

# EL DORADO COUNTY EMS AGENCY

## PREHOSPITAL PROTOCOLS

Effective: July 1, 2009

Reviewed: July 1, 2021

Revised: October 2022

Scope: BLS/ALS – Adult/Pediatric

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EMS Agency Medical Director

### SHOCK – ADULT/**PEDIATRIC**

**PROTOCOL PROCEDURE:** Flow of protocol presumes patient is in shock or that the patient is compensating for impending shock. Rapid transport with IV(s) established en route is a standard.

## Basic Life Support

### EMT

#### ABCs / ROUTINE MEDICAL CARE:

- Keep patient warm
- Assess airway and support ventilation with appropriate airway adjuncts as indicated
- Apply oxygen if pulse oximetry <94% or signs of hypoperfusion or respiratory distress
- Consider spinal precautions for patients with traumatic injury

#### SIGNS AND SYMPTOMS:

- Restlessness, confusion, ALOC
- Weakness, dizziness
- Weak, rapid pulse
- Pale, cool, clammy skin
- Delayed capillary refill
- Hypotension
- Coffee-ground emesis
- Tarry stools
- Hemorrhage

#### CONSIDER CAUSE:

<b>ANAPHYLACTIC</b>	Severe allergic reaction - Refer to ALLERGIC REACTION Protocol
<b>SEPTIC</b>	Overwhelming Infection – Refer to SEPSIS Protocol
<b>HYPOVOLEMIC</b>	Decreased circulating volume due to blood or fluid loss, i.e. trauma, anticoagulants, history of GI or vaginal bleeding, ectopic pregnancy, vomiting, diarrhea
<b>CARDIOGENIC</b>	Circulatory failure due to inadequate cardiac function, i.e. acute MI, CHF, congenital defect
<b>NEUROGENIC</b>	Loss of sympathetic tone causing decrease in peripheral vascular resistance; occurs in head and spinal cord injury

**Advanced Life Support**

Paramedic

**ADULT**

<p align="center"><b>APPLY CARDIAC MONITOR AND ASSESS VITAL SIGNS</b></p> <p align="center"><b>Establish a large bore IV or an IO if unable to establish IV</b></p>		
HYPOVOLEMIC	CARDIOGENIC	NEUROGENIC
<p>1) Give 1000mL bolus if SBP &lt; 100 <b>OR</b> has signs of compensatory shock (tachycardia, tachypnea, poor skin signs, delayed cap refill)</p> <p>2) Repeat 500 mL bolus as necessary for SBP &lt; 100</p> <p>3) Treat injury per GENERAL TRAUMA Protocol</p> <p><b>CONTACT BASE as needed</b></p>	<p>1) Obtain 12 lead EKG</p> <p>2) Check Blood Glucose</p> <p>3) Consider 250 mL bolus if SBP &lt; 100 <b>OR</b> has signs of compensatory shock (tachycardia, tachypnea, poor skin signs, delayed cap refill). Monitor closely and discontinue if ineffective.</p> <p align="center"><b>If hypotension persists:</b></p> <p align="center"><b>EPINEPHRINE – push dose or gtt</b> <b>OR</b> <b>DOPAMINE gtt</b></p> <p align="center"><b>-Refer to Formulary-</b></p> <p><b>CONTACT BASE as needed</b></p>	<p>1) Give 1000 mL bolus if SBP &lt; 100 <b>OR</b> has signs of compensatory shock (tachycardia, tachypnea, poor skin signs, delayed cap refill)</p> <p>2) Check Blood Glucose</p> <p>3) Repeat 500 mL bolus as necessary for SBP &lt; 100</p> <p align="center"><b>If hypotension persists:</b></p> <p align="center"><b>EPINEPHRINE – push dose or gtt</b> <b>OR</b> <b>DOPAMINE gtt</b></p> <p align="center"><b>-Refer to Formulary-</b></p> <p><b>CONTACT BASE as needed</b></p>

PEDIATRIC

<p align="center"><b>APPLY CARDIAC MONITOR AND ASSESS VITAL SIGNS</b></p> <p align="center"><b>Establish a large bore IV or an IO if unable to establish IV</b></p>		
HYPOVOLEMIC	CARDIOGENIC	NEUROGENIC
<p>1) Give bolus of 20 mL/kg if hypotensive <b>OR</b> has signs of compensatory shock (tachycardia, tachypnea, poor skin signs, delayed cap refill)</p> <p>2) Check Blood Glucose</p> <p>3) If no improvement with initial bolus give additional fluid boluses of 20 mL/kg to a max of 60 mL/kg</p> <p><b>CONTACT BASE as needed</b></p>	<p>1) Obtain 12 lead EKG</p> <p>2) Check Blood Glucose</p> <p>3) Give bolus of 10 mL/kg if hypotensive <b>OR</b> has signs of compensatory shock (tachycardia, tachypnea, poor skin signs, delayed cap refill)</p> <p align="center"><b>If hypotension persists:</b></p> <p align="center"><b>EPINEPHRINE – push dose or gtt</b> <b>OR</b> <b>DOPAMINE gtt</b></p> <p align="center"><b>-Refer to Formulary-</b></p> <p><b>CONTACT BASE as needed</b></p>	<p>1) Give bolus of 20 mL/kg if hypotensive <b>OR</b> has signs of compensatory shock (tachycardia, tachypnea, poor skin signs, delayed cap refill)</p> <p>2) Check Blood Glucose</p> <p>3) If no improvement with initial bolus. Give additional boluses of 20 mL/kg to a max of 60ml/kg</p> <p align="center"><b>If hypotension persists:</b></p> <p align="center"><b>EPINEPHRINE – push dose or gtt</b> <b>OR</b> <b>DOPAMINE – gtt</b></p> <p align="center"><b>-Refer to Formulary-</b></p> <p><b>CONTACT BASE as needed</b></p>