Preparation and Dosing of Push Dose Epinephrine - Pediatric

INDICATIONS:

- ROSC
- Shock unresponsive to initial fluid bolus
- Deteriorating patient condition with unknown shock etiology

CONTRAINDICATIONS:

- Hemorrhagic shock

PROCEDURE: **Base Hospital contact and order required.**

- Initiate fluid resuscitation with 20 mL/kg IV or IO bolus up to maximum dose of 250 mL. If no response
- and it appears that Push Dose Epinephrine (PDE) would be indicated, make Base Hospital contact for PDE order.
- If patient is experiencing cardiogenic shock with pulmonary edema, do not administer fluids but go directly to Base Hospital contact.
- Paramedics may prepare PDE dose prior to Base Hospital contact but cannot administer medication without Base Hospital contact and order.

Recommended Preparation:

1. Obtain epinephrine 1 mg in 10 mL (0.1 mg / mL; cardiac epinephrine).
2. Waste 9 mL from the syringe, leaving 1 mL (0.1 mg).
3. Withdraw 9 mL of normal saline into syringe.
4. Gently mix.
5. Final concentration: 10 mL total volume at 10 mcg / mL

Weight	Volume
3 kg	0.3 mL
4 kg	0.4 mL
5 kg	0.5 mL
6 kg	0.6 mL
7 kg	0.7 mL
8 kg	0.8 mL
9 kg	0.9 mL
≥ 10 kg	1 mL

Administration:

- Administer 0.1 mL / kg (0.001 mg / kg) IV / IO (max single dose 1.0 mL).
- May repeat dose every 3 minutes to titrate to age-based SBP (refer to graph below).

Pediatric Vital Signs by Age

Age	Pulse	Systolic Blood Pressure	Respiratory Rate
Neonate (0-30 days)	100-180	> 60	30-60
Infant (31 days - < 1 yr)	100-160	> 60	30-60
Toddler (1 yr - < 3 yrs)	90-150	> 70	24-40
Pre-school (3 yrs - < 5 yrs)	80-140	> 75	22-34
School Aged (5 yrs - < 10 yrs)	70-120	> 80	18-30
Teen (≥ 10 yrs)	60-100	> 90	12-16

Approved: [signature] MD

Review Date: 08/26
Final Date for Implementation: 04/01/2027