

HOW TO BE HEAT-HEALTHY THIS SUMMER

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We've all heard the term "Dog Days of Summer", an idiom referring to the hottest days of the year. As the Dog Days loom, did you know young athletes are often the most susceptible to heat stress because they either don't recognize the symptoms or feel pressured to continue practicing or playing? As a result, it is critical for parents and coaches to learn the signs and symptoms of heat illness to be proactive in prevention and having an action plan in the event an athlete develops heat exhaustion or heat stroke.

Heat illnesses threaten the overall safety and well-being of your child. They range in severity from minor to life threatening, which is why it is important to know the different stages of heat illness so that interventions can be made.

Heat cramps, heat syncope (fainting), heat exhaustion and heat stroke are all heat-related illnesses that happen when the body cannot properly cool itself in the heat. The body's temperature rises faster than it can cool itself down. Exercising or playing in a hot or humid environment can increase the risk of dehydration, which can lead to heat exhaustion and heatstroke.

Although these conditions are all caused by heat and a person's inability to efficiently dissipate it, they often times cause different combinations of symptoms:

ILLNESS	SYMPTOMS	FIRST AID
HEAT CRAMPS	<ul style="list-style-type: none"> • Muscle Spasms • Pain • Usually in abdomen, arms, or legs 	<ul style="list-style-type: none"> • Have athlete rest in shady, cool area • Athlete should drink water or other cool beverages • Wait a few hours before allowing athlete to return to strenuous activity • Have athlete seek medical attention if cramps don't go away
HEAT EXHAUSTION	<ul style="list-style-type: none"> • Heavy sweating • Headache • Rapid heartbeat • Nausea or vomiting • Dizziness • Light headedness • Weakness • Thirst • Irritability 	<ul style="list-style-type: none"> • Have athlete sit or lie down in a cool, shady area • Give athlete plenty of water or other cool beverages to drink • Cool athlete with cold compresses/ice packs • Take to clinic or emergency room for medical evaluation or treatment if signs or symptoms worsen or do not improve within 60 minutes.
HEAT STROKE	<ul style="list-style-type: none"> • Confusion • Fainting • Slurred speech • Loss of consciousness • Seizures • Excessive sweating or red, hot, dry skin • Very high body temperature • Can be fatal if treatment is delayed 	<p>DIAL 911, THIS IS A MEDICAL EMERGENCY! While waiting for help:</p> <ul style="list-style-type: none"> • Place athlete in shady, cool area • Loosen clothing, remove outer clothing • Wet athlete with cool water; apply ice packs, cool compresses, or ice if available • Provide fluids (preferably water) as soon as possible • Stay with athlete until EMS arrives

How can you help prevent heat-related illness?

On hot and/or humid days, try to do outdoor activities when it's coolest, like in the morning or evening hours. You can also help protect your child from the sun by making sure they wear sunscreen, even when it's overcast. Sunburn affects the body's ability to cool down, which can cause dehydration.

Fluid needs vary based on activity, intensity, environmental conditions, body size of the athlete and training status.

In addition to encouraging athletes to drink during activity, helping adolescent athletes develop their own hydration schedule is also useful. Scheduling fluid intake will help athletes get in the habit of drinking at regular times throughout the day. The following is an example of a basic fluid hydration schedule. Use this as a guide to help athletes understand the purpose, but have them tailor the times to their school and training schedule changes (see table on right).

TIME OF DAY	FLUID INTAKE
6:30am (wake up)	Drink 8 ounces of water
8:30am (or between classes)	4 ounces
10:30am (or between classes)	4 ounces
Noon (with lunch)	4 ounces
1:30pm (or between classes)	4 ounces
2:30pm (after school)	8 ounces
3:30pm (or before practice)	8 ounces
During practice	Drink breaks - about 4-12 ounces every 15 minutes
After practice	Drink 8-16 ounces of fluid
7:30pm	8 ounces of fluid
9:30pm	8 ounces of fluid

This list is not exhaustive and does not serve as formal education. Thorough education for coaches, athletes, support staff and medical staff around heat illness should occur annually and include:

- understanding when it is safe to conduct a workout
- how to recognize signs of heat illness and initial treatment
- the importance of on-site medical supplies specific to the weather
- venue specific emergency action plans

Organizations should be able to show proper education has occurred for these stakeholders on a yearly basis.

Remember, it's **COOL** to be able to prevent and treat heat illness!

<https://www.childrencolorado.org/conditions-and-advice/parenting/parenting-articles/difference-between-heat-exhaustion-heatstroke/>

<https://truesport.org/hydration/heat-illness-youth-sports/>

<https://www.childrens.com/health-wellness/the-importance-of-hydration-for-young-athletes>

<https://www.nata.org/sites/default/files/healthy-hydration-for-young-athletes.pdf>

Kevin Gorey is a Senior Director at the U.S. Council for Athletes' Health (USCAH). Kevin brings extensive experience from both commercial health care and sports medicine to the USCAH team. His three-decades long professional experience has produced high-level results for the organizations he has had the privilege to work with.

USCAH was founded upon the need for trusted, independent athletic health care partners with the experience and expertise to advise and consult with organizations regarding their healthcare delivery system. This is why USCAH is committed to providing independent and unbiased medical expertise to organizations and individuals dedicated to the optimal health and safety for the athletes they serve. If your team or organization would like to learn more about preventing/treating heat illnesses or emergency action plans, please reach out to kgorey@uscah.com or visit www.uscah.com.