

Admission to Special Care Nurseries in Newborn Intensive Care Unit (NICU)

Procedure Responsibilities and Authorisation

Department Responsible for Procedure	NICU
Document Facilitator Name	Laura Thorpe/Nicola White
Document Facilitator Title	Associate Charge Nurse Manager
Document Owner Name	Diane Taylor
Document Owner Title	Charge Nurse Manager
Target Audience	Nurses
<p>Disclaimer: This document has been developed for use specifically by staff at the former Waikato District Health Board. Caution should be exercised before use outside this district. Any reliance on the information contained herein by any third party is at their own risk and Health New Zealand Te Whatu Ora assumes no responsibility whatsoever for any issues arising as a result of such reliance.</p>	

Procedure Review History

Version	Updated by	Date Updated	Summary of Changes
5	Chantelle Hill	June 2017	Updating change in practice
6	Joyce Mok	Feb 2021	Due for review
7	Laura Thorpe	January 2024	Updated indications for admission (esp weight) included Trendcare hypothermia management on postnatal ward guideline linked, (#2286) linked to community admissions guideline (#) needs to be reviewed in conjunction with Care of the late preterm / small for gestational age baby on the Postnatal Ward #3285

Admission to Special Care Nurseries in Newborn Intensive Care Unit (NICU)

Contents

1	Overview	3
1.1	Purpose.....	3
1.2	Staff group	3
1.3	Patient / client group	3
1.4	Admissions to special care nursery	3
1.4.1	Indications for NICU Admission to special care nursery.....	3
1.4.2	Admission from the Community for infants <2 weeks old.....	4
2	Clinical Management	4
2.1	Competency required	4
2.2	Equipment.....	4
2.3	Documentation:.....	5
2.4	Procedure	6
2.4.1	Admission	6
2.4.2	Monitoring & Documentation	7
2.4.3	Blood sugar level monitoring	9
2.4.4	After admission	9
3	Audit.....	10
3.1	Indicators	10
4	Evidence base	10
4.1	Bibliography	10
4.2	Associated Health NZ Waikato documents	10

Admission to Special Care Nurseries in Newborn Intensive Care Unit (NICU)

1 Overview

1.1 Purpose

To outline the admission procedure to ensure infant receives prompt and appropriate monitoring and management; parents and family/whanau are informed and participate in partnership during the care process.

1.2 Staff group

Staff working in NICU at Health NZ Waikato.

1.3 Patient / client group

Babies or infants in NICU at Waikato hospital.

1.4 Admissions to special care nursery

1.4.1 Indications for NICU Admission to special care nursery

- Premature infant not requiring Level 3 care – Infants ≥ 36 weeks gestation may be cared for on postnatal ward. [Refer to Management of SGA after 34 weeks Gestation \(2848\)](#).
- Low birthweight infant <2000g
- Hypoglycaemic Infant with blood sugar levels <2.6mmol/L after two dextrose gel treatments or infant's with blood sugar level <1.2mmol/L [Hypoglycaemia- Screening and Initial Treatment Protocol for Babies at Risk of.pdf](#)
 - Infants exhibiting signs of mild respiratory distress.
 - Infants requiring respiratory support and not fulfilling the criteria for level 3 care.
- Jaundice requiring treatment greater than BiliCocoon™/BiliSoft™.
- Infants with feeding difficulties requiring observation, assistance or NG feeding.
- Neonatal Abstinence syndrome, requiring medical treatment. [Refer to Management of Newborns Delivered to Drug Dependent Mothers \(6435\)](#).
- Babies with persistent hypothermia (infants with mild hypothermia may be managed on the postnatal ward on a CosyTherm or under a radiant warmer. See [Infants in Newborn Intensive Care Unit \(NICU\)](#) Ref 1476
- Step down from Level 3 (intensive care).

Doc ID:	4946	Version:	07	Issue Date:	19 AUG 2024	Review Date:	19 AUG 2027
Facilitator Title:	ACNM			Department:	NICU		
IF THIS DOCUMENT IS PRINTED, IT IS VALID ONLY FOR THE DAY OF PRINTING							Page 3 of 10

Admission to Special Care Nurseries in Newborn Intensive Care Unit (NICU)

1.4.2 Admission from the Community for infants <2 weeks old

- Infants with jaundice, weight loss and/or feeding difficulties are assessed by NICU NNP/Reg in the NICU interview room.
- If infant requires admission for ongoing care contact E5 Co-ordinator to request a bed on E5 or E7 (if no space consider NICU parent room or E2). **Infants are admitted under NICU team.**
- If Level 3 care is required admit into Parent Room 6 (first priority) under the Level 3 team or Level 3 nursery is clinical condition/situation dictates (Ensure infant is nursed under isolation precautions and swabs taken for extended viral screen panel).
- Plan of care documented in General Treatment Sheet and clinical notes prior to admission.

