

DEFINITION:

- Shock is defined by hypotension resulting in end organ hypoperfusion (such as altered mental status)
- SBP <90 mmHg has historically been used as a cutoff for considering initiation of treatment for shock
- Once treatment has been initiated, and particularly in the case of vasopressor use, a target MAP of 65 mmHg should preferentially be used for titration purposes as it better approximates the minimum blood pressure required to perfuse the brain

TREATMENT:

- A. Treat per Universal Patient Care
- B. Prepare for rapid transport.
- C. Determine type of shock and treat as follows:
 - **Hypovolemic Shock:**
 1. Elevate legs.
 2. Give **NS or LR 500 ml** fluid bolus, repeat if needed if no signs of pulmonary edema.
 3. For hemorrhagic shock, do not fluid overload. Goal is a MAP of >65mmHg.
 4. For SBP <90 or MAP <65 mmHg with signs of traumatic hemorrhagic shock, if available, give **TXA 2g IV/IO** slow push over 1 minute if less than 3 hrs since injury.
 5. For SBP <90 or MAP <65 mmHg with signs of postpartum hemorrhagic shock after delivery of placenta, give **TXA 1g IV/IO** in 100 ml NS or LR over 10 minutes if less than 3 hrs since delivery AND **Pitocin 10 units IM.**
 - **Cardiogenic Shock:**
 1. Follow appropriate cardiac dysrhythmia protocol.
 2. Administer **NS** or **LR 250 ml** fluid boluses if no pulmonary edema present.
 3. Consider **Push-Dose Epinephrine 10 mcg of 1:100,000** q 1 min until MAP of at least 65 mmHg. Use as a bridge to Norepinephrine or epinephrine infusion.
 4. If unresponsive to fluid challenge, administer **Norepinephrine infusion.** Increase medication infusion per protocol until MAP is >65 mmHg and signs of shock are alleviated.
 5. If **Norepinephrine** isn't available, consider **Epinephrine infusion.**
 - **Distributive Shock (anaphylaxis, sepsis, neurogenic):**
 1. Give **NS or LR 500 ml** fluid bolus, repeat if needed if no signs of pulmonary edema. May repeat to a total of 1,000 ml. If shock persists consider **Push-Dose Epinephrine 10 mcg of 1:100,000** q 1 min until MAP of at least 65 mmHg. Use as a bridge to **Norepinephrine** or **epinephrine** infusion per protocol with titration to MAP >65 mmHg.
 2. **Norepinephrine** infusion is preferred in suspected septic and neurogenic shock whereas **epinephrine** infusion is preferred in anaphylactic shock.

PEDIATRIC PATIENTS:

Treat as outlined above with the exception of the following Fluid Administration guidelines:

1. Infants – 10 ml/kg.
2. Children – 20 ml/kg.
3. Maximum fluid amount in Cardiac and Obstructive shock is 20 ml/kg

NOTES & PRECAUTIONS:

- A. Closely monitor patient's respiratory status and vital signs. Avoid fluid overload.
- B. Other signs and symptoms of shock include confusion, restlessness, altered mental status, moist skin, apathy and tachycardia.
- C. Keep patient warm
- D. Notify receiving hospital ASAP

DOCUMENT:

- A. Respiratory Effort
- B. Signs & Symptoms of shock
- C. Vital signs including temp, SpO2 and CO2
- D. GCS
- E. Skin Color and Temp
- F. Cardiac Rhythm
- G. Response to treatments