

EL DORADO COUNTY EMS AGENCY

PREHOSPITAL PROTOCOLS

Effective: July 2009

Reviewed: July 2021

Revised: May 2022

Scope: BLS/ALS – Adult/Pediatric

please see signature on file

EMS Agency Medical Director

HEAT ILLNESS - ADULT/PEDIATRIC

PROTOCOL PROCEDURE: Flow of protocol presumes that the patient's condition is continuing. Immediate, rapid transport for heat illness with treatment performed en route is preferred UNLESS severe heat exhaustion or heat stroke with cold water immersion (CWI) in process by on-scene staff. CWI should be allowed to be completed (10-15 minutes) unless trauma or other possible issues require hospital intervention.

<u>HEAT CRAMPS</u>	<u>HEAT EXHAUSTION</u>	<u>HEAT STROKE</u>
<p>Sx: Muscle cramps and possibly fatigue and/or dehydration</p> <p>Signs: Warm moist skin, normal to elevated temp, skin may be flushed</p> <p>Care: Begin passive cooling and oral rehydration</p>	<p>Sx: Dehydration, dizziness, low grade fever, headache, cramping, nausea, vomiting</p> <p>Signs: Tachycardia, hypotension and elevated temperature with warm or cool moist skin</p> <p>Care: Begin active cooling and rehydration</p>	<p>Sx: Dehydration, fever, altered mental status</p> <p>Signs: Tachycardia, hypotension, temperature >102, cessation of sweating (if environmental) or continued sweating (if exertional). Confusion or slow to respond</p> <p>Care: Begin rapid active cooling and cool IV saline Bolus</p>

Basic Life Support

EMT

ROUTINE MEDICAL CARE –

- Assess airway and support ventilation with appropriate airway adjuncts as indicated
- Apply oxygen if pulse oximetry <94% or signs of hypoperfusion or respiratory distress
- Obtain and document temperature if able

BEGIN COOLING MEASURES –

- Move patient to a cooler environment, remove restrictive clothing.
- If temperature is elevated, begin active cooling. In order of effectiveness, use dependent on availability of resources:
 - If on scene at an event where staff have initiated cold water immersion (CWI) for suspicion of heat stroke, do not move the patient from cold water immersion until patient starts shivering or 10-15 minutes of immersion, whichever is soonest.
 - Ideal core temperature, if available, would be 102°F (39°C) or less when cold water immersion is discontinued.

HEAT ILLNESS

CONTINUED

- If CWI not available but cool/cold water is, remove clothing and rotate cool/cold wet towels over entire body of patient
- If CWI and cool/cold wet towels not available, remove clothing, splash/sponge patient with water and place cool packs on neck, axillary, and inguinal areas. Promote evaporative cooling with fan or by fanning.

LOSOP

EMT working under Local Optional Scope

GLUCOSE LEVEL ASSESSMENT via finger stick and treat if indicated per GLYCEMIC EMERGENCY protocol.

Advanced Life Support

Paramedic

VASCULAR ACCESS - Establish IV/IO

NORMAL SALINE –

- **Adult:** NS 1000mL bolus. Repeat 500mL boluses to keep minimum SBP of 100mmHg.
- **Peds:** Give NS 20ml/kg. Repeat as indicated to keep minimum age appropriate SBP [70 + (2 x age in years)].

GLUCOSE LEVEL ASSESSMENT - Via finger stick or venipuncture and treat if indicated per GLYCEMIC EMERGENCY protocol.

REFER TO ALTERED LEVEL OF CONSCIOUSNESS, SEIZURE, OR SHOCK PROTOCOLS AS APPROPRIATE.