

Appendix C

~~Management of Screened Neonates Who Qualify for Possible Cooling~~ *Management of neonates accepted for further evaluation and management by Regional Cooling Centers* Or *“What to do in preparation for transport”*

Please Note: These are general guidelines for the management of babies accepted for transport by the Regional Cooling Centers and initiated on a passive cooling protocol. However, each Cooling Centers may have their own criteria and management protocols. You should confirm these guidelines with your Regional Cooling Center, or follow their specific guidelines/protocols as instructed. If your Regional Cooling Center chooses to make the determination about cooling therapy on admission, then follow their guidelines for normotheria management during transport.

1. **Identify patients to discuss with regional cooling center within 1 hour of birth.**
 - a. After initial resuscitation and stabilization, perform screening evaluation (*Appendix A*).
 - b. If screening criteria met, call neonatologist at regional cooling center.
 - c. Discuss if patient is appropriate to remain for observation vs. transport for cooling.
 - d. If approved by regional cooling center, begin passive cooling (see also *Appendix D*).
2. **Turn down/off external heat sources and avoid hyperthermia**
 - a. Document time and **do not actively cool patients.** (See *Appendix D*).
3. **Monitor core (rectal) temperature closely**
 - a. **Target rectal temp = 33.5°C** (92.3°F) or **Axillary temp = 32.5°C** (90.5°F).
 - b. Check temp continuously/frequently (q15 min). Complete flow sheet (*Appendix H*).
 - c. Core temp may still fall <33.5C with passive cooling. Be prepared to respond.
4. **Secure vascular access** - Before peripheral vasoconstriction occurs with cooling.
 - a. Umbilical venous and arterial access, if possible.
 - b. Peripheral IV at a minimum.
5. **Maintain adequate sedation** - Keep comfortable/minimize cold stress and avoid shivering.
 - a. e.g., **Morphine IV** – consider prn dosing or continuous infusions as indicated.
6. **Treat only clinical seizures** – No prophylactic antiepileptic treatments.
 - a. **Lorazepam (Ativan):** 0.1mg/kg/dose IV, repeat once prn for suspected seizures.
 - b. **Phenobarbital:** 20mg/kg IV load, repeated once prn for confirmed seizures.
7. **Expect these physiologic states in cooled infants**
 - a. Expect low baseline heart rates (80-100bpm) as patient approaches target temp.
 - b. Manage blood pressure and oxygenation as usual. Maintain normal values.
 - c. Consider volume bolus (eg, normal saline) if perfusion compromised.
8. **Monitor electrolytes closely** - maintain normal ranges.
 - a. Fluctuations often seen in **Ca, K, Mg** levels with cooling.
9. **Avoid hypoglycemia** - maintain within high normal ranges.
 - a. Maintain **Glucose** levels > 50-60mg/dl.
10. **Avoid iatrogenic hyperventilation and hyperoxygenation.**
 - a. Target **pCO2= 40-50** (patients may have compensatory hyperventilation).
 - b. Target **PaO2 = <80mmHg** and keep **oxygen saturations <98%**
11. **Send Blood cultures and start IV antibiotics (eg, Ampicillin and Gentamicin)**
12. **Send other baseline labs** if indicated, but don't delay transport for routine labs.
 - a. CBC, differential and platelets
 - b. Coagulation panel (INR, PT/PTT), LFT, BUN/Cr.