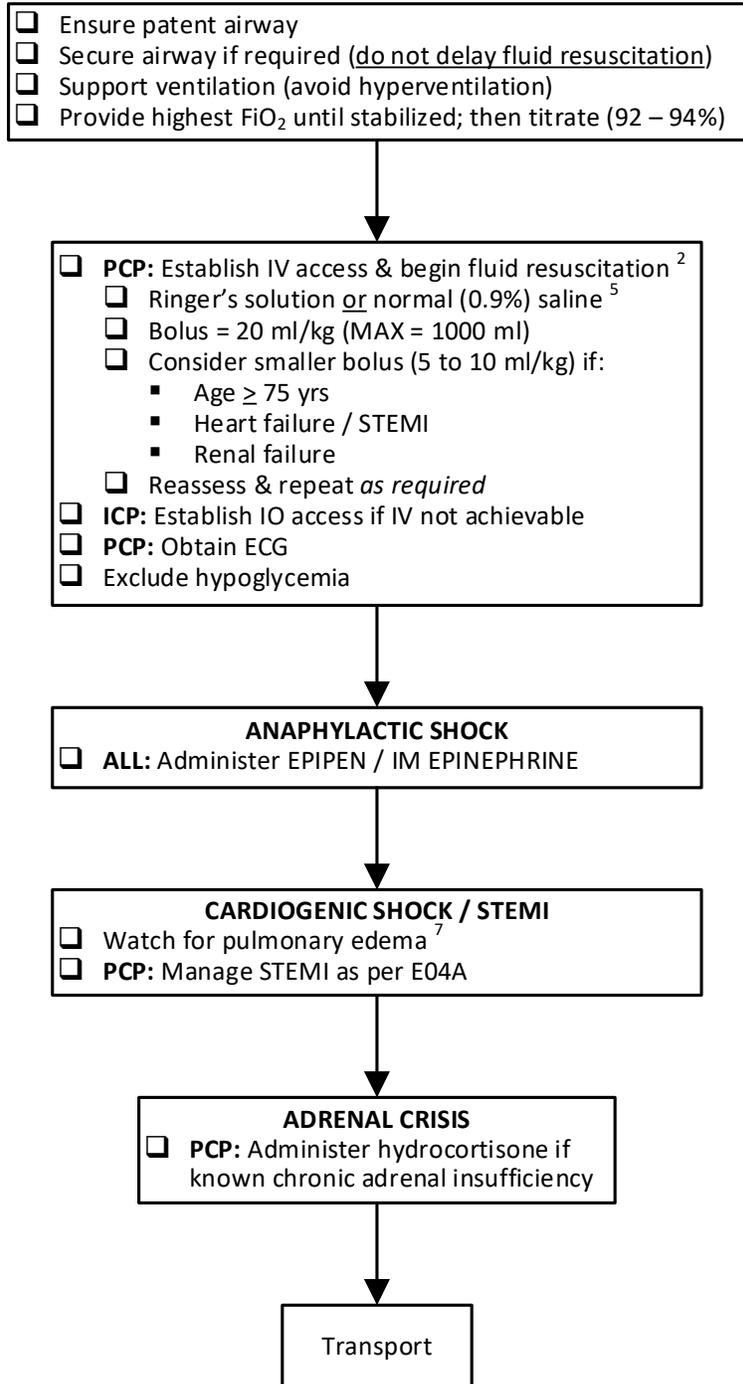


	<b>C07 - SHOCK</b>	
	All ages	RESUSCITATION
<b>ALL</b> - Paramedics with all work scopes will follow this protocol except where indicated by <b>PCP</b> (primary & intermediate only) or <b>ICP</b> (intermediate only).		
Version date: 2022-07-16	Effective Date: 2022-09-27 (0700 hrs)	



**ALL:** Paramedics with all work scopes will follow this protocol except where indicated by **PCP** (primary & intermediate only) or **ICP** (intermediate only).

### INDICATIONS

- Known or suspected shock that is not due to major trauma

### CONTRAINDICATIONS

- Not applicable

### NOTES

1. *Circulatory shock* is defined as a state of inadequate tissue perfusion. Although hypotension may be present, no specific blood pressure (BP) value defines shock. Shock may be present with a normal BP. Multiple factors (eg. age, fitness, medications) may impact the vital signs and complicate the presentation of shock.
2. The specific cause of shock can sometimes be difficult to determine in the prehospital setting, and multiple causes may sometimes be present (eg. myocardial dysfunction in septic shock). This is referred to as undifferentiated shock. Nonetheless, with a few exceptions, IV fluid administration is still an important early step in the management of most causes of shock.
3. The common categories and causes of shock that is not due to trauma include:
  - Hypovolemia (eg. vomiting, diarrhea, decreased oral intake, polyuria)
  - Hemorrhage
  - Sepsis / infection
  - Cardiogenic (eg. myocardial infarction, arrhythmia, acute valve dysfunction)
  - Obstructive (eg. tension pneumothorax, pericarditis)
  - Anaphylaxis
  - Adrenal insufficiency (adrenal crisis)
  - Neurogenic
4. Hemorrhagic shock can be due to major trauma or nontraumatic causes (eg. gastrointestinal bleed, severe epistaxis, tumor erosion). For the management of hemorrhagic shock due to major trauma, refer to F01 - MAJOR TRAUMA.
5. Either normal (0.9%) saline or lactated Ringer's solution are both acceptable in prehospital care in all age groups. Emerging evidence suggest that lactated Ringer's solution may improve various outcome parameters in most types of shock.
6. While there is limited research into the benefit of **permissive hypotension** in nontraumatic hemorrhagic shock, aggressive crystalloid administration is known to create coagulopathy and hypothermia (impairing clotting), and increases mortality. Consider smaller fluid boluses (5 ml/kg up to a maximum of 500 ml) targeted to an age-appropriate lower target systolic BP to maintain adequate blood flow to keep the heart and brain adequately perfused.
7. With cardiogenic shock, the conditions that cause poor cardiac output may also cause backup of fluid into the lungs. If the lungs are clear, use smaller volumes and continuously reassess to avoid pulmonary edema. Do not administer IV fluid in pulmonary edema, regardless of the presence of poor perfusion. The prehospital management of cardiogenic shock can be extremely difficult. Paramedics may consult the on-line medical support (OLMS) physician at any time for clinical support,

LINKS
E03 - ANAPHYLAXIS E04A - ACUTE CORONARY SYNDROME & STEMI M13 - HYDROCORTISONE

APPROVED BY	
	
MEDICAL DIRECTOR - PROVINCIAL EMS/PT	ASSOCIATE MEDICAL DIRECTOR - PROVINCIAL EMS/PT

VERSION CHANGES (refer to X03 for change tracking)
<ul style="list-style-type: none"> <li>Compliance statement moved out of header to become policy &amp; procedure A03</li> <li>Work scope statement added to header</li> </ul>