

MONITORING AND OBSERVATIONS ON NEONATAL UNIT

- Guideline offers guidance to monitor and record SpO₂, cardiac (ECG) and blood pressure for babies admitted to NNU
- May be superseded by clinician discretion based on circumstances – more frequent assessment may be required than mentioned below
- All babies requiring admission to NNU to have baseline observations within the first hour
- Clearly document decision to discontinue monitoring in medical records
- Guidance below serves as reference for ongoing monitoring and recording of observations, as well as when to stop

PERIPHERAL SpO₂

Frequency and eligibility for subsequent monitoring

Hourly/continuous monitoring and hourly documentation

- All acutely unwell babies whose physiological status is unstable/unknown

When to stop monitoring

All babies ≥34 weeks gestation

If oxygen requirement transient (**< first 24 hr of life**), then continue monitoring depending on highest level of respiratory support required:

- incubator/low flow supplementation – **minimum** 4 hr
- high flow/CPAP/NIPPV – **minimum** 12 hr

If oxygen requirement **beyond first 24 hr of life**, continue monitoring for following period from discontinuation of any respiratory support:

- 24 hr: babies born at term gestation (≥37 weeks)
- 48 hr: babies born 34–36⁺⁶ weeks gestation

All babies born <34 weeks' gestation

- Continue monitoring and documentation **until 34 weeks'** CGA
- to continue at least ≥48 hr after discontinuing caffeine citrate

If oximetry study indicated

- Continue saturation monitoring and documentation until study reported satisfactory

Special considerations

- Following LASER ablation of ROP, follow relevant SOP
- Continue monitoring and documentation:
 - post-immunisation: for 48–72 hr after injections
 - RSV immunisation (Palivizumab): for 24 hr after injection

BLOOD PRESSURE

Frequency and eligibility for subsequent monitoring

Hourly/ continuous monitoring and hourly documentation

- All acutely unwell babies whose physiological status unstable/unknown
- All babies with indwelling peripheral/umbilical arterial line
- All babies on inotropes/vasoactive medications

2-hrly monitoring and documentation

- Minimum of 48 hr after extubation and/or discontinuing all inotropes
- If observations remain stable, monitoring may be stretched to 4-hrly

Twice daily monitoring and documentation

- Babies born <32 weeks' gestation or <1250 g: in first week of life

Once daily monitoring and documentation

- Babies born <32 weeks' gestation or <1250 g: on/after day 8 of life
- Babies born >32 weeks' gestation to 34 weeks' CGA or until discontinuation of continuous SpO₂ monitoring (whichever is later)

When to stop monitoring

- See above

Special considerations

- Post-LASER ablation for ROP, follow relevant SOP
- On postnatal steroids for CLD: twice daily until discontinued
- Oxygen dependency and >28 days of life: weekly once blood pressure monitoring
- Medications (captopril, sildenafil, thyroxine, diuretics, diazoxide): 12–24 hourly as directed by clinician
- Blood transfusion: hourly monitoring during transfusion continued at least until ≥ 2 hr after completion
- Be more mindful of monitoring and consider more frequent observations for the following conditions/situations:
 - congenital heart disease: repaired/unrepaired
 - known renal disease/urological malformations
 - malignancy
 - suspected neurofibromatosis or tuberous sclerosis
 - list is not exhaustive and individual practice variation under special circumstances may be allowed to require more frequent monitoring as directed by clinician

Difficulties in measuring non-invasive blood pressure

- If non-invasive blood pressure cannot be measured, attempt using different cuff size/limb site
- if still unable to measure, escalate immediately to medical staff for further plan for evaluation and management including frequency of assessment
 - may include assessment of end-organ perfusion and possible requirement of volume replacement and/or inotropes depending on situation

CARDIAC MONITORING (ECG)

Frequency and eligibility for subsequent monitoring

Continuous monitoring with hourly documentation in health records

- All babies on any respiratory support
- Babies receiving blood transfusion
- Babies being evaluated and/or treated for cardiac arrhythmias

When to stop monitoring

- Until 48 hr after cessation of caffeine citrate (usually 34–35 weeks' CGA)

Special considerations

- Babies receiving blood transfusion: ≥ 2 hr after the completion of transfusion