

# 2.19

# Non-Traumatic Shock Adult & Pediatric

Recognize Compensated Shock-Adult

- Anxiety
- Tachycardia
- Tachypnea
- Diaphoresis

## SHOCK

**Inadequate tissue perfusion that impairs cellular metabolism**

Recognize Compensated Shock - Pediatric:

- Delayed capillary refill
- Decreased or bounding peripheral pulses
- Palpable central pulse, decreased distal pulse
- Cool extremities
- Altered mental status
- Mild tachypnea



←NO→ Trauma Involved? →YES→

See Shock – Traumatic Protocol 4.4

### EMT STANDING ORDERS - ADULT & PEDIATRIC:

## E

- Obtain finger stick lactate level (if available and trained)
  - ETCO<sub>2</sub> < 25 mmHg OR lactate > 2 mmol/L may indicate poor perfusion/shock

### ADVANCED EMT STANDING ORDERS – ADULT & PEDIATRIC

## A

- **ADULT:** Administer 0.9% NaCl in 250 mL boluses to return the patient to a coherent mental status or palpable radial pulse, not to exceed 2000 mL without consultation with **Medical Control**.
- **PEDIATRIC:** Administer fluid bolus of 20 mL/kg of 0.9% NaCl by syringe push method (may repeat to a maximum 60 mL/kg) to improve clinical condition (capillary refill time ≤ 2 seconds, equal peripheral and distal pulses, improved mental status, normal breathing).

### PARAMEDIC STANDING ORDERS – ADULT & PEDIATRIC

## P

- ADULT:** If there is no adequate hemodynamic response after 2,000 ml IV fluid infused consider:
- Norepinephrine infusion 1 – 30 microgram/minute (preferred) via pump, **OR**
  - Epinephrine infusion 2 – 10 micrograms/minute, via pump
- PEDIAITRIC:** If there is no adequate hemodynamic response after 60 mL/kg IV fluid infused contact **Medical Control**

### CARDIOGENIC SHOCK

Primary pump failure  
Decreased cardiac output

- Norepinephrine infusion 1 – 30 microgram/minute (preferred) via pump, **OR**
  - Epinephrine infusion 2 – 10 micrograms/minute, via pump
- \*For pediatric cardiogenic shock administer fluid bolus of 10mL/kg of 0.9% saline by syringe push method. Repeat bolus per **Medical Control**.

### DISTRIBUTIVE SHOCK

Inadequate blood volume distribution.

Known history of AI or recent illness, see [Adrenal Insufficiency Protocol 2.1](#)  
Systemic response to an allergen, see [Anaphylaxis/Allergic Reaction Protocol 2.2A&P](#)  
Overwhelming response to an infection, see [Sepsis Protocol 2.18 A&P](#)

### HYPOVOLEMIC SHOCK

Insufficient circulating volume.

Abdominal pain with vaginal bleeding see [Obstetric Protocol 2.14](#).  
Nausea and vomiting see [Nausea Vomiting Protocol 2.11](#).  
For GI bleeding see [Abdominal Pain Protocol 2.0](#).  
Heat exposure, see [Hyperthermia Protocol 2.8](#).

### OBSTRUCTIVE SHOCK

Obstruction of blood flow outside the heart

For cardiac tamponade, rapid transport, treat arrhythmias per [Cardiac Protocols 3.0 – 3.6](#).  
For spontaneous pneumothorax: consider needle decompression per [Thoracic Injury Protocol 4.6](#).  
For pulmonary embolism: rapid transport and see [Airway Management Protocol 5.0](#).