



SW1208

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Contact: [guidelines@health.qld.gov.au](mailto:guidelines@health.qld.gov.au)Queensland  
Government**Encephalopathy Severity  
(Modified Sarnat) Assessment**

Facility: .....

**Instructions**

- Assess baby's signs against each criterion.
- Record hourly the actual time of assessment during first 6 hours of life.
- Record severity for each sign (normal, mild, moderate, severe) or N/A if not assessable.

*SOURCE: Queensland Clinical Guideline: Hypoxic-ischaemic encephalopathy (HIE)*

(Affix identification label here)

URN:

Family name:

Given name(s):

Address:

Date of birth:

Sex: ☐ M ☐ F ☐ I**Encephalopathy Severity (Modified Sarnat) Assessment**

Hours from birth/Actual time

Assessment criteria	Normal (N)	Mild (Mild)	Moderate (Mod)	Severe (S)	1h	2h	3h	4h	5h	6h
					:	:	:	:	:	:
Level of consciousness	Alert/arouses appropriately	Hyperalert	Lethargic	Stupor or coma						
Spontaneous activity	Normal	Normal or increased	Decreased	None						
Posture	Normal	Normal or mild distal flexion	Distal flexion, complete extension	Decerebrate						
Tone*	Normal	Normal or increased in trunk and extremities	Hypotonia (focal or general)	Flaccid						
Suck reflex	Normal	Normal or incomplete	Weak	Absent						
Moro reflex	Strong	Strong, low threshold	Incomplete	Absent						
Autonomic system	Pupils equal and reacting to light; normal heart rate and respirations	Pupils equal and reacting to light; normal heart rate and respirations	Pupils constricted; bradycardia or periodic/irregular breathing	Pupils deviated/dilated/non-reactive; variable heart rate or apnoea						
Seizures	None	None	Common, focal or multifocal	Uncommon (excluding decerebration)						

\*Assess tone in both limbs and trunk/neck – presence of hypotonia in either meets the criteria.

ENCEPHALOPATHY SEVERITY (MODIFIED SARNAT) ASSESSMENT



Queensland  
Government

## Encephalopathy Severity (Modified Sarnat) Assessment

(Affix identification label here)

URN:

Family name:

Given name(s):

Address:

Date of birth:

Sex: ☐ M ☐ F ☐ I

### Therapeutic Hypothermia Criteria

Evidence of acidosis or depression at birth, as indicated by at least one of the following:

- ☐ APGAR score  $\leq 5$  at 10 minutes
- ☐ pH  $< 7.00$  or a base deficit  $\geq$  minus 12 mmol/L on a cord/arterial/venous/capillary blood gas obtained within 60 minutes of birth
- ☐ Mechanical ventilation or ongoing resuscitation for  $\geq 10$  minutes

#### AND ONE OR BOTH OF THE FOLLOWING:

- ☐ Evidence of moderate or severe encephalopathy\* at any time from 1–6 hours of age (use modified Sarnat assessment)
- ☐ Seizures (witnessed by medical officer/nurse/midwife or as seen on an aEEG/EEG)

#### AND

Has no absolute contraindications to therapeutic hypothermia:

- ☐ Uncontrolled critical bleeding
- ☐ Uncontrolled hypoxia due to persistent pulmonary hypertension
- ☐ Imminent withdrawal of life support planned

#### AND

Meets the following criteria:

- ☐ 35 weeks\*\*
- ☐ Birth weight 1800 grams\*\*\*
- ☐ Able to begin cooling before 6 hours of age
- ☐ Assessment of relative contraindications performed (major congenital abnormalities, uncontrolled pulmonary hypertension, major surgery required in first 72 hours of life)
- ☐ Assessed as not moribund and with plans for full care

Consult a neonatologist if:    \*Evidence of mild encephalopathy    \*\*Less than 35 weeks gestational age    \*\*\*Less than 1800 gram