



WAA Girls Softball

Heat and Humidity Guidelines

According to the Center for Disease Control (CDC) there are approximately 400 deaths a year in the U.S due to heat related illness (heat stroke). Heat stroke can occur in young healthy people who are exercising in hot weather. Hot humid weather is one of the leading causes of environmental distress in athletes. Heat stroke, second only to spinal cord injury, is the primary cause of activity-related death in high school athletes. The onset of heatstroke can be rapid and is a medical emergency!

Definition of Heat Illness

Several types of afflictions suffered when an individual experiences a raising body temperature and dehydration.

Risk factors for heat related illness

During moderate exercise 70 to 90 percent of the energy produced by the body is released as heat. There are several factors that can interfere with heat dissipation and put a person at risk for heat illness.

- Air temperature, combined with humidity, wind speed (or lack of) and radiant heat can hamper heat dissipation. High humidity (>60%) dramatically lessens the effectiveness of heat loss through sweating.
- Children adapt to heat more slowly and are less effective in regulating body heat than adults.
- Moderate dehydration predisposes an athlete to exertional heat illness. Thirst is not a good indicator of hydration. If an athlete is thirsty they are already at some level of dehydration.

Prevention of heat related illness

- Ensure that athletes are well hydrated before the start of any activity.
- Encourage your athlete to drink fluids before, during and after activities.
- Use sunscreen.
- Wear light weight and light colored clothing.

Symptoms and Treatment of Heat Illness

As recommended by the National Athletic Trainers Association (NATA)
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	Symptoms	Treatment
Heat Cramps	Muscle spasms caused by an imbalance of water and electrolytes in muscles, usually affects the legs and abdominal muscles.	<ul style="list-style-type: none"> • Rest in a cool place. • Drink plenty of fluids. • Proper stretching and massaging. • Application of ice in some cases
Heat Exhaustion	<ul style="list-style-type: none"> • Can be a precursor to heat stroke. • Normal to high body temperature • Heavy sweating • Skin flushed or cool and pale • Headache and/or dizziness • Physical collapse may occur • Can occur without prior symptoms i.e. cramps 	<ul style="list-style-type: none"> • Get to a cool place immediately • Drink plenty of fluids • Remove excess clothing • In some cases, immerse body in cool water
Heat Stroke	<ul style="list-style-type: none"> • Body's cooling system shuts down • Sweating stops • Shallow breathing, rapid pulse, possible irregular heartbeat and cardiac arrest • May become disorientated or lose consciousness • Core temperature elevated 104 degrees F. or higher • If untreated can cause brain and internal organ damage or death 	<ul style="list-style-type: none"> • Call 911 immediately • Cool bath • Place ice packs near large arteries such as neck, armpits, and groin • Replenish fluids by drinking water or "Gatorade" or intravenously if needed • Must be cleared by physician before returning to game or practice