

Postresuscitation Treatment of Shock and Maintenance Fluid Requirements

Pediatric Advanced Life Support

American Academy of Pediatrics

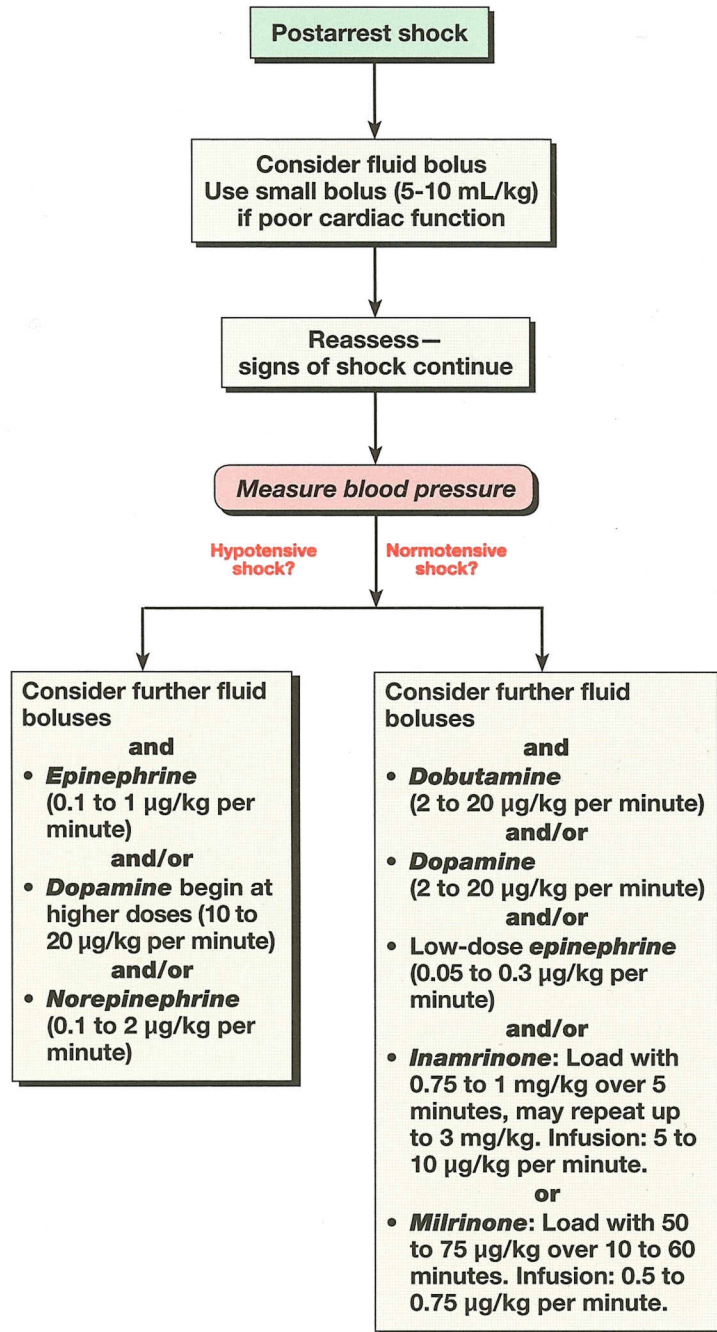
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Estimation of Maintenance Fluid Requirements

- **Infants <10 kg:** Infusion of D₅ normal saline after initial stabilization at a rate of 4 mL/kg per hour. For example, the maintenance rate for an 8-kg baby is as follows:

$$4 \text{ mL/kg per hour} \times 8 \text{ kg} = 32 \text{ mL/h}$$

- **Children 10 to 20 kg:** Infusion of 0.9% sodium chloride (normal saline) after initial stabilization at a rate of 40 mL/h plus 2 mL/kg per hour for each kilogram between 10 and 20 kg. For example, the maintenance rate for a 15-kg child is as follows:

$$40 \text{ mL/h} + (2 \text{ mL/kg per hour} \times 5 \text{ kg}) = 50 \text{ mL/h}$$

- **Children >20 kg:** Infusion of 0.9% sodium chloride (normal saline) after initial stabilization at a rate of 60 mL/hour plus 1 mL/kg per hour for each kilogram above 20 kg. For example, the maintenance rate for a 30-kg child is as follows:

$$60 \text{ mL/h} + (1 \text{ mL/kg per hour} \times 10 \text{ kg}) = 70 \text{ mL/h}$$

- Shortcut for patients weighing >20 kg:

$$\text{weight in kg} + 40 \text{ mL/h}$$

Adjust rate and composition of fluids to child's clinical condition (eg, pulse, blood pressure, systemic perfusion) and level of hydration.