

Referral Physician Guidelines for Therapeutic Hypothermia

- Is a blood gas available and is the infant > or = to 36 weeks?
- If a blood gas available, follow left side of decision making checklist
- If no blood gas available, or pH = 7.01 – 7.15 or base deficit = 10 -15.9, then follow right side of decision making checklist

Decision Making Checklist

□ If a Blood Gas Available:

- Cord pH or 1st blood gas within 1 hour of age with pH ≤ 7.0
- OR
- Base deficit on either blood gas >16 mEq/L

□ If No Blood Gas

- If No Blood Gas Available:
 - An acute perinatal event
- AND** one of the following:
1. Apgar score of ≤ 5 at 10 mins
 2. Continued need for assisted ventilation for at least 10 mins

THEN:

- The presence of moderate to severe encephalopathy defined as seizures OR presence of one or more signs in 3 of 6 categories in the chart below (Modified Sarnat Score).

<i>Category</i>	<i>Moderate Encephalopathy</i>	<i>Severe Encephalopathy</i>
<i>Level of Consciousness</i>	<input type="checkbox"/> Lethargic	<input type="checkbox"/> Stupor/Coma
<i>Spontaneous Activity</i>	<input type="checkbox"/> Decreased Activity	<input type="checkbox"/> No Activity
<i>Posture</i>	<input type="checkbox"/> Distal Flexion, Full Extension	<input type="checkbox"/> Decerebrate
<i>Tone</i>	<input type="checkbox"/> Hypotonia	<input type="checkbox"/> Flaccid
<i>Primitive Reflexes:</i> <i>Suck</i> <i>Moro</i>	<input type="checkbox"/> Weak <input type="checkbox"/> Incomplete	<input type="checkbox"/> Absent <input type="checkbox"/> Absent
<i>Autonomic System:</i> <i>Pupils</i> <i>Heart Rate</i> <i>Respirations</i>	<input type="checkbox"/> Constricted <input type="checkbox"/> Bradycardia <input type="checkbox"/> Periodic Breathing	<input type="checkbox"/> Dilated, non-reactive <input type="checkbox"/> Variable Heart Rate <input type="checkbox"/> Apnea

- **Make sure that the following exclusion criteria are not present**

Exclusion Criteria:

- Unable to initiate cooling by 6 hours of age
- Presence of known chromosomal anomalies
- Presence of major congenital anomalies
- Severe intrauterine growth restriction (<1800g)
- Infants in extremis for which no additional intensive therapy will be offered by Medical Care Provider

CALL NATIONWIDE CHILDREN'S HOSPITAL AT THIS TIME

(Use this worksheet as a guide when discussing your patient's case with the neonatologist)

If you have additional questions regarding therapeutic hypothermia in general, we'd be glad to speak with you. During day time hours, you may call (614)722-4529 and ask to speak with Dr. Edward Shepherd with questions regarding the therapeutic hypothermia protocol.