

UF HEALTH ORTHOPAEDICS AND SPORTS MEDICINE INSTITUTE

Exertional Heat Illnesses (EHI) and Appropriate Hydration

EHI: Types, signs/symptoms, treatment

Exercise-associated muscle cramps (EAMCs)

- Painful, involuntary muscle contractions during or immediately after exercise
- Stop activity, hydrate, stretch and massage the affected muscle, return to competition as tolerated

Heat Syncope

- Transient loss of consciousness due to pooling of blood in lower extremities after exercise or prolonged standing
- Treated by elevating legs above heart level and rehydrating

Heat Exhaustion

- Inability to continue exercising due to heat stress and cardiovascular insufficiency
- Remove excess clothing and take to shaded area
- Cool immediately with wet/cold towels, ice bags to neck/axilla/groin, fans, ice water immersion if needed, begin rehydration

Exertional Heat Stroke (EHS)

- Exercise-induced hyperthermia (core body temp > 104/105° F), significant central nervous system dysfunction
- Typically seen in young athletes/military engaging in strenuous physical activity who can't dissipate heat production
- Seen most often in hot and humid environments (July through October)
- Most commonly occurs in American football players and runners
- Can be seen in cooler climates during heat wave due to lack of acclimatization
- May be profusely sweating

Prevention of Exertional Heat Illnesses

- Ensure Athletic trainers (ATs) are on site during athletic activities
- Adapt athletes to exercise in heat (acclimatization)
- Follow appropriate work to rest guidelines
- Drink when thirsty, drink to keep weight at baseline, drink to keep urine clear/light yellow
- Avoid hottest/most humid part of the day
- Follow a well-developed/well-rehearsed emergency action plan if emergency occurs



Pre-Hospital/Transport Care of Exertional Heat Stroke

- Rapid recognition, rapid assessment, rapid cooling, rapid advanced care
- Cold water immersion on-site
- **Cool First**, Transport Second

Hydration Guidelines

- **Pre-exercise hydration** – 350-500 mL 2-3 hours before exercise
- **Hydration during exercise** – 200-300 mL every 20 minutes while exercising
- **Post-exercise hydration** – replenish lost body fluids, carbohydrates, electrolytes and protein

How do I schedule an appointment to be evaluated for a sports-related injury?

Please contact us at the sports injury hotline at 352.273.7001 to schedule an appointment with one of our sports medicine specialists.

OSMI and UF Health Sports Medicine Providers

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Primary Care Sports Medicine

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