## **Pediatric Shock**

<sup>1</sup>Manage anaphylactic shock **General Signs of Shock** Routine Medical Care / Trauma Care as per Pediatric Anaphylaxis Altered mental status Include temperature protocol Delayed/flash capillary refill Look for associated injuries <sup>2</sup> Alert the hospital if you have Weak or decreased pulses a sepsis patient! Tachycardia\* **Elevated RR** Risk Factors for Septic Shock Place 1 or 2 IVs of the largest size possible Hypoxemia Cancer (consider IO after two unsuccessful attempts) Hypotension for age Sickle Cell disease Decreased urine output Catheters (PICC, Foley, etc) Immune deficiency or \*sometimes tachycardia compromise is the only symptom\* Consider etiology of shock state History of transplant Normal SBP = 70 + (age in yrs x 2)Severe developmental delay <sup>1</sup>Anaphylactic <sup>2</sup>Septic Cardiogenic Obstructive Hypovolemic Neurogenic High flow O<sub>2</sub> via NRB Evaluate lung sounds **Crystalloid Fluid bolus**  Evaluate lung sounds • Crystalloid Fluid bolus 20 mL/kg IV/IO (max 1L) Decompress tension 10 mL/kg IV/IO \*deliver bolus as quickly as possible\* pneumothorax (consult (max 500 mL) (infuse over <15 minutes) Med Control prn) Reassess vital signs and perfusion Look for signs of fluid overload (ex. JVD, crackles, hepatomegaly, hx of heart failure) Repeat prior No Yes Are there signs Start Epinephrine infusion<sup>3</sup> Crystalloid Fluid bolus 20 ml/kg of fluid overload? 0.01-0.5 mcg/kg/min (if cardiogenic 10ml/kg) <sup>3</sup>While preparing infusion, consider <sup>3</sup>Consider Vasopressor Infusion: Push Dose Epinephrine 1ml IV/IO - may repeat q5min x 2 (3 doses total) Do NOT administer faster than 1ml/min. Epinephrine 0.01-0.5 mcg/kg/min Using a 1ml syringe, draw 0.1ml of 0.1mg/ml (1:10,000) Epi and 0.9 ml of NS Norepinephrine 0.01-0.5 mcg/kg/min

| Normal Vital Signs by Age |             |                |         |             |                |
|---------------------------|-------------|----------------|---------|-------------|----------------|
|                           | HEART RATE  | BLOOD PRESSURE |         | HEART RATE  | BLOOD PRESSURE |
| AGE                       | (beats/min) | (mmHg)         | AGE     | (beats/min) | (mmHg)         |
| Premature                 | 120-170     | 55-75/35-45    | 1-3 yr  | 70-110      | 90-105/55-70   |
| 0-3 mo                    | 100-150     | 65-85/45-55    | 3-6 yr  | 65-110      | 95-110/60-75   |
| 3-6 mo                    | 90-120      | 70-90/50-65    | 6-12 yr | 60-95       | 100-120/60-75  |
| 6-12 mo                   | 80-120      | 80-100/55-65   | 12+ yr  | 55-85       | 110-135/65-85  |

Contact Medical Control for additional orders or consultation

(syringe = 10mcg/ml Epinephrine)
\* contraindicated in traumatic shock\*

