan; FAQ: Web Bulb Temperature Index; Georgia High School Association Instrument Guidelines; Heat Index Chart; Hyponatremia; Position Statement and Recommendations for Hydration to Minimize the Risk for Dehydration and Heat Illness; Position Statement and Recommendations for the Use of Energy Drinks by Young Athletes; Relative Humidity: Wet-Bulb Thermometers or Hygrometers; Sample Emergency Action Plan Posters; The American Academy of Pediatrics Policy Statement on Climatic Heat Stress and Exercising Children and Adolescents; Understanding Sweat Loss.