

Cathedral Athletic Department

Exertional Heat Illness Policy/Procedures

Heat-related illnesses are among the most common, but easily prevented, problems that can arise when athletes participate in hot & humid conditions. Managing the heat requires collaboration among athletes, coaches, parents and the Cathedral Medical staff. The following information is designed to help athletes and parents understand the risks associated with exercising in hot/humid conditions and what can be done to prevent heat illness.

What are the different types of Exertional Heat Illness?

- **Heat Cramps:** These are painful cramps which often affect the legs, arms or abdomen. These often occur during the preseason or early season when the body is not as well conditioning. Cramps have been linked to poor hydration and lack of dietary sodium.
- **Heat Exhaustion:** This is the most common heat-related illness. It is characterized by the inability to continue exercising in hot/humid conditions. In this condition, the heart has difficulty delivering blood to working organs and muscles. Signs and symptoms include fatigue, nausea, vomiting, dizziness, weakness, headache and elevated body temperature.
- **Heat Stroke:** This is a true medical emergency! Signs and symptoms include high body core temperature (>104), altered consciousness, collapse and irrational behavior.

What are the risk factors for Heat Illness?

- Heat and Humidity
- Extreme Physical Exertion
- Inadequate Hydration
- Inadequate Acclimatization
- Low Fitness level
- Excessive clothing and/or equipment
- Fever
- Lack of sleep
- Prior history of heat illness

What can an athlete do to prevent the likelihood of heat illness?

- **Acclimatize** – It takes 10-14 days for an athlete's body to adapt to the heat. Athlete's should gradually increase intensity and duration of training in hot/humid conditions. Proper acclimatization allows for better physiologic function and increased heat tolerance.
- **Hydrate** – Athlete's that are properly hydrated can work hard over longer periods of time with less stress on their body. Your child should come to practice or games well

hydrated. Water and fluids containing sodium (sports drinks) are the best choices. Carbonated or caffeinated beverages should be avoided.

Fluids will be made available during practices and games so athletes can maintain hydration. Water and sports drink intake after competition should match fluid lost. Weighing yourself before/after playing or checking urine are ways an athlete knows if they are well hydrated. Twenty ounces of fluid is required per pound of weight lost to adequately replace lost fluids. Urine that looks like pale lemonade (not apple juice) also indicates proper hydration.

- Dress appropriately – Wear light colored, light weight clothes. Avoid wearing excess clothing.
- Know the signs of Heat Illness – These include nausea, vomiting, fatigue, weakness, headache, poor concentration and loss of coordination.
- Speak up – Your child needs to let medical staff or coaching staff know if they are not feeling well
- Sleep and eat well – Sleep at least 6-8 hours in a cool environment and eat a well-balanced diet.

What measures will the Cathedral medical staff/coaches/athletic administration take to prevent heat illness in athletes?

- Conditions for practice and games are monitored by a member of the Cathedral Athletic Training staff. Wet Bulb Globe temperature measurements are taken before and during practice to determine temperature, relative humidity and air movement on site. Web Bulb Globe temperature is the current gold standard for measuring environmental conditions for physical activity.
- Activity length/intensity, equipment modifications and breaks from practice/games will be based on the Wet Bulb Globe temperature. Activity time may be shortened, break during activity lengthened, and events may be delayed or postponed if necessary.
- Athletes are provided with unlimited access to fluids during activity.
- Cold tubs for ice immersion, and cold towels will be available on-site

References

1. Binkley HM, Beckett J, Casa DJ, Kleiner DM, Plummer, PE. National Athletic Trainers' Association Position Statement: Exertional Heat Illness. J Athl Train. 37 (3):329-343.
2. Casa DJ, Armstrong LE, Hillman SK, Montain SJ, Reiff RV, Rich B, Roberts WO, Stone JA. National Athletic Trainers' Association Position Statement: Fluid Replacement for Athletes. J of Athl Train. 35 (2): 212-224

