



## 3 Types of Heat Illness

Even with a great hydration plan, heat illness is something you need to be able to recognize and take measures to prevent. There are 3 types of heat illness to be aware of: heat cramps, heat exhaustion and heat stroke.

### Heat Cramps

### Heat Exhaustion

### Heat Stroke

**Heat Cramps:** Painful spasms of the skeletal muscle, usually involving the calves. In athletes prone to cramping, sports drinks can help with prevention, as heat cramps appear to primarily be the result of dehydration and loss of sodium through sweating.

### Symptoms

- Painful muscle spasms

### Treatment

- Gentle stretching
- Rest
- Increased fluid and electrolyte consumption

**Heat Exhaustion:** the most common type of heat illness.

### Signs & Symptoms

- Dizziness and fatigue
- Chills
- Rapid pulse

### Treatment

- Remove the student from the hot environment
- Cool as quickly as possible
- Re-hydrate

**Heat Stroke:** The potential for it to be fatal makes heat stroke by far the most serious type of heat illness. Heat stroke occurs when the body's cooling system completely shuts down or their blood volume is so low that the victim stops sweating and goes into shock.



## Signs and Symptoms

- Very high core body temperature
- Altered central nervous system function (i.e. confusion or unconsciousness)
- Skin is not always hot and dry; student may still be sweating profusely
- Otherwise healthy athlete collapses during intense exercise in the heat

## Treatment

- Activate the Emergency Medical System (EMS)
- Immediate rapid cooling

### **If heat stroke is suspected, the following steps must be taken:**

1. Have a designated person activate the Emergency Medical System (EMS)
2. Quickly remove all of the athlete's equipment and shirt.
3. If an ice bath is available and assuming there is no potential for head or neck injury, place the student in the pool and immerse his/her torso and extremities in an ice-water bath. Do not let the head become submerged.
4. If an ice bath is not available, move the student to a shaded area and cool his/her torso by covering him/her in ice bags from the shoulders to the hips.
5. Monitor the student for responsiveness, pulse and breathing until medical help arrives.