Heat Illness: Exertional Heat Stroke

What is it?

Exertional Heat Stroke (EHS) is a severe condition characterized by an extremely high core body temperature of above 104°F (40°C), central nervous system dysfunction and multiple organ system failure brought on by strenuous exercise, often occurring in the hot environments. EHS is a medical emergency and can be a fatal condition if the individual's core temperature remains above 104°F for an extended period of time without the proper treatment.

Treatment of Suspected Exertional Heat Stroke

- **Assess core body temperature**
  If heat stroke is suspected, the first step will be to perform a rectal temperature. This is the ONLY temperature assessment that should be used with an overheated individual – it is the only method for an accurate and immediate temperature assessment. Other temperature devices (tympanic, oral, skin or axillary) may give false readings. This step is important in order to confirm the diagnosis and also to know when to remove from the cold water and transport to the hospital.

- **If temperature is above 104°F, begin cold water immersion**
  Rapid and aggressive whole body cooling is the key to survival of exertional heat stroke. The fastest way to decrease body temperature is to remove excess clothing and equipment and immerse the body into a cold water immersion tub.

- **Once core body temperature has reached 101°F, the individual will be transported to the emergency room via ambulance.**
  They will monitor the individual until it is safe to return home.

More Information

Korey Stringer Institute
http://ksi.uconn.edu/emergency-conditions/heat-illnesses/

National Athletic Trainers Association
http://www.nata.org/practice-patient-care/health-issues/heat-illness

American College of Sports Medicine
http://www.acsm.org/about-acsm/media-room/news-releases/2012/08/07/strategies-for-young-athletes-to-prevent-exertional-heat-illness-and-injury-in-preseason-practice