Admission into NICU is at the discretion of the Senior Medical Officer (SMO). Refer to [Neonatal Pathway to Paediatric wards and Post-Natal Ward for admission from Community of Babies <14 days of age](#) (6417).

2 Clinical Management

2.1 Competency required

- Registered Nurse who has completed Level 2 orientation
- Enrolled Nurse who has completed Level 2 orientation and under direction and delegation of Registered Nurse

2.2 Equipment

Incubator (pre-warmed utilising [Giraffe Omnibed Incubators and Cosytherm Use in Neonatal Intensive Care Unit](#) Ref 1485) **for:**

- Infants with birthweight less than 2000g and/or persistent hypothermia
- Cold infants, e.g. axilla temperatures less than 36°C.
- Infants exhibiting signs of respiratory distress
- Any infant requiring close observations which would be best achieved by using an incubator.

A cot for:

- Infants with birthweight $\geq 2000\text{g}$ and temperature within normal range
- Infants with no signs of respiratory distress.

Doc ID:	4946	Version:	07	Issue Date:	19 AUG 2024	Review Date:	19 AUG 2027
Facilitator Title:	ACNM			Department:	NICU		
IF THIS DOCUMENT IS PRINTED, IT IS VALID ONLY FOR THE DAY OF PRINTING							Page 4 of 10

Admission to Special Care Nurseries in Newborn Intensive Care Unit (NICU)

Other equipment:

- Incubator/cot, phototherapy equipment and eye shield for jaundiced baby:
- SpO₂ monitor and lead, apnoea monitor, or cardio-respiratory monitor as indicated
- Stethoscope
- Laerdal bag and mask
- Suction apparatus set at 100mm Hg
- No. 8 & 10 suction catheters, as needed
- An intravenous infusion pump, if required
- Equipment for blood sugar monitoring
- Length measuring device
- Welcome Pack in Little Miracles Trust bag for babies $\leq 33/40$ or babies with complex needs; and Welcome Pack in plastic package for babies $\geq 34/40$

2.3 Documentation:

Red Bedside Folder

- Drug prescription chart
- Fluid record chart, as required
- General treatment sheet
- Individualised Treatment Threshold Graph for Babies with Neonatal Jaundice
- Individualised weight chart
- Laboratory result flow sheet
- Level 2 nursing checklist
- Level 2 or Level 1 observation chart
- NICU admission and discharge form (A1170HWF)
- Patient care plan and feeding plan

Other

- Pamphlets, e.g. "Newborn Intensive Care- Patient Information " C1075HWF
- Tamariki Ora Health Book

Doc ID:	4946	Version:	07	Issue Date:	19 AUG 2024	Review Date:	19 AUG 2027
Facilitator Title:	ACNM			Department:	NICU		
IF THIS DOCUMENT IS PRINTED, IT IS VALID ONLY FOR THE DAY OF PRINTING							Page 5 of 10

Admission to Special Care Nurseries in Newborn Intensive Care Unit (NICU)

2.4 Procedure

2.4.1 Admission

- Perform hand hygiene.
- Ensure all appropriate equipment is set up and ready for use prior to admission to ensure prompt assessment of infant.
- Welcome parents to the unit and introduce yourself and provide opportunities to ask questions.
- Inform family about NICU hand-hygiene.
- Obtain medical history from staff handing over and/or family member. Refer to accompanying documents and file in clinical notes.
- Check infant's identification (ID) bracelet or confirm with family to ensure infant's identification is correct.
- **All infants in NICU**
 - **It is a mandatory requirement to have at least one ID label on infant's wrist/ankle.**
 - When placing an ID label onto a baby this must be checked by 2 nurses.
 - Maternal ID is replaced with NICU baby ID bracelet on admission.
- Document on the safety checklist where the ID label is – i.e. wrist, foot.
- Ensure all infant ID labels are NICU specific.
- Assess infant's condition and vital signs.
- Don gloves, as required.
- Weigh infant on admission, unless already done in delivery suite or theatre. Inform NICU receptionist of the baby's weight; if out of hours inform Women's Assessment Unit (WAU) receptionist.
 - Infants admitted from home/community or other hospital must be weighed upon admission.
- Transfer infant into incubator or cot as appropriate.
- Apply pulse oximetry, cardio-respiratory or apnoea monitoring as indicated.
- Check and document axilla temperature, heart rate (HR) and respiratory rate (RR), +/- SpO₂.
- Measure and document infant's head circumference and length.

