



10. If patient seizes, treat per [Seizures Guideline](#)
11. Consider transporting patients to an age-appropriate facility which offers specialized adult or pediatric post-resuscitation care

### **Patient Safety Considerations**

1. Avoid hyperthermia (temperature greater than 37.5° C or 99.5° F) by avoiding excessive environmental heat exposure, warm blankets, etc.
  - a. Beyond interventions to prevent hyperthermia or fever, prehospital initiation of therapeutic hypothermia (targeted temperature management) is not routinely recommended

### **Notes/Educational Pearls**

#### **Key Considerations**

1. Hyperventilation is a significant cause of hypotension and recurrence of cardiac arrest in the post resuscitation phase and must be avoided. Similarly, hypoventilation (suggested by an EtCO<sub>2</sub> greater than 40–45) contributes to worsening acidosis and may precipitate re-arrest
2. Most patients are comatose immediately after resuscitation and will require airway management and ventilatory assistance
3. Many patients experience “stunning” of the cardiac muscle after ROSC. Hypotension is common, and volume resuscitation or vasopressor support is often required. Refer to the [\[Shock Guideline\]](#) for further recommendations
4. Common non-cardiac causes of post-resuscitation hypotension include hyperventilation, hypovolemia, and traumatic pneumothorax from chest compressions
5. The condition of post-resuscitation patients fluctuates rapidly and continuously requiring close monitoring. A significant percentage of post-ROSC patients will re-arrest
6. Current research has demonstrated that care of patients with ROSC at specialized centers is associated with both decreased mortality and improved neurologic outcomes
7. Maintain mechanical CPR device in place in preparation for re-arrest
8. A moderate number of adult post-ROSC patients may have transient ST-elevation on EKG. Consider performing serial EKGs. Post-ROSC patients should preferentially be transported to centers capable of managing STEMI, whenever possible

#### **Pertinent Assessment Findings**

Assess post-ROSC rhythm, lung sounds, and for signs of hypoperfusion

### **Quality Improvement**

**Associated NEMSIS Protocol(s) (eProtocol.01)** (for additional information, go to [www.nemsis.org](http://www.nemsis.org))

- 9914019 – Cardiac Arrest - Post Resuscitation Care

#### **Key Documentation Elements**

- Immediate post-arrest rhythms, vital signs (pulse, blood pressure, respiratory rate, neurologic status assessment) and oxygen saturation
- Post-ROSC 12-lead EKG

#### **Performance Measures**

- Percent of ROSC patients transported to appropriate facility as defined by the EMS system