

Criteria for therapeutic hypothermia (cooling)

Does therapeutic hypothermia need to commence?

The baby presents with evidence of acute perinatal/intrapartum hypoxia-ischaemia as suggested by at least one of the following:

- Apgar score ≤ 5 at 10 minutes
- The blood gas (cord/arterial/venous/capillary) within 60 minutes of birth includes either a:
 - pH < 7.00 , or
 - Base excess equal to or worse than minus 12 mmol/L
- Mechanical ventilation or ongoing resuscitation for ≥ 10 minutes

- Babies who are likely to meet the criteria for therapeutic hypothermia: initiate early discussion with a neonatologist
- CSCF Level 1–5 neonatal service:
 - Contact RSQ: 1300 799127
 - Refer to QCG: *Neonatal stabilisation for retrieval*

Does baby meet criteria for probable moderate or severe HIE (i.e. seizures or 3 of the following)?

- Level of consciousness:** Lethargy or stupor/coma
- Spontaneous activity:** Decreased or no activity
- Posture:** Distal flexion, complete extension, or decerebrate
- Tone:** Hypotonia (focal or general e.g. head/neck tone) or flaccid
- Primitive reflexes:** Weak/absent suck or incomplete/absent Moro response
- Autonomic system:** Constricted/deviated/dilated/non-reactive pupils, bradycardia/variable heart rate, periodic/irregular breathing, apnoea

Reassess and document hourly for the first 6 hours following birth [refer to Checklist: Criteria for therapeutic hypothermia (cooling)]

Is the baby:

- ≥ 35 weeks, and
- ≥ 1800 grams, and
- Less than 6 hours old?

Discuss with neonatologist

• Baby qualifies for therapeutic hypothermia

- CSCF Level 1–5 neonatal service: discuss the type of cooling (passive or active) to be provided with a Level 6 neonatologist

State of Queensland (Queensland Health) 2018
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Queensland Clinical Guideline: Hypoxic-ischaemic encephalopathy (HIE) F16.11-2-V8-R21

Abbreviations: aEEG: Amplitude-integrated electroencephalograph; CSCF: Clinical Services Capability Framework; EEG: Electroencephalograph; QCG: Queensland Clinical Guidelines; RSQ: Retrieval Services Queensland; \geq : greater than or equal to; \leq : less than or equal to

