

**WESTERN MARYLAND HEALTH SYSTEM
Physician Orders**

**REMINDER: ALL MEDICATION ORDERS REQUIRE DOSE, ROUTE, FREQUENCY AND INDICATION
DO NOT USE ABBREVIATIONS**

DOCTORS ORDERS THERAPEUTIC HYPOTHERMIA PROTOCOL AFTER CARDIAC ARREST	CHECK OFF/ INITIALS
<p><u>INCLUSION CRITERIA:</u></p> <ol style="list-style-type: none"> 1. Age 18 years or older. 2. Women of childbearing age must have a negative pregnancy test. 3. Cardiac arrest (initial rhythm ventricular fibrillation or pulseless ventricular tachycardia, pulseless electrical activity or asystole with return to a normal rhythm) with return of spontaneous circulation. 4. Unresponsive after return of spontaneous circulation (not following commands, no purposeful movement to noxious stimuli, no eye opening to painful stimulus). 5. Endotracheal intubation with mechanical ventilation. 6. Map of 65 or greater achieved spontaneously or with fluid resuscitation and/or vasopressor support. 7. Estimated time from arrest to resuscitation of less than one hour. <p><u>EXCLUSION CRITERIA:</u></p> <ol style="list-style-type: none"> 1. Alternate etiology for coma (drug overdose, head trauma, stroke or status epilepticus). 2. Pregnancy. 3. Temperature less than 30 degree centigrade after cardiac arrest. 4. Known pre-existing coagulopathy or active hemorrhage (anticoagulation with Warfarin at the time of cardiac arrest is not a contraindication). 	
<ol style="list-style-type: none"> 1. Cooling should be initiated as soon as possible following arrest. Out of hospital arrests should be started in the E.R. 	
<ol style="list-style-type: none"> 2. Target temperature is 32-34 degrees centigrade. 	
<ol style="list-style-type: none"> 3. Cooling Methods: <ol style="list-style-type: none"> A. Place ice packs under the axillae, beside the neck, on the torso, in both groins and to the limbs. B. A cooling blanket should be placed above and below the patient. C. If no contraindication to fluid administration one liter of chilled Normal Saline should be administered through a peripheral line or femoral catheter. Do not administer chilled Normal Saline through the subclavian or internal jugular route. D. Maintain cool room temperature. E. Once temperature goal is achieved, temperature control can be managed with cooling blankets alone. F. Cooling to be continued for 24 hours from the time of protocol initiation. 	
<ol style="list-style-type: none"> 4. Ventilator humidifier should be turned off and a heat moisture exchanger should be used. 	
<ol style="list-style-type: none"> 5. Temperature monitoring preferably with a foley catheter and bladder temperature probe, (bladder temperature monitoring may be inaccurate with oliguria). Rectal temperature probe monitoring would be the favored alternative and tympanic temperature should also be monitored. 	
<ol style="list-style-type: none"> 6. Control of shivering. <ol style="list-style-type: none"> A. Meperidine (Demerol[®]) 25mg Intravenously every 4 hours as needed – if ineffective may use Cisatracurium (Nimbex[®]) 0.15mg/Kg/bolus intravenously and maintenance infusion if necessary at 0.3mg/Kg/hour. 	
<ol style="list-style-type: none"> 7. If paralysis initiated, begin Propofol (Diprivan[®]) 10mcQ/Kg/minute or if contraindicated administer Midazolam (Versed[®]) 0.2mg/Kg/hour. 	
<ol style="list-style-type: none"> 8. Accuchecks every 6 hours. 	
<p>Physician/Date/Time: _____</p>	
<p>PASSIVE REWARMING BEGINNING 24 HOURS AFTER THE INITIATION OF COOLING:</p>	

DOCTORS ORDERS THERAPEUTIC HYPOTHERMIA PROTOCOL AFTER CARDIAC ARREST	CHECK OFF/ INITIALS
<p>1. Rewarming should occur gradually with a target of 0.5-1 degree centigrade or 1-2 degrees fahrenheit per hour, monitor for hypotension (MAP < 65) during the rewarming phase.</p> <p>A. Remove cooling blankets.</p> <p>B. Maintain paralysis and sedation if initiated until temperature is 36 degrees centigrade (96.8 degrees Fahrenheit).</p> <p>C. Maintain sedation until paralysis resolves.</p> <p>D. Turn room thermostat to normal.</p> <p>E. Resume heating the ventilator circuit.</p> <p>F. Do not use a warming blanket.</p>	

Physician/Date/Time:	Nurse/Date/Time:	Secretary/Date/Time:
-----------------------------	-------------------------	-----------------------------

Full page of orders requires only one physician, one nurse and one clerical signature

Original to Patient's Chart

Fax to Pharmacy



Original: 1/09

Reviewed: 10/09

Form # 1.4-006