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TITLE: Neonatal Hypoglycaemia: Screening and Management

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1. Purpose

- To effectively screen and safely manage a neonate at risk of hypoglycaemia.
- To prevent neurological sequelae in neonates at risk of impaired metabolic transition.
- To promote breastfeeding and minimise separation of mother and baby.

Low blood sugar concentrations (hypoglycaemia) are linked with brain injury and poor neurodevelopmental outcome.

In newborns, hypoglycaemia is most likely to occur in the first 24 hours of life, as the newborn adapts to extra uterine life, with the risk declining over subsequent days (up to 72 hours in preterm or FGR infants).

Altered electrophysiological measurements and poor long-term neurological outcome have been reported in infants with recurrent serum glucose levels <2.6 mmol/L. There is no physiological reason why brain glucose requirements should differ between term and preterm infants, or between the first and subsequent days of life.

Hypoglycaemia that presents after the first day of life, or which persists or recurs, may indicate underlying disease.

N.B.: Clinical symptoms are a poor guide to detecting hypoglycaemia in a neonate. Half of hypoglycaemic infants are asymptomatic, and half of infants with symptoms are not hypoglycaemic. Hypoglycaemia should therefore be treated regardless of the presence of symptoms.

2. Scope

This guideline applies to all staff who provide care to neonates; Te Whatu Ora Lakes employed Paediatric medical staff, Midwives, Nurses and to all Lead Maternity Carers (LMC's) who have an Access Agreement with Te Whatu Ora Lakes.

It is the responsibility of all staff providing care to neonates to identify, communicate and document any risk factors for neonatal hypoglycaemia identified antenatally or found during initial examination or recognised subsequently.

3. Definitions

EBM	Expressed Breast Milk
FGR	Fetal Growth Restriction as defined by gestational age and using GROW customised centile calculator (<10th centile).
Hypoglycaemia	Blood glucose level <2.6mmol/L (measured on Point of Care Monitor (Hemocue) and/or blood gas analyser/ iSTAT). <u>Persistent</u> : hypoglycaemia despite 2 dextrose gel administrations. <u>Recurrent</u> : needing more than 6 dextrose gels within 48 hrs for hypoglycaemic episodes. <u>Severe</u> : < 1.2mmol/l at any point, or < 2.0mmol/L after/despite one dose of oral dextrose gel
IPPV	Intermittent Positive Pressure Ventilation
IV	Intravenous
LGA	Large for Gestational Age with birth weight >95 th centile on GROW customised centile calculator
LMC	Lead Maternity Carer
NGT	Nasogastric Tube
NOC/NEWS	Newborn Observation Chart incorporating Newborn Early Warning Score
SGA	Small for Gestational Age
SCBU	Special Care Baby Unit
UVC	Umbilical Venous Catheter

4. Screening

Screen all newborns to identify those who are at risk of developing hypoglycaemia and to ensure appropriate recognition and treatment of hypoglycaemia.

Refer to and record risk factors using the 'Risk Assessment' on the Newborn Observation Chart with Newborn Early Warning Score (NOC/ NEWS).

At risk newborns can also be identified by using the following table:

<u>Newborns at Risk of Hypoglycaemia</u>
<ul style="list-style-type: none"> • All newborns confirmed as; <ul style="list-style-type: none"> ○ Fetal Growth Restricted (FGR) detected antenatally as per NZ 2023 FGR guidelines¹ or babies with birth weight <10th centile using GROW customised centile calculator OR ○ Small babies < 2.5kg OR ○ Large for gestational age (LGA) with birth weight >95th centile on GROW customised centile calculator • All newborn babies of diabetic mothers (type 1, 2 and gestational DM) • All newborns exposed to maternal medications; <ul style="list-style-type: none"> ○ Insulin ○ Metformin ○ Beta-blockers (e.g. Labetalol, Metoprolol, Atenolol or Sotalol) in the last trimester of pregnancy ○ Sodium Valproate (brand name Epilim in NZ)- used for treatment of epilepsy • All preterm newborns < 37 weeks • All newborns who had severe intrapartum fetal distress, as demonstrated by any one of the following signs; <ul style="list-style-type: none"> ○ Cord Blood pH < 7.1 ○ Cord Lactate > 6.0 mmol/L ○ Apgar Score < 7 at 5 minutes ○ IPPV > 5 mins or resuscitation > 10 mins • Any newborns exhibiting/demonstrating any of the following signs and symptoms (this list is not exhaustive): <ul style="list-style-type: none"> ○ Poor feeding - (incl. if initially fed well first 24-48hrs, then not latching/interested) ○ Sleepy / lethargic ○ Jittery ○ Irritable ○ Poor tone / floppy ○ Seizure activity ○ Hypothermia (<36.5°C) ○ Sepsis ○ Increased work of breathing / respiratory distress ○ Apnoea

For the screening regime please refer to the 'Screening and Management of Newborns at Risk of Hypoglycaemia' flowchart for Rotorua in [Appendix 1](#) and Taupo in [Appendix 2](#). For 'Observation Requirements' refer to the NOC/NEWS.

1. Te Whatu Ora – Health New Zealand. 2023. *Small for gestational age and fetal growth restriction in Aotearoa New Zealand A clinical practice guideline: Summary of recommendations*. Wellington: Te Whatu Ora – Health New Zealand.

5. Monitoring

5.1 When to Monitor

Maternity: For newborns in maternity care settings the timing of **first** blood glucose level check is according to risks and the NOC/NEWS Observation Requirements;

- **At 1 - 2 hours after birth** (pre-term, FGR, large baby or maternal diabetes - as per NOC/NEWS) or **earlier if baby is symptomatic**.
- At 3 - 4 hours after birth (severe intrapartum fetal compromise - as per NOC/NEWS)
- Subsequent blood glucose levels should be done before feeds (AC).
- The blood glucose levels are to be documented on the NOC/NEWS Chart and the Infant Feeding Record from birth.

SCBU: For babies admitted to SCBU at birth, **first** blood glucose level should be checked at **1-2 hours of age or earlier if baby is symptomatic/unwell**.

5.2 How to Monitor

All blood glucose measurements should be analysed by a glucose oxidase method e.g. iSTAT, gas machine or lab analysis. Other 'Point of Care' monitors e.g. Accucheck, are not sufficiently accurate to measure blood glucose concentrations in babies at risk of neonatal hypoglycaemia.

- SCBU: please use iSTAT (located in SCBU) for all glucose monitoring.
Hemocue to be used only if iSTAT is out of order.
Please note that Hemocue is less accurate for measuring neonatal blood glucose levels especially when the blood glucose is lower (under 3mmol/l).
- Birthing