



Target Temperature Management (Optional)

History

- Non-traumatic cardiac arrests (drownings and hanging / asphyxiation are permissible in this protocol.)
- All presenting rhythms are permissible in this protocol
- Age 18 or greater

Signs and Symptoms

- Cardiac arrest
- Return of Spontaneous Circulation post-cardiac arrest

Differential

- Continue to address specific differentials associated with the arrhythmia

Return of Spontaneous Circulation ROSC

Criteria for Induced Hypothermia
Initial rectal temperature ≥ 93.2 F (34C)

YES

NO

Exit to
Post Resuscitation Protocol AC 10

Agencies utilizing cerebral cooling devices are unlikely to see a change in rectal temperature during transport.

Continued temperature assessment not warranted with these devices. Document initial temperature

| | |
|----------|--|
| B | Advanced Airway (includes BIAD) in place with EtCO₂ > 20 mmHg |
| | Airway Protocol(s) AR 1, 2, 3 as indicated |
| | Post Resuscitation Protocol AC 10 as indicated |
| | IV / IO Access Protocol UP 6 |
| | Hypotension / Shock Protocol AM 5 as indicated |
| | Perform Neurological Assessment |
| | Expose and apply ice packs to axilla and groin areas |

Adult Cardiac Protocol Section

Stop cooling measures
Until temperature increases

Reassess temperature every 10 minutes

Continue Post Resuscitation Care



< 89.6° F
(32° C)

Reassess Rectal Temperature
Target: 89.6 – 96.8 °F
(Range 32 – 36C)

≥ 89.6° F
(32° C)

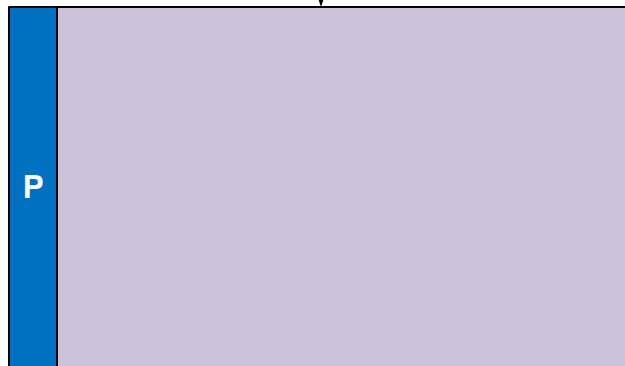
Continue Cooling

Exit to Post Resuscitation Protocol AC 10

Shivering noted

NO

YES



Notify Destination or Contact Medical Control



Target Temperature Management (Optional)

Pearls

- **Criteria for Targeted Temperature Management:**
 - Return of spontaneous circulation not related to blunt / penetrating trauma or hemorrhage with ventricular fibrillation / tachycardia and non-shockable arrhythmias.
 - Temperature greater than 93.2°F (34° C).
 - Advanced airway (including BIAD) in place with no purposeful response to verbal commands.
 - Infusion of cold saline is NOT recommended in the prehospital setting.
- **Hyperventilation is a significant cause of hypotension and recurrence of cardiac arrest in the post resuscitation phase and must be avoided. Titrate FiO₂ to maintain SpO₂ of 92 - 98%.**
- **Pain/sedation:**
 - Patients requiring advanced airways and ventilation commonly experience pain and anxiety. Unrelieved pain can lead to increased catecholamine release, ischemia, immunosuppression, and prolonged hospitalization.
 - Ventilated patients cannot communicate pain / anxiety and providers are poor at recognizing pain / anxiety.
 - Vital signs such as tachycardia and / or hypertension can provide clues to inadequate sedation, however they both are not always reliable indicators of patient's lack of adequate sedation.
 - Pain must be addressed first, before anxiety. Opioids are typically the first line agents before benzodiazepines. Ketamine is also a reasonable first choice agent.
- **EtCO₂ Monitoring:**
 - Initial End tidal CO₂ may be elevated immediately post-resuscitation, but will usually normalize. Goal is 35 – 45 mmHg but avoid hyperventilation to achieve.
- Titrate fluid resuscitation and vasopressor administration to maintain SBP of 90 – 100 mmHg or Mean Arterial Pressure (MAP) of 65 – 80 mmHg.
- Titrate fluid resuscitation and vasopressor administration to maintain SBP of > 90 mmHg or Mean Arterial Pressure (MAP) of 65 mmHg.
- **STEMI (ST-Elevation Myocardial Infarction)**
 - Consider placing 2 IV sites in the left arm: Many PCI centers use the right radial artery for intervention.
 - Consider placing defibrillator pads on patient as a precaution.
 - Document and time-stamp facility STEMI notification and make notification as soon as possible.
 - Document the time of the 12-Lead ECG in the PCR as a Procedure along with the interpretation (Paramedic).
- Consider transport to facility capable of managing the post-arrest patient including hypothermia therapy, cardiology / cardiac catheterization, intensive care service, and neurology services.
- Utilization of this protocol mandates transport to facility capable of managing the post-arrest patient and continuation of induced hypothermia therapy.
 - If no advanced airway in place obtained, cooling may only be initiated on order from medical control.
 - No evidence suggests improved survival with prehospital cooling.
 - The condition of post-resuscitation patients fluctuates rapidly and continuously, and they require close monitoring. Appropriate post-resuscitation management may best be planned in consultation with Medical Control.