

## FREEZE WARNING

# Neonates with brain injuries must be cooled within 6 hours

### **Cooling Requirements**

- 1. Gestational Age greater than or equal to 35 weeks gestation
- 2. Birth weight greater than or equal to 1.8 kg
- 3. less than or equal to 6 hours since insult occurred
- 4. Seizures or 3 of 6 of the following:

Clinical criteria	Signs of Encephalopathy	
	Moderate Encephalopathy	Severe Encephalopathy
1. Level of consciousness	Lethargic	Stupor/coma
2. Spontaneous activity	Decreased activity	No activity
3. Posture	Distal flexion, complete extension	Decerebrate
4. Tone	Hypotonia (focal or general)	Flaccid
5. Primitive reflexes		
Suck	Weak	Absent
Moro	Incomplete	Absent
6. Autonomic system		
Pupils	Constricted	Deviated/dilated/non- reactive to light
Heart rate	Bradycardia	Variable
Respiration	Periodic	Apnea

#### **ONE OR MORE** of the following predictors of severe HIE:

- -pH  $\underline{\text{less than or equal to}}$  7.0 with base deficit of greater than or equal to 16 on arterial blood gas determination (base excess more negative than -16)
- -pH7.01--7.15 , base deficit 10-15.9 or no blood gas available and acute perinatal event (cord prolapse, heart rate decelerations, uterine rupture) and either APGAR less than or equal to 5 at 10 min
- -Assisted ventilation at birth required for greater than or equal to 10 min

### **Steps to Take**

- 1. Turn off radiant warmer
- 2. Take rectal temperatures every 15 minutes with a target temperature of 33.0 C
- 3. If the temperature drops below 33.0, turn the radiant warmer on with a temperature set at 0.5C above current temperature
- 4. Call participating FN<sup>3</sup>
  Centers for further
  treatment and emergent
  transport

If the baby does not meet all of the above, call your Referral Center to discuss possible treatment options