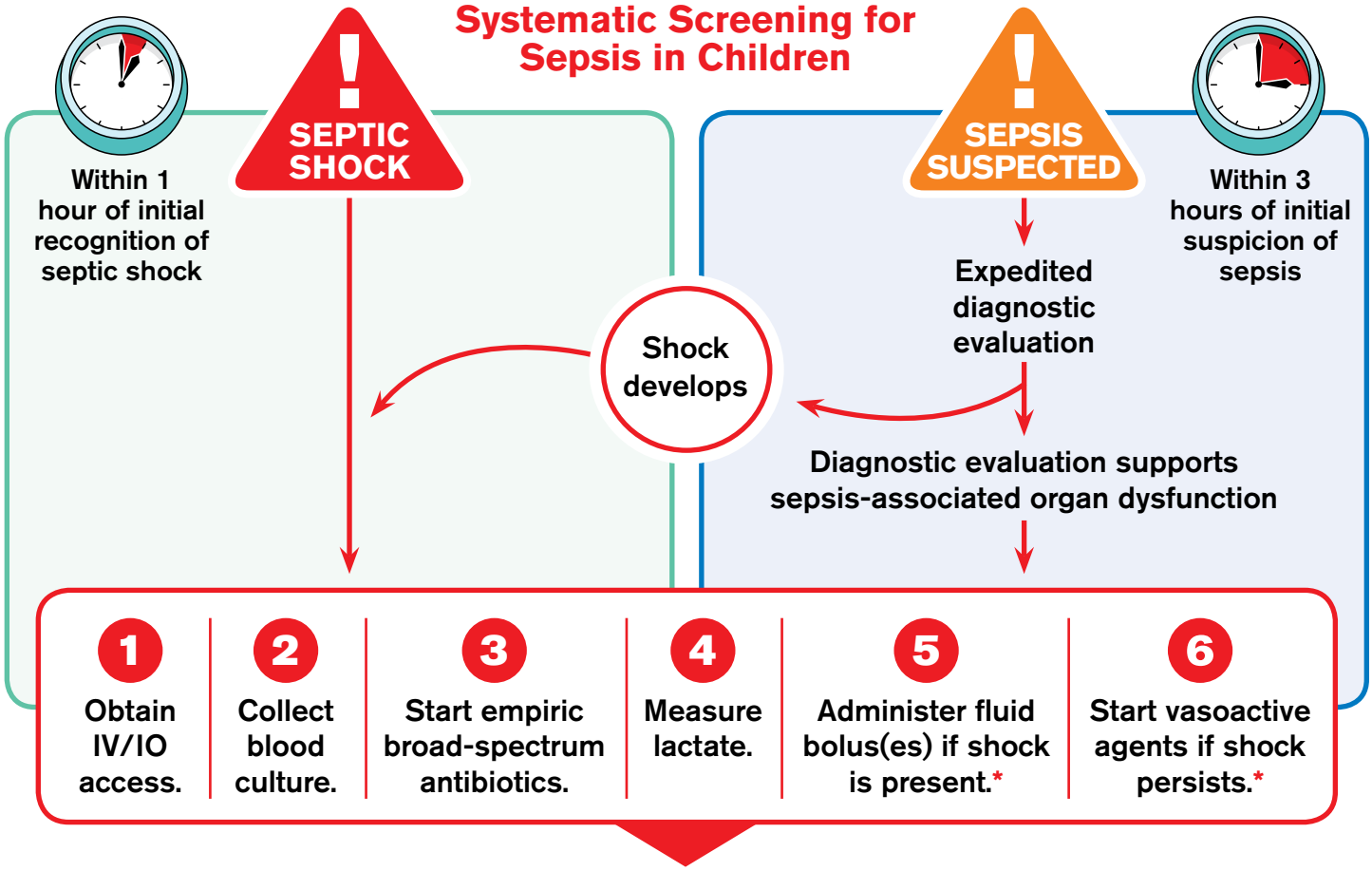
Initial Resuscitation Algorithm for Children

Surviving Sepsis Campaign®



Respiratory support

Assess for Pediatric Acute Respiratory Distress Syndrome

Infectious source control — **Continuous reassessment** — Fluid and vasoactive titration*

Advanced hemodynamic monitoring if shock persists

- +/- hydrocortisone for refractory shock**
- Nutritional support
- Avoid hypoglycemia
- Antimicrobial stewardship

VA or VV ECLS for refractory shock or oxygenation/ventilation failure (after addressing other causes of shock and respiratory failure)

*See fluid and vasoactive algorithm. Note: Fluid bolus should be omitted from bundle if a) fluid overload is present or b) it is a low-resource setting without hypotension. Fluid in mL/kg should be dosed as ideal body weight.

**Hydrocortisone may produce benefit or harm.

www.sccm.org/SurvivingSepsisCampaign/Guidelines/Pediatric-Patients

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Fluid and Vasoactive-Inotrope Management Algorithm For Children

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Healthcare Systems WITH Intensive Care

SEPTIC SHOCK

Healthcare Systems WITHOUT Intensive Care

Abnormal Perfusion with or without Hypotension

- If signs of fluid overload are absent, administer fluid bolus, 10-20 mL/kg.
- Repeat assessment of hemodynamic response to fluid and consider fluid boluses, 10-20 mL/kg, until shock resolves or signs of fluid overload develop.
- Assess cardiac function.
- Consider epinephrine if there is myocardial dysfunction or epinephrine/ norepinephrine if shock persists after 40-60 mL/ kg (or sooner if signs of fluid overload develop).

Abnormal perfusion WITHOUT hypotension

- Do NOT give fluid bolus unless there are signs of dehydration with ongoing fluid losses (eg, diarrhea).
- Start maintenance fluids.
- Monitor hemodynamics closely.
- Consider vasoactive-inotropic support (if available).

Abnormal perfusion WITH hypotension*

- If signs of fluid overload are absent, administer fluid bolus, 10-20 mL/kg.
- Assess hemodynamic response to fluid and repeat fluid boluses, 10-20 mL/kg, until hypotension resolves or signs of fluid overload develop.
- Assess cardiac function (if available)
- Consider epinephrine/ norepinephrine if hypotension persists after 40 mL/kg or sooner if signs of fluid overload develop.

Fluid in mL/kg should be dosed as ideal body weight.

Shock resolved, perfusion improved

- Do not give more fluid boluses.
- Consider maintenance fluids.
- Monitor for signs/symptoms of recurrent shock.

*Hypotension in healthcare systems WITHOUT intensive care is defined as either:

- SBP < 50 mm Hg in children aged < 12 months
- SBP < 60 mm Hg in children aged 1 to 5 years
- SBP < 70 mm Hg in children aged > 5 years

OR

- Presence of all 3 World Health Organization criteria: cold extremities, prolonged capillary refill > 3 seconds, weak/fast pulse

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