

Summary: Managing Shock

Here is a summary of general management of shock and specific management by etiology.

General Management

- Oxygen
- Pulse oximetry
- ECG monitor; frequent blood pressure monitoring
- BLS as indicated
- IV/IO access
- Point-of-care glucose testing

Specific Management of Hypovolemic Shock

- Nonhemorrhagic
 - 20 mL/kg isotonic crystalloid bolus, repeat as needed
 - Consider colloid
- Hemorrhagic
 - Control external bleeding
 - 10-20 mL/kg isotonic crystalloid bolus, repeat 1 or 2 × as needed
 - Transfuse PRBCs as indicated

Specific Management of Distributive Shock

- Septic
 - Refer to the Pediatric Septic Shock Algorithm
- Anaphylactic
 - IM epinephrine (or autoinjector)
 - Fluid boluses (10-20 mL/kg isotonic crystalloid)
 - Albuterol
 - Antihistamines, corticosteroids
 - Epinephrine infusion
- Neurogenic
 - 20 mL/kg isotonic crystalloid bolus, repeat as needed
 - Vasopressor

Specific Management for Cardiogenic Shock

- Bradyarrhythmia/tachyarrhythmia
 - Refer to the Pediatric Bradycardia With a Pulse Algorithm
 - Refer to the Pediatric Tachyarrhythmia With a Pulse Algorithm
- Other (eg, congenital heart disease, myocarditis, cardiomyopathy, poisoning)
 - 5 to 10 mL/kg isotonic crystalloid bolus, repeat as needed
 - Inotropic and/or vasoactive infusion
 - Antidote for poisoning
 - Consider expert consultation

Specific Management for Obstructive Shock

- Ductal-dependent (left ventricular outflow obstruction)
 - Prostaglandin E₁
 - Expert consultation
- Tension pneumothorax
 - Needle decompression
 - Tube thoracostomy
- Cardiac tamponade
 - Pericardiocentesis
 - 5-10 mL/kg isotonic crystalloid bolus
 - Expert consultation
- Pulmonary embolism
 - 5-10 mL/kg isotonic crystalloid bolus, repeat as needed
 - Consider thrombolytics, anticoagulants
 - Expert consultation