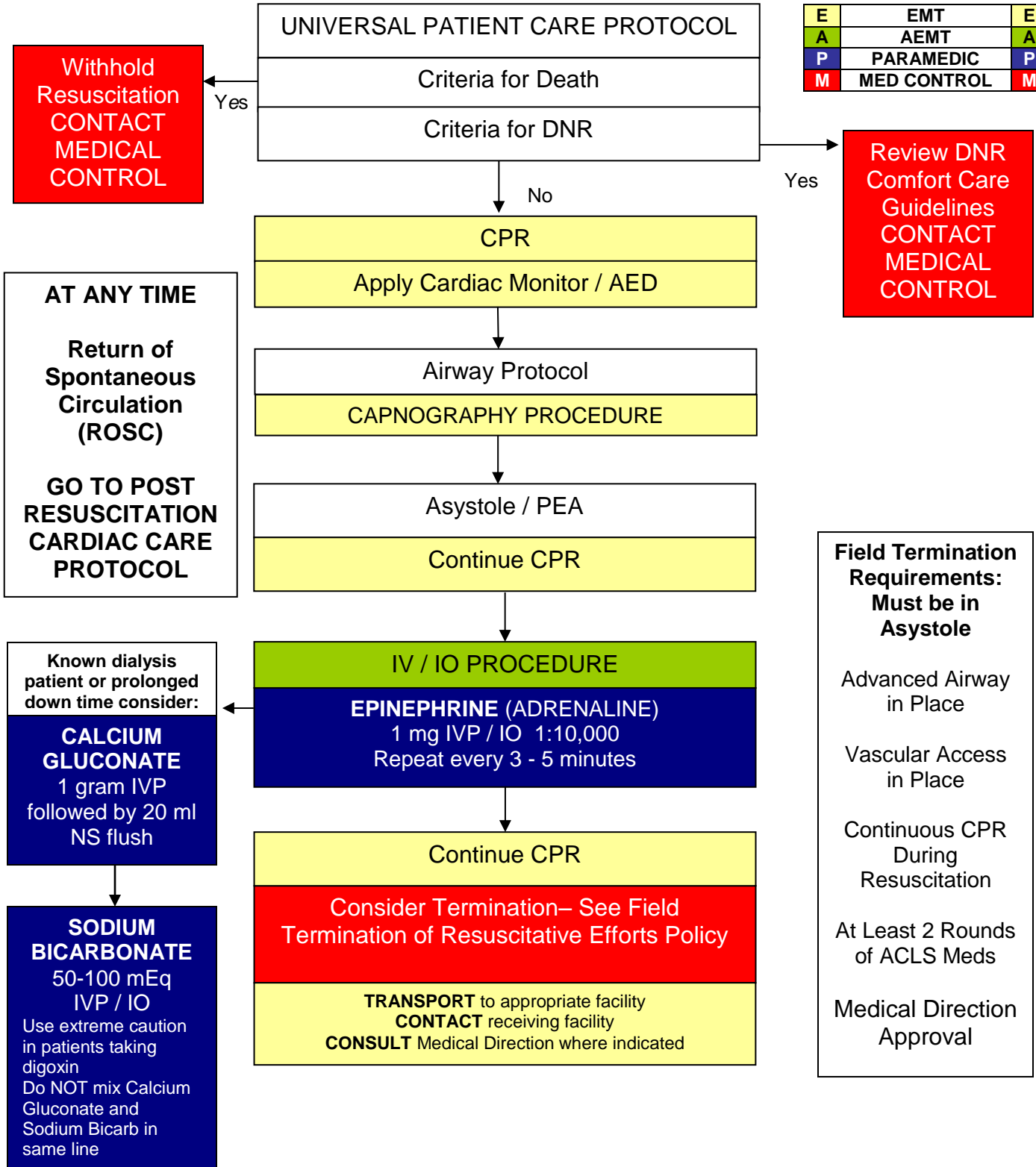




# Section 4: Adult ACLS Protocols

## ADULT ACLS: ASYSTOLE/PULSELESS ELECTRICAL ACTIVITY (PEA)

E	EMT	E
A	AEMT	A
P	PARAMEDIC	P
M	MED CONTROL	M





## Section 4: Adult ACLS Protocols

### ADULT ACLS: ASYSTOLE/PULSELESS ELECTRICAL ACTIVITY (PEA)-Cont.

#### PEARLS and KEY POINTS

HISTORY	SIGNS AND SYMPTOMS	DIFFERENTIAL DIAGNOSIS
<ul style="list-style-type: none"> <li>• Past medical history</li> <li>• Medications</li> <li>• Events leading to arrest</li> <li>• End stage renal disease</li> <li>• Estimated downtime</li> <li>• Suspected hypothermia</li> <li>• Suspected overdose</li> <li>• DNR</li> <li>• Tricyclics</li> <li>• Digitalis</li> <li>• Beta blockers</li> <li>• Calcium channel blockers</li> </ul>	<ul style="list-style-type: none"> <li>• Pulseless</li> <li>• Apneic</li> <li>• No electrical activity on ECG</li> <li>• Cyanosis</li> </ul>	<ul style="list-style-type: none"> <li>• Medical vs. trauma</li> <li>• Hypoxia</li> <li>• Potassium (hypo / hyper)</li> <li>• Acidosis</li> <li>• Hypothermia</li> <li>• Device (lead) error</li> <li>• Death</li> <li>• Hypovolemia</li> <li>• Cardiac tamponade</li> <li>• Drug overdose (Tricyclics, digitalis, beta blockers, calcium channel blockers)</li> <li>• Massive myocardial infarction</li> <li>• Tension pneumothorax</li> <li>• Pulmonary embolus</li> </ul>

CONSIDER TREATABLE CAUSES	
<ul style="list-style-type: none"> <li>• Hypovolemia</li> <li>• Hypo-hyperkalemia</li> <li>• Hypoxia</li> <li>• Hypoglycemia</li> <li>• Hydrogen ion (acidosis)</li> <li>• Hypothermia</li> </ul>	<ul style="list-style-type: none"> <li>• Toxins</li> <li>• Tamponade (cardiac)</li> <li>• Tension pneumothorax</li> <li>• Thrombosis (coronary or pulmonary)</li> <li>• Trauma</li> </ul>

- Exam: Mental Status
- Always minimize interruptions to chest compressions.
- Always confirm asystole in more than one lead.
- Consider each possible cause listed in the differential: Survival is based on identifying and correcting the cause!
- Discussion with Medical Control can be a valuable tool in developing a differential diagnosis and identifying possible treatment options.
- If the patient converts to another rhythm, refer to the appropriate protocol and treat accordingly.
- Early identification and treatment of reversible causes of PEA increases the chance of a successful outcome.
- Consider volume infusion for all patients in PEA. Be alert for fluid overload.
- Treat as ventricular fibrillation if you cannot differentiate between asystole and fine ventricular fibrillation.
- Dextrose 50% (D50) or Dextrose 10% (D10) should only be administered to a patient with a confirmed blood glucose level less than 60 mg / dl.