

Hydration and Heat Illnesses

Hydration

- Athletes should acclimate themselves to hot weather by gradually increasing their participation over a period of two weeks. This is probably the most important method of prevention.
- Rest periods of 15-30 minutes should be scheduled during hot weather activities that last longer than an hour.
- Activities should be scheduled during cooler morning or early evening hours.
- Clothing should be white to reflect heat, loose enough to permit heat to escape, and permeable to moisture to allow heat loss through sweat evaporation.
- Athletes should drink four to eight ounces of water every 15-20 minutes of an activity.
- Children at risk should be watched carefully. Athletes with large muscle mass and those with a history of heat problems are particularly prone to heat illnesses.

Heat Illnesses

Exercise and heat can be a deadly combination, especially for young athletes who may be too intimidated to tell their coach they need a break. There are three types of heat illnesses:

Heat Cramps

Heat cramps are the least serious of the heat illnesses.

- **Symptoms:** A painful spasm of the skeletal muscles, occurring often in the hamstrings, calves and abdominal muscles. These can also produce dehydration, sweating and a loss of electrolytes.
- **Treatment:** Water, gentle stretch applied to involved muscles, rest and observation for further symptoms.

Heat Exhaustion

Heat exhaustion is the most common heat illness. A decreased volume of blood circulation causes prolonged overexertion and insufficient water and electrolyte replacement.

- **Symptoms:** Profuse sweating; cool, clammy skin; normal body temperature; rapid, weak pulse; pale skin; dizziness and headache; confusion and disorientation.
- **Treatment:** Remove athlete from hot environment to a cool place (child should not return to the game or activity); remove excess equipment and clothing; get athlete to drink cool fluids. If the athlete does not improve rapidly, take them to a medical facility for further evaluation.

Heat Stroke

Heat stroke is the least common, but most serious heat illness. The athlete's thermo-regulatory system is completely overwhelmed and the body can no longer cool itself.

- **Symptoms:** No sweating; rapid, strong pulse; unconscious; if child is conscious, she is confused or disoriented; markedly increased body temperature; reddish-colored skin.
- **Treatment:** THIS IS A MEDICAL EMERGENCY! Call 911. Seek medical assistance immediately. Find a cool place. Lay the child down with head elevated at least 45°. Reduce the child's body temperature immediately by placing cool towels on his or her body, pouring cool water over the child, and/or directing fans toward the child. If the athlete is semi-conscious or nauseous, do not give fluids by mouth.



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