Doc ID:	4946	Version:	07	Issue Date:	19 AUG 2024	Review Date:	19 AUG 2027
Facilitator Title:	ACNM	Department:	NICU				
IF THIS DOCUMENT IS PRINTED, IT IS VALID ONLY FOR THE DAY OF PRINTING							Page 6 of 10

Admission to Special Care Nurseries in Newborn Intensive Care Unit (NICU)

2.4.2 Monitoring & Documentation

A. Indications and documentation for cardio-respiratory (ECG + SpO₂) waveform monitoring:

Indications

- Infants transferred from Level 3 at high-risk of apnoea.
- Infants receiving blended and humidified High Flow Oxygen therapy.
- Infants with history of antenatal/perinatal/postnatal abnormal cardiac rhythm, e.g. Supraventricular Tachycardia (SVT).
- Infants receiving anti-arrhythmia medication.
- As requested by SMO.

Documentation:

- Hourly gas flow rate, oxygen concentration (%), SpO₂, HR, and RR
- **Respirations must be manually counted over 1-minute.**
- Document apnoea, bradycardia, or desaturations on the ABD chart

B. Indications and documentation for continuous SpO₂ monitoring

Indications

- Infant's $\geq 32/40$ gestation and not fulfilling any of the criteria for cardio respiratory monitoring.
- Infants receiving low flow oxygen therapy (and not fulfilling any of the criteria for cardio-respiratory SpO₂ waveform monitoring).
- Infants with history or suspected of cyanotic episodes, desaturation or bradycardia
- Hypothermic infants: axilla temperature $\leq 36^{\circ}\text{C}$
- Infants with history of administration of drugs causing/potentially causing respiratory depression
- Infant with history of abnormal movements within the last 48 hours.
- Infants who fulfil the criteria for apnoea monitoring but are being nursed in an incubator – as per manufacturers recommendations.
- As requested by SMO.

Documentation

- Infants on humidified high flow therapy – Hourly gas flow rate, oxygen concentration (%), SpO₂, HR, and RR.
- Infants on low flow oxygen therapy – **2-hourly** gas flow rate, oxygen concentration (%), SpO₂, HR, and RR

Continued over page

Doc ID:	4946	Version:	07	Issue Date:	19 AUG 2024	Review Date:	19 AUG 2027
Facilitator Title:	ACNM			Department:	NICU		
IF THIS DOCUMENT IS PRINTED, IT IS VALID ONLY FOR THE DAY OF PRINTING							Page 7 of 10

Admission to Special Care Nurseries in Newborn Intensive Care Unit (NICU)

- Infants in room air - minimum of 3 hourly SpO₂, HR, and RR.
- **Respirations must be manually counted over 1-minute.**
- Document apnoea, bradycardia, or desaturations on the ABD chart.

C. Indications and documentation for apnoea monitoring:

Indications

- Infants with a history of apnoeic episodes and not fulfilling any of the above criteria.
- Infants receiving caffeine medication and/or within 5 days of its withdrawal and not receiving either cardiorespiratory and/or saturation monitoring.
- Hypothermic infants (axilla temperature $\leq 36^{\circ}\text{C}$)
- Infants <35/40 weeks gestation and not requiring SpO₂ or Cardio-respiratory monitoring

Note:

No apnoea monitoring in incubators as per manufacturer's recommendations. If infant requires monitoring they should have a pulse oximeter or cardio-respiratory monitor.

D. Documentation required for infants on apnoea monitor:

- Minimum 3-4 hourly manual count RR and HR
- Document all episodes of apnoea in Apnoea/Bradycardia/Desaturation Chart

E. Infants for whom routine monitoring is not automatically indicated:

- Infants not fulfilling criteria for any of the above monitoring.
- Stable infants who have progressed to term/near term & no longer receiving respiratory stimulants for ≥ 5 days
- Stable infants of $\geq 35/40$ gestation on admission or corrected gestational age and have had no respiratory distress symptoms for a minimum of 48 hours.

F. Level 1 observations for infants who are not on monitoring or are rooming in:

- Monitor and document vital signs minimum once a shift: axilla temperature, manual count RR and HR

Doc ID:	4946	Version:	07	Issue Date:	19 AUG 2024	Review Date:	19 AUG 2027
Facilitator Title:	ACNM			Department:	NICU		
IF THIS DOCUMENT IS PRINTED, IT IS VALID ONLY FOR THE DAY OF PRINTING							Page 8 of 10

Admission to Special Care Nurseries in Newborn Intensive Care Unit (NICU)

2.4.3 Blood sugar level monitoring

As per Hypoglycaemia guideline – [Guidelines for management \(3122\)](#):

Report and record any abnormal findings to Registrar/NNP/CNS to ensure appropriate treatment is commenced.

