## Bridge Orders for Induced Hypothermia Post-Cardiac Arrest
### Code Chill Induction Phase

After Emergency Department provider discussed patient with admitting Hospitalist/Attending:

Dr. ___________________________ accepted patient at ___________________________ am / pm

In compliance with 42 CFR Section 456.60 Certification/Recertification, I certify that the level of care is based on medical necessity as documented within this medical record.

<table>
<thead>
<tr>
<th>Physician Signature</th>
<th>Date</th>
<th>Time</th>
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- Follow Therapeutic Hypothermia Post-Cardiac Arrest Policy
- Keep patient room cool
- Goal is to cool patient at 33.0° C (TARGET TEMPERATURE) for 24 hours
- Goal to TARGET TEMPERATURE after initiation of therapy is 2 hours
- Do NOT cool patient to less than 32.5° C
- Upon reaching TARGET TEMPERATURE begin MAINTENANCE PHASE Order Set
- Sedation goal during Induction Phase is RASS -3 to -4
- Maintain a MAP of 70 to 100 mm Hg for 24 to 48 hours
- When ICY™ (femoral) catheter is used, connect patient to CoolGard 3000® Temperature Management System
- When using RAP-r™ round blankets, connect to the CSZ Blanketrol® III
- Monitor and record esophageal & rectal temperatures every 30 minutes until TARGET TEMPERATURE is reached
- Immediately notify Cardiology for continued/prolonged arrhythmias – consider termination of treatment

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<th>DATE</th>
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<th>Level of Care: Admit Inpatient - CMICU</th>
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**Diagnosis/Medical Reason to support level of care:**

Obtain Active Surveillance Culture (ASC) for patient if he/she is identified as being in a risk group per ASC protocol

### Diagnostics/ Lab, Radiology, Other:

1. Monitor and record vital signs (heart rate, blood pressure, mean arterial pressure (MAP), respiratory rate, CVP, SPO2):
   - Every 30 minutes until target temperature is met, then hourly if stable
   - Record esophageal and rectal temperature every 30 minutes until target temperature is met, then hourly if stable
   - Notify physician and initiate hypotension management for MAP less than 70 mm Hg and/or heart rate less than 40 beats per minute

2. STAT Labs on admission to CMICU – if not completed in ED:
   - CBC, Comprehensive metabolic profile (COMPET), Magnesium, Phosphorus, BNP, Lipase, Amylase, Cortisol Level, PT/PTT, Lactic Acid, CPK, CK -MB, Troponin I, and Quantitative HCG (females ages 18 to 55)
   - Paired Blood Cultures
   - Drug Toxicology Screen (if indicated)
   - ABG
   - Urine for urinalysis (U/A) and culture and sensitivity (C&S)
   - Sputum Culture
   - MRSA Swab
   - Other Labs: ________________________________

3. Other diagnostic tests: ________________________________

4. EKG on arrival to CMICU

5. Portable chest x-ray on arrival to CMICU – If not completed in ED

Signature ___________________________ Date _______________ Time _______________

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Henrico Doctors’ Hospital

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HDH.HOSP#167 (11/10)
**Interventions and Treatments:**

<table>
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<tr>
<th>DATE</th>
<th>TIME</th>
<th>6. Initial ventilator setting: until seen by Pulmonary Associates</th>
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<tbody>
<tr>
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<td>Ventilator Mode Settings: [ ] AC [ ] SIMV</td>
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<tr>
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<td>Rate: ______ FIO2: ______ Vt: ______ PEEP: ______ PSV: ______</td>
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<td>• SpO2 Goal: 94 to 96% / PaO2 Goal: 80 – 120 mm Hg</td>
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<td>• Ensure ventilator humidifier is OFF until rewarming phase is initiated</td>
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<td>7. Place foley catheter on arrival to CMICU</td>
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**Medications:**

8. Pain and Sedation Medication Management
   IV Bolus – NOTE: These medications can be used in the Induction Phase and/or the Maintenance Phase.
   **Select one choice only**
   - Midazolam (Versed) 1 mg IV every 30 minutes PRN for sedation
   - Fentanyl 50 mcg IV every 30 minutes PRN for sedation and/or pain
   - Morphine 2 mg IV every hour PRN pain

**Neuromuscular Blocking Agents may not be necessary at a body temperature below 35°C. TOF may be unreliable if hypothermic setting and not recommended. Duration of paralytic action may be prolonged in hypothermic patients.**

9. Neuromuscular Blocking Agents for Shivering Suppression:
   **Select one choice only**
   - Norcuron (Vecuronium) 0.1 mg per kg IV bolus x 1 dose. May repeat every 30 minutes up to a total of 3 additional doses. (Discontinue this order when rewarming phase begins)
   - For known Renal and/or Hepatic dysfunction consider:
     Nimbex (Cisatricurium) 0.2 mg per kg IV bolus x 1 dose. May repeat every 30 minutes up to a total of 3 additional doses. (Discontinue this order when rewarming phase begins)

10. If initial magnesium level is less than or equal to 2.0 – administer magnesium 2 grams IV over 2 hours STAT – DO NOT DELAY THIS INFUSION

A MAP of 70 to 100 mm Hg during treatment should be maintained to provide adequate end organ perfusion. Heart rates less than 40 are common. This alone is not cause for concern in the absence of other evidence of hemodynamic instability.

11. Hypotensive Management:
    For MAP less than 70 mm Hg and/or CVP less than 10 cm H2O, give 500 ml refrigerated 0.9% Normal saline IV bolus, may repeat x 1 to achieve desired results; if increase in MAP not achieved, continue fluids and start:

   **For symptomatic bradycardia, consider Dopamine as first choice**
   - Dopamine 400 mg in 250ml Normal saline: initiate at 5 mcg/kg/minute PRN for a MAP less than 70 mm Hg and/or heart rate less than 40 bpm. Titrate up or down by 2 mcg/kg/min every 15 minutes to achieve a MAP of 70 to 100 mm Hg, up to a maximum dose of 20 mcg/kg/min
   - Neosynephrine (Phenylephrine) 40 mg in 250 ml Normal saline: initiate at 100 mcg per minute PRN for MAP less than 70 mm Hg. Titrate up or down by 25 mcg per min every 15 minutes to achieve a MAP 70 to 100 mm Hg, up to a maximum dose of 300 mcg/min
   - Levophed (Norepinephrine) 4 mg in 250 ml Normal saline: initiate at 2 mcg/minute PRN for a MAP less than 70 mm Hg. Titrate up or down by 2 mcg/min every 15 minutes to achieve a MAP of 70 to 100 mm Hg, up to a maximum dose of 30 mcg/min

**Signature _______________________________ Date ___________________ Time ___________________**

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Bridge Orders for Induced Hypothermia Post-Cardiac Arrest (Page 2 of 2)
HDH.HOSP#167 (11/10)

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