

# SARNAT SCORING TOOL

Normal/Mild	Moderate HIE	Severe HIE
<p><b>1. Level of Consciousness</b> Code 1: arouses to wakefulness, responds to external stim, or appears hyperalert or inconsolable/irritable</p>	Code 2: Lethargic: delayed but complete response to external stimuli (start with mild stimuli first then proceed to more noxious stimuli)	Code 3: stupor/coma: infant is not arousable and is non-responsive to external stimuli; may have a delayed but incomplete response to stimuli
<p><b>2. Spontaneous Activity</b> Code 1: infant is active</p>	2 = Decreased activity Code 2: activity is decreased	Code 3: no activity
<p><b>3. Posture</b> Code 1: if infant is moving around and does not maintain one posture, should have flexion of lower extremity at hip and/or knees</p>	2 = Distal flexion, complete extension Code 2 if strong <u>distal</u> flexion, complete extension or "frog-legged" position (complete abduction)	Code 3 if decerebrate with or without stimulation
<p><b>4. Tone</b> Code 1 if there is normal resistance</p>	2a = Hypotonia (focal or general) 2b = Hypertonia Code 2: 2a if hypotonic or floppy either focal or generalized 2b if increased tone noted	Code 3: 3a if flaccid (like a rag doll) 3b if rigid (stiffness or inflexibility)
<p><b>5. Primitive Reflexes</b> <b>* Suck</b> Code 1 if the infant vigorously sucks the examiners finger or the ET tube</p> <p><b>*Moro</b> Code 1 if, with stimulus, there is extension of limbs, opening of hands extension with abduction of UE</p>	Code 2 if suck is weak or if infant has a bite  Code 2 if incomplete	Code 3 = Suck is Absent Code 3 = Absent  Code 3 if absent
<p><b>6. Autonomic System</b> <b>*Heart rate</b> Code 1 if &gt;100 per min or consistent tachycardia</p> <p><b>*Respiration</b> Code 1 if breathing spontaneously or <u>if periodic breathing without desaturation</u></p> <p><b>*Pupils</b> Code 1 if normal in size and reactive to light</p>	Code 2 if bradycardia (< 100/min) with only occasional increases to >120/min  Code 2 if periodic breathing <u>associated with desaturations (SpO<sub>2</sub> &lt; 80%) ± supplemental O<sub>2</sub></u>  Code 2 if constricted and reacting to light Code 3 if skew deviation of eyes, pupils are	Code 3 if heart rate is not constant and varies widely between <100 and > 120  Code 3 if apnea or requiring ventilator support: •3a if spontaneous breaths above the ventilator •3b if no spontaneous breaths above the vent  Code 3 if skew deviation of eyes, pupils are dilated or non-reactive to light •If pupils asymmetric, assign 3

**Refer to Power Point Slides for visual clarification: Screening Neurologic Exam for Therapeutic Hypothermia @ <http://hopefn3.org>**

**Adapted from: A Phase II Multi-site Study of Autologous Cord Blood Cells for Hypoxic Ischemic Encephalopathy (HIE)**