NB: If the baby requires a peripheral intravenous (IV) cannula or requires blood tests, consider obtaining a blood sugar sample.

2.4.4 After admission

- Assist NNP/CNS/Registrar with procedures as appropriate.
- Administer fluids, medications and feed as prescribed.
- Discuss with parents/caregivers about their desired method of feeding. Obtain parental consent if infant is to be fed with milk formula; and document in *NICU Admission and Discharge form (A1770HWF)*, care plan, feeding plan and clinical notes.
- Explain to parents/caregivers the procedures, blood tests, etc., which are required or have been done.
- Answer parents' questions as able and provide opportunity for the parents to talk with Registrar/CNS/NNP.
- Explain to parents NICU policies, e.g. visiting policy, hand hygiene, etc.
- Give parents appropriate information pamphlets, e.g. Parent Information – Newborn Intensive Care information, Jaundice, Hypoglycaemia, etc.
- Complete *NICU Admission and Discharge form (A1770HWF)* to obtain essential information pertaining to care of infant and parental/family/whanau's wishes.
- Fill in Tamariki Ora Health Book and document in infant's care plan.
- Staff members are responsible for categorising, predicting, actualising and updating patient information on TrendCare.

If NICU Receptionist is on duty:

Inform receptionist of infant's admission. Receptionist will record data required for admission, assist in generating an identification number (NHI) if required, and print patient identification stickers.

If a Receptionist is NOT on duty:

For community admission, coordinator/ACNM to complete the *NICU Registration Admission* form and scan to the WAU receptionist:

MATERNITYBOOKINGFORMS@waikatodhb.health.nz

WAU Receptionist will assist in providing the identification number (NHI), stickers and inpatient front sheet.

Doc ID:	4946	Version:	07	Issue Date:	19 AUG 2024	Review Date:	19 AUG 2027
Facilitator Title:	ACNM			Department:	NICU		
IF THIS DOCUMENT IS PRINTED, IT IS VALID ONLY FOR THE DAY OF PRINTING							Page 9 of 10

Admission to Special Care Nurseries in Newborn Intensive Care Unit (NICU)

NICU staff must document all admissions in the “Admission Book” in the office to ensure accurate documentation.

Clinical records:

If the infant is delivered in the Waikato Hospital, the receptionist will be able to find the infant’s clinical records from the “Medical Office” department.

3 Audit

3.1 Indicators

- There is documented evidence that all physiological tests and investigations are taken at the designated time and intervals as described within the procedure.
- There is documented evidence that all babies have an ID bracelet on as per S2.3.1
- There is documented evidence that a blood sugar has been taken as per S2.3.3
- All admissions to Level 1 & 2 are recorded in the Admission Book.

4 Evidence base

4.1 Bibliography

- Kenner, C. et al. (ed.) (2020). *Comprehensive neonatal nursing care*. Sixth edition. New York: Springer Publishing.
- Gardner, S. et al. (Eds.) (2020). *Merenstein & Gardner's handbook of neonatal intensive care*. 9th edition. St. Louis, Missouri: Elsevier.
- *Lippincott Procedures* Wolters Kluwer (2023).
 - [Admission to floor, pediatric](#)

4.2 Associated Health NZ Waikato documents

- [Artificial Milk formula Feeding for Infants](#) policy (Ref. 1901)
- [Consultation Process and Transfer of Care for Neonates](#) guideline (Ref. 2290)
- [Heel Prick for Blood Sampling in Neonates](#) procedure (Ref. 4352)
- [Neonatal Hyperbilirubinemia Management](#) guideline (Ref. 6618)
- [Hypoglycaemia Monitoring and Management in the Newborn intensive Care Unit \(NICU\)](#) guideline (Ref. 6482)
- [Neonatal Pathway to Paediatric wards and Post-Natal Ward for admission from Community of Babies <14 days of age](#) (Ref. 6417).
- [Small for Gestational Age \(SGA\) - Fetal Growth Restriction \(FGR\), Management of](#) guideline (Ref. 2848)
- [Ukaipo-Breastfeeding](#) policy (Ref. 0132)

Doc ID:	4946	Version:	07	Issue Date:	19 AUG 2024	Review Date:	19 AUG 2027
Facilitator Title:	ACNM			Department:	NICU		
IF THIS DOCUMENT IS PRINTED, IT IS VALID ONLY FOR THE DAY OF PRINTING							Page 10 of 10