ED THERAPEUTIC HYPOTHERMIA PATHWAY PHYSICIAN ORDER SET

PROMOTE PATIENT SAFETY!
1) Indicate REASONS FOR USE for all PRN medication orders  
2) Do NOT use these dangerous abbreviations:

<table>
<thead>
<tr>
<th>ALLERGIES</th>
<th>1.</th>
<th>2.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEIGHT:</td>
<td></td>
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<tr>
<td>WEIGHT:</td>
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</tbody>
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**DIAGNOSIS:**

**MUST HAVE RETURN OF SPONTANEOUS CIRCULATION**

- A Glasgow Coma Scale greater than 8
- Blood Pressure of less than 90 mmHg systolic spontaneously or with fluids and/or vasopressors
- Non contrast CT head positive
- Other causes of coma (ie: stroke, head trauma, SAH)
- Greater than 12 hours since ROSC

**EXCLUSIONS/CONTRAINDICATIONS**

- Pregnancy
- Severe coagulopathy
- Pediatrics
- Trauma
- Sepsis
- Pulseless greater than 60 minutes

**[ ] Patient MEETS criteria**

- Intubate and place on ventilator.
- Insert Oral gastric tube.
- Chest X-ray
- 12 lead EKG
- Labs (including CBC, BMP, PT/INR, MG, PHOS, PTT, Trop, CK-MB, B-HCG [women younger than 55], urine toxicology
- Insert urinary catheter with temperature probe.
- Place central line and arterial line.

**[ ] Patient does NOT meet criteria**

- Call Critical Care at 662-0336 with Code CHILL Consultation.
- Contact Patient Flow Coordinator for ICU bed.
- Non contrast CT of head R/O Intracranial bleed.
- Infuse 2 liters of Normal Saline 4-5°C (40°F=refrigerator temperature) over 30 mins.
- Apply Arctic Sun pads per sizing chart and attach to device, then attach to Foley temperature probe.
- Select Auto Mode for a goal of 33°Celsius (91.4°F)

**Medications:**

- Target systolic BP greater than 90 mmHg
- Normal Saline at 100mL/hour (after volume resuscitation complete)
- Norepinephrine infusion, starting at 2mcg/min for hypotension. Titrate to maintain SPB of greater than 90mmHg.
- Dopamine infusion, starting at 5mcg/kg/min for hypotension. Titrate to maintain SPB of greater than 90mmHg.

**SEDATION:** (Always sedate before paralyzation)

Please select only one from the categories below:

- Propofol initiated at 5 mcg/kg/min IV and titrated by 5mcg/kg/min IV every 5 min to a maximum of 70 mcg/kg/min or as tolerated by blood pressure.
- Midazolam initial IV bolus dose:  
  - 2 mg  
  - other ____________mg
Followed by infusion: Midazolam 1-10 mg/hour. Titrate to Ramsey Scale of 5

**PARALYSIS:**

- Cisatracurium (Nimbex) 0.15 mg/kg IV Push
- Shivering can be difficult to detect, so this must be started promptly. Sedation must be used.
- Keep head of bed at 30°while on ventilator

**LACK OF LEADING ZERO**

**MSO4**

**MgSO4**

**MS**

**QOD**

**QD**

**IU**

**TRAILING ZEROS**

**PROMOTE PATIENT SAFETY!**

1) Indicate REASONS FOR USE for all PRN medication orders  
2) Do NOT use these dangerous abbreviations:

**ORDERS:**

**AUTHORIZATION IS GIVEN TO DISPENSE A THERAPEUTIC EQUIVALENT UNLESS NOTED. NON-FORMULARY DRUGS MAY REQUIRE 48 HOURS TO OBTAIN.**
ED THERAPEUTIC HYPOTHERMIA NURSING PATHWAY

Admission Day

Date: ___________  Time of Admission: ___________

**EXCLUSIONS/CONTRAINDICATIONS**

- A Glasgow Coma Scale greater than 8.
- Blood Pressure of less than 90 mmHg systolic spontaneously or with fluids and/or vasopressors.
- Non contrast CT head positive
- Other causes of coma (i.e.: stroke, head trauma, SAH)
- Greater than 12 hours since ROSC

- Pregnancy
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**Ramsey Sedation Scale**

<table>
<thead>
<tr>
<th>Score</th>
<th>Response</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Anxious or restless or both</td>
</tr>
<tr>
<td>2</td>
<td>Cooperative, oriented and tranquil</td>
</tr>
<tr>
<td>3</td>
<td>Responding to commands</td>
</tr>
<tr>
<td>4</td>
<td>Brisk response to stimulus</td>
</tr>
<tr>
<td>5</td>
<td>Sluggish response to stimulus</td>
</tr>
<tr>
<td>6</td>
<td>No response to stimulus</td>
</tr>
</tbody>
</table>

**REFERENCE TEMPERATURES**

- 36 Celsius = 96.8°F
- 35 Celsius = 95°F
- 34 Celsius = 93.2°F
- 33 Celsius = 91.4°F
- 32 Celsius = 89.6°F

Note: Shivering usually stops at 33.5 Celsius, consider stopping paralytics.

**Procedures**

- CALL CODE CHILL.
- Initiate cooling with ice packs on patient’s axilla and groin until cooling blankets started. Remove once cooling device is applied to avoid overshoot.

**OPTION 1:** Arctic Sun Device for Cooling (See Option 2 below if Arctic Sun NOT available)

- Apply pads per sizing chart
- Select auto mode for a goal of 33°C (91.4°F) (temperature may vary once goal is met by 0.5 degrees)
- In order for patients to achieve and maintain target hypothermia of 33°C (91.4°F) complete sedation and paralysis must be achieved with continuous infusion of appropriate medications (see below)

**OPTION 2:** (Use ONLY if Arctic Sun NOT available)

- Chilled (4-5°C or 40°F = normal refrigerator temp) 0.9% Normal Saline Intravenous Bolus via central line. Using pressure-bag infuser, bolus (30mL/kg up to 3 liters maximum).
- Stop infusion and notify physician for SaO2 less than 90%.
- Document infusion volume.

**Things to consider:**

2) Have we gotten the results of the non-contrast CT Head?
3) Do you have the Coag’s back? Are they normal?
4) Does the patient qualify for Code Chill?