

*Michigan*  
**ALS Adult Treatment Protocols**  
**SHOCK**

Date: May 31, 2012

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## ***Shock***

Assessment: Consider multiple etiologies of shock (hypovolemic, distributive – neurogenic, septic and anaphylactic, and cardiogenic)

### **Pre-Medical Control**

#### **MFR/EMT/SPECIALIST/PARAMEDIC**

1. Follow **General Pre-hospital Care Protocol**.
2. Control major bleeding
3. Position patient:
  - A. Left lateral recumbent if 3<sup>rd</sup> trimester pregnancy.
  - B. Elevate legs 10-12 inches.
4. Remove all transdermal patches using gloves.
5. **Immediate load and transport for unstable patients.**
6. Follow local MCA transport protocol.

#### **SPECIALIST/PARAMEDIC**

7. Obtain vascular access (in a manner that will not delay transport).
  - A. The standard NS IV/IO fluid bolus volume will be normal saline up to 1 liter, wide open, repeated as necessary, unless otherwise noted by protocol. IV/IO fluid bolus is contraindicated in patients with pulmonary edema.
  - B. Repeat IV/IO fluid bolus as necessary.
8. For hemorrhagic conditions, IV/IO fluid bolus is indicated only when signs of poor perfusion (e.g., lack of radial pulse) are present. Patient should be closely monitored. Fluid should be slowed to TKO upon evidence of improved perfusion.
9. Consider establishing a second large bore IV of Normal Saline enroute to hospital, if possible.

#### **PARAMEDIC**

10. Obtain 12-lead ECG if available.

### **Post-Medical Control**

#### **SPECIALIST/PARAMEDIC**

1. Additional IV/IO fluid bolus.

#### **PARAMEDIC**

2. If BP is less than 100 mmHg and signs/symptoms of cardiogenic or spinal shock, administer Dopamine 5-20 mcg/kg/min. Generally start at 5 mcg/kg/min, and increase every 10 minutes by an additional 5 mcg/kg/min until BP greater than 100 mmHg. DO NOT exceed 20 mcg/kg/min unless ordered by medical control.

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Assessment: Consider multiple etiologies of shock (hypovolemic, distributive – neurogenic, septic and anaphylactic, and cardiogenic)

Follow **General Pre-hospital Care Protocol**

Control major bleeding

Position patient

- Left lateral recumbent if 3<sup>rd</sup> trimester pregnancy
- Elevate legs 10-12 inches
- Remove all transdermal patches using gloves

**Immediate load and transport for unstable patients. Follow local MCA transport protocol.**

- Obtain vascular access (in a manner not to delay transport)
- The standard NS IV/IO fluid bolus volume will be normal saline up to 1 liter, wide open, repeated as necessary, unless otherwise noted by protocol. IV/IO fluid bolus is contraindicated in patients with pulmonary edema.
- Repeat IV/IO fluid bolus as necessary
- For hemorrhagic conditions, IV/IO fluid bolus is indicated only when signs of poor perfusion (e.g., lack of radial pulse) are present. Patient should be closely monitored. Fluid should be slowed to TKO upon evidence of improved perfusion.
- Consider establishing 2<sup>nd</sup> large bore IV of Normal Saline en route to hospital, if possible.
- Obtain 12-lead ECG, if available

**Contact Medical Control**

- Additional IV/IO fluid bolus
- If BP is less than 100 mmHg and signs/symptoms of cardiogenic or spinal shock, administer Dopamine 5-20 mcg/kg/min. Generally start at 5 mcg/kg/min, and increase every 10 minutes by an additional 5 mcg/kg/min until BP over 100 mmHg. DO NOT exceed 20 mcg/kg/min unless ordered by medical control.