TRANSY
SPORTS MEDICINE

Heat Illness and Prevention Policy

Practice or competition in a hot and/or humid environment can pose special concerns such as heat stress and heat illness. Although deaths from heat illness are rare, exertional heat stroke is the third leading cause of on-the-field sudden death in athletes.

Intense exercise, hot and humid weather and dehydration can seriously compromise athletic performance and increase the risk for exertional heat injury such as muscle cramps, heat exhaustion, and heat stroke.

Muscle Cramps:

- Occur during or after intense exercise as an acute, painful, and involuntary muscle contraction
- Causes may include dehydration, electrolyte imbalances, neuromuscular fatigue, or a combination of factors.
- Signs and symptoms: dehydration, thirst, sweating, muscle cramps, fatigue.

Heat Exhaustion:

- Occurs most frequently in hot, humid conditions and causes an inability to continue exercise.
- May be caused by dehydration, heavy sweating, sodium loss, and energy depletion.
- Signs and symptoms: pallor, persistent muscle cramps, weakness, fainting, nausea, decreased urine output, cool and clammy skin, diarrhea, body temperature between 97-104

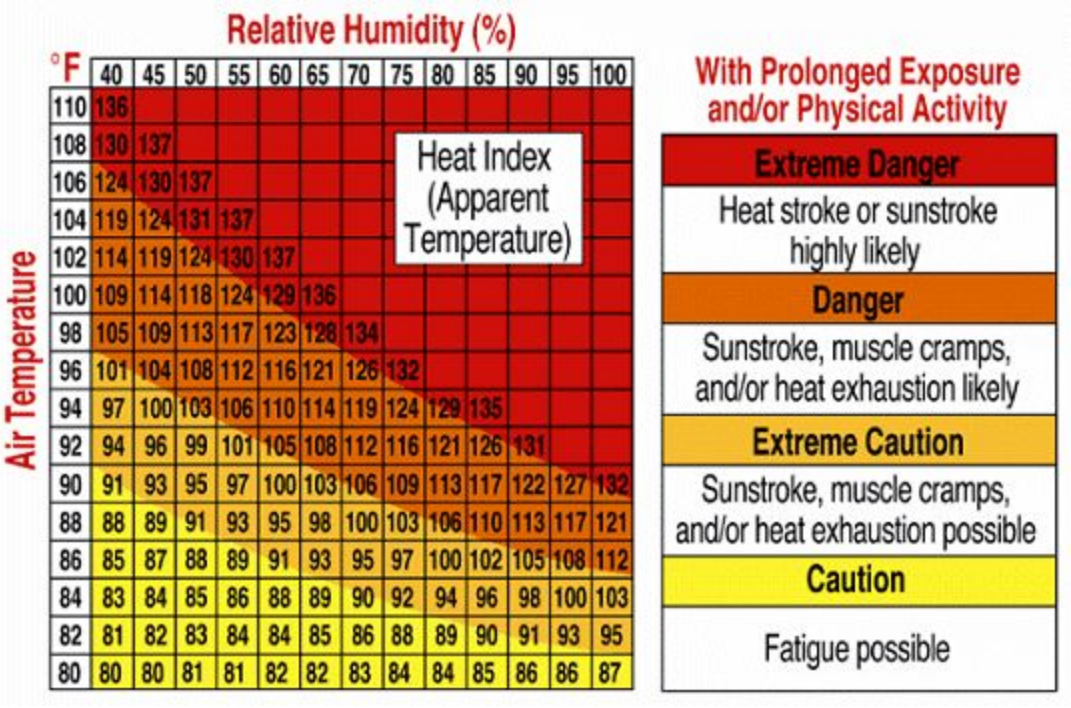
Heat Stroke:

- Occurs when core temperature is elevated (usually greater than 104) with signs of organ system failure due to hyperthermia and physical activity
- Caused by an overwhelmed temperature regulation system due to excessive heat production or inhibited heat loss due to environmental conditions.

- Signs and symptoms: tachycardia, hypotension, sweating, hyperventilation, altered mental status, vomiting, diarrhea, seizures, coma, CNS changes.
- Life-threatening condition that can be fatal unless promptly recognized and treated.

Prevention

- A pre-participation physical will be completed for incoming athletes prior to the start of their training.
- Coaches should encourage off-season conditioning to help student-athletes prepare for excessive heat
- Gradual increase of activity should take place in order to acclimatize athletes to their environment.
- Stay hydrated. Hydration helps regulate the thermos-regulatory system within the body which can help decrease the impact heat stress has on the body.
- The chart below shows relative humidity and air temperature and together what the apparent temperature is. This is a guideline and all decisions with regard to participation outside will be made by the Athletic Trainer.



- The Athletic Training Staff will monitor the temperature with a digital psychrometer and in case that one is not available, will use the information through WeatherSentry. All temperature information will be passed on to the

coaching staff in an appropriate amount of time in order to discuss practice modifications.

- In the event that the outside air temperature reaches 92 degrees, the max practice time is two hours with a mandatory 5 minute rest period.
- In the event that the outside temperature reaches 95 degrees, the max length of practice time is one hour. If further practice time is desired, all athletes must cool completely in an indoor air conditioned facility or in a shaded area if no indoor facility is present for 20 minutes prior to the continuation of practice

Guidelines for Hydration

Prior to Activity

- Athletes should consume 2 cups (17-20 ounces) or more of water and/or sport beverage in 2-3 hours prior to practice or competition. It is important to stay ahead of your hydration throughout the week.

During Activity

- Athletes must drink early and often
- Recommended to drink 7-10 ounces of fluid every 10-20 minutes

After Activity

- Encourage athletes to replenish fluid loss within 2 hours of activity. Replenishment should include water, carbohydrate, and electrolytes. Caffeinated beverages should be discouraged.

In Case of Emergency

- All coaches and team volunteers will be up to date on CPR
- Make sure to review the Emergency Action Plan at your facility.
- In case of heat illness at the 4th Street turf facility, the cold whirlpool will be utilized in the Athletic Training Room