

SYMPTOMS: Signs of poor perfusion due to a medical cause. Signs include altered mental status, delayed capillary refill, hypoxia (SpO<sub>2</sub> of less than 94%), decreased urine output, respiratory rate greater than 20 in adults or elevated in children, hypotension for age, tachycardia for age, weak, decreased or bounding pulses, cool/mottled, flushed or ruddy skin.

#### Assessment, Treatment and Interventions

#### ALL LEVELS

1. Obtain and monitor vital signs.
2. Activate ALS. Early, aggressive IC fluid administration is essential in the treatment of suspected shock.

#### EMR-O; EMT-R

3. For anaphylactic shock, see [Allergic Reaction/Anaphylaxis guideline \[M-4\]](#).
4. Check SpO<sub>2</sub>.
5. Administer oxygen as appropriate for dyspnea or distress with a target of achieving greater than 93% saturation for most acutely ill patients.
6. Check blood sugar and correct if less than 60 mg/dL.

#### EMT-O

7. Apply ECG cardiac monitor.
8. Obtain ETCO<sub>2</sub>.

#### AEMT-R

9. If fever, consider administration of acetaminophen [15mg/kg PR/IV/IO/PO maximum dose 1000mg].
10. Establish IV/IO access.
11. Consider isotonic IV/IO fluid bolus 20 ml/kg normal saline over less than 15 minutes using a push/pull method of drawing up the fluid in a syringe and pushing it through the IV/IO (preferred for pediatric patients). OR

#### AEMT-O

12. Consider lactated Ringer's over less than 15 minutes, using a push-pull method of drawing up the fluid in a syringe and pushing it through the IV/IO (preferred for pediatric patients).
13. If fever, and acetaminophen not administered, administer ibuprofen [10mg/kg PO maximum 600 mg].

#### INT-R

14. Interpret ECG.

#### INT-O

15. Interpret ETCO<sub>2</sub>. Reading of less than 25 mmHg may be sign of poor perfusion.

#### PARA-R

16. Interpret ETCO<sub>2</sub>. Reading of less than 25 mmHg may be sign of poor perfusion.

#### PARA-O

17. If there is a history of adrenal insufficiency or long-term steroid dependence, administer:
  - a. Hydrocortisone succinate [2mg/kg IV/IO/IM (preferred) maximum of 100mg].
  - OR
  - b. Methylprednisolone [2mg/kg IV/IO maximum of 125mg].
18. For shock unresponsive to IV fluids administer vasopressor.
19. Cardiogenic shock, hypovolemic shock, obstructive shock and distributive shock, give Norepinephrine infusion (preferred) [Adult: 0.05-0.5mcg/kg/minute titrated to MAP greater than 65mmHg; Pediatric: 0.05-0.5mcg/kg/minute titrated to age-appropriate BP].