

EXERTIONAL HEAT STROKE

HPI	Signs & Symptoms	Differential Diagnosis
<ul style="list-style-type: none"> Exposure time to heat Extremities of age Strenuous exercise in hot weather 	<ul style="list-style-type: none"> AMS Rectal temperature >104F 	<ul style="list-style-type: none"> Heat cramps Heat exhaustion Fever Dehydration

	EMR	EMT	PM
1. Provide Adult/Pediatric Routine Medical Care - treat life threatening problems with airway, breathing circulation and disability.	•	•	•
2. Move patient to cool environment, remove clothing to facilitate cooling	•	•	•
3. Obtain ECG and/or 12 lead, monitor Capnography.		•	•

EXERTIONAL HEAT STROKE: AMS, rectal temperature > 104F°

4. Cool on scene and then transport patient	•
5. <u>May</u> assist with rectal temperature measurement if performed by athletic staff on scene with event (probe inserted 6 inches)	•
6. Initiate immersion cooling with or without rectal temperature: <ol style="list-style-type: none"> If tank available, perform whole-body cold-water immersion (assist athletic staff if patient is already in a tank) If no tank available, perform Tarp Assisted Cooling with Oscillation (TACO method): <p>Place patient on a large tarp/body bag with ice water and tilt back and forth continuously (assist athletic staff if patient is already in a tarp with oscillating ice water).</p> Notify OLMC of onsite immersion cooling for an exertional heat stroke patient 	•
7. Stop cooling and transport when rectal temperature < 102.2F° or if mental status improves (may assist staff with rectal temp. if available)	•
8. ALL heat stroke patients require transport	•

NOTE:

- Oral and axillary temperature measurements are unreliable
- Stop immersive cooling if patient begins to shiver.
- If patient vomits, refer to [Nausea/Vomiting Protocol](#)
- If patient seizes, refer to [Seizure Protocol](#)

CONSIDERATIONS FOR COLLAPSED ATHLETE

- Arrhythmia and [cardiac arrest](#)
- [Traumatic brain injury](#)
- [Hypoglycemia](#)
- Hyponatremia - evident by abdominal cramps, vomiting, widened QRS - IV fluid bolus CONTRAINDICATED
- [Anaphylaxis](#)

PEARLS:

- The care goals include: rapid recognition, rapid assessment, and rapid cooling. Rapid recognition of exertional heat stroke and immersion cooling are essential to survival. Critical cell damage occurs in 30 minutes. Cool first/Transport second.