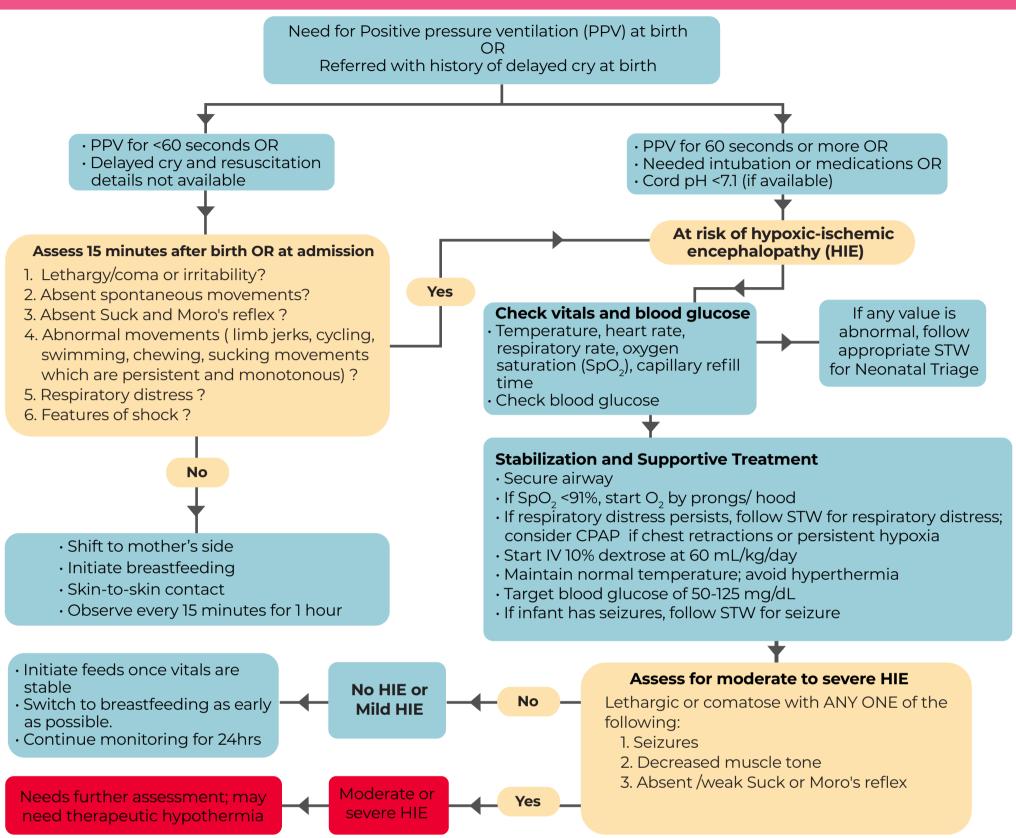




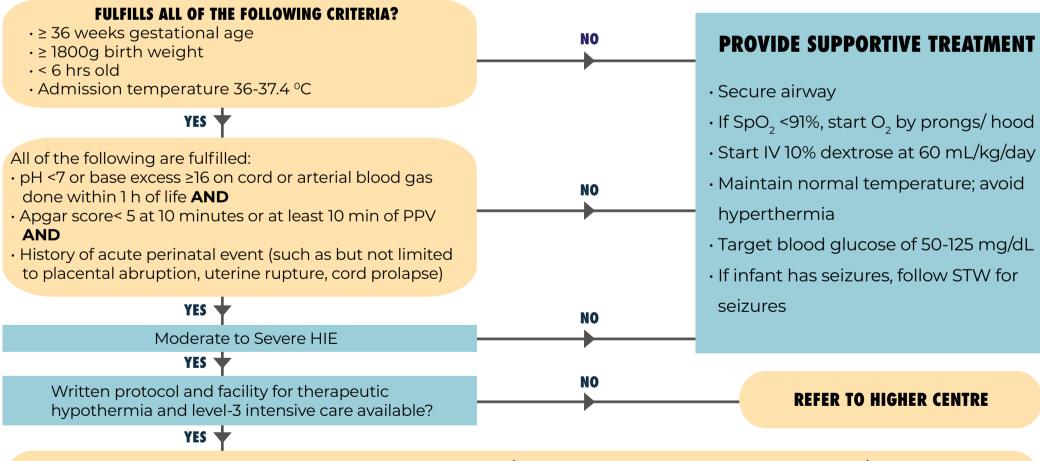
Department of Health Research Ministry of Health and Family Welfare, Government of India

# Standard Treatment Workflow (STW) **POST-ASPHYXIAL MANAGEMENT OF NEONATES** ICD-10-P21.0

## **IMMEDIATE MANAGEMENT OF AN ASPHYXIATED NEONATE**



### **NEONATE WITH MODERATE OR SEVERE HYPOXIC-ISCHEMIC ENCEPHALOPATHY**



Initiate whole body cooling using a servo-controlled mattress / phase-change material (PCM) based device / ice or gel packs.

- · If using gel or ice packs/PCM ensure presence of nurse in 1:1 ratio for the neonate being cooled
- Whatever the device used, the cooling targets and monitoring are similar:
  - Continuous rectal temperature monitoring is required from initiation until 8 hrs after rewarming
  - Target rectal temperature is 33-34 °C
  - Induction: aim to attain target temperature in the first 30 minutes
  - Maintenance: continue to maintain target temperature for 72 hrs after initiation
  - Rewarming: increase rectal temperature to 36.5 °C over 6-12 hrs, at a rate ≤ 0.5 °C per hour

#### ABBREVIATIONS

**BE:** Base excess **CBC:** Complete blood count **CRP:** C reactive protein **CSF:** Cerebrospinal fluid **HIE:** Hypoxic-ischemic encephalopathy **NICU:** Neonatal intensive care unit **PPV:** Positive pressure ventilation **SNCU:** Special newborn care unit

#### REFERENCES

1. NNF Working Group. Position Statement and Guidelines for Use of Therapeutic Hypothermia to treat Neonatal Hypoxic Ischemic Encephalopathy in India. New Delhi: National Neonatology Forum, India; 2021 Oct.

- 2. Sarnat HB, Sarnat MS. Neonatal Encephalopathy Following Fetal Distress: A Clinical and Electroencephalographic Study. Arch Neurol-chicago. 1976; 33(10):696–705.
- 3. Abate BB, Bimerew M, Gebremichael B, Kassie AM, Kassaw M, Gebremeskel T, et al. Effects of therapeutic hypothermia on death among asphyxiated neonates with hypoxic-ischemic encephalopathy: A systematic review and meta-analysis of randomized control trials. Plos One. 2021; 16(2):e0247229.

#### FREQUENT MULTI-SYSTEM MONITORING IS A MUST

This STW has been prepared by national experts of India with feasibility considerations for various levels of healthcare system in the country. These broad guidelines are advisory, and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on his/her specific condition, as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit the website of DHR for more information: (**stw.icmr.org.in**) for more information. ©Department of Health Research, Ministry of Health & Family Welfare, Government of India.