

## SCOPE DEFINITION

## Guideline Title: Hypoxic ischaemic encephalopathy (HIE) Version 10

Scope framework	
<b>Population</b>	<i>Which group of people will the guideline be applicable to?</i> Newborn babies greater than or equal to 35+0 weeks gestational age at risk of HIE
<b>Purpose</b>	<i>How will the guideline support evidence-based decision-making on the topic?</i> Identify relevant evidence related to : <ul style="list-style-type: none"> <li>• Diagnosis, assessment and management of HIE</li> </ul>
<b>Outcome</b>	<i>What will be achieved if the guideline is followed?</i> <i>(This is not a statement about measurable changes—not SMART goals)</i> Support: <ul style="list-style-type: none"> <li>• Early identification of HIE risk and diagnosis</li> <li>• Accurate assessment and correct diagnosis of HIE</li> <li>• Best practice management of HIE including therapeutic cooling</li> </ul>
<b>Exclusions</b>	<i>What is not included/addressed within the guideline</i> Management of: <ul style="list-style-type: none"> <li>• Neonatal resuscitation</li> <li>• Respiratory distress</li> <li>• Neonatal seizures</li> <li>• Hypoglycaemia—neonatal</li> <li>• Stabilisation for retrieval</li> </ul>

## Clinical questions

Question	Likely content/headings/document flow
<b>Introduction</b>	Background Definition Clinical standards
1. What are the risk factors for HIE?	<ul style="list-style-type: none"> <li>• Risk factors <ul style="list-style-type: none"> <li>○ Maternal</li> <li>○ Fetal</li> <li>○ Placental</li> <li>○ Other</li> </ul> </li> <li>• Fetal heart rate changes</li> </ul>
2. How is HIE assessed and identified?	<ul style="list-style-type: none"> <li>• Perinatal events</li> <li>• Signs of HIE</li> <li>• Investigations</li> <li>• HIE staging</li> <li>• Observation and monitoring</li> </ul>
3. What is the management of HIE?	<ul style="list-style-type: none"> <li>• Therapeutic hypothermia <ul style="list-style-type: none"> <li>○ Criteria</li> <li>○ Care considerations</li> <li>○ Contraindications</li> <li>○ Adverse effects</li> </ul> </li> <li>• Management of babies born in non-tertiary facility</li> <li>• Other therapies, e.g. erythropoietin</li> <li>• Supportive care</li> </ul>
4. What is the prognosis of HIE?	<ul style="list-style-type: none"> <li>• Assessment <ul style="list-style-type: none"> <li>○ Clinical</li> <li>○ Imaging</li> <li>○ Electrophysiology</li> </ul> </li> <li>• Outcomes</li> </ul>

Available from: [www.health.qld.gov.au/qcg](http://www.health.qld.gov.au/qcg)

Document Number: SC21.11-1-V6-R26

Effective date: December 2020 | Review date: December 2025



State of Queensland (Queensland Health 2020)

Question	Likely content/headings/document flow
5. What is the best care of parents?	<ul style="list-style-type: none"> <li>• Communication</li> </ul>
6. What is appropriate care follow-up after discharge?	<ul style="list-style-type: none"> <li>• Follow-up assessments</li> <li>• Criteria for early intervention</li> </ul>

**Potential areas for audit focus (to be refined during development)**

*Audit items will relate to the desired outcomes and the clinical questions*

- Baby identified as meeting criteria for therapeutic hypothermia
- Time interval from birth to commencement of therapeutic cooling is less than 6 hours
- Target temperature of 33–34 °C is reached within 6 hours
- Rectal temperature monitored
- Temperature of baby does not fall below 33 °C
- Hypothermia maintained for 72 hours before rewarming commenced
- Baby has MRI between 5 and 10 days of age
- Long term follow up of baby is arranged (beyond 2 years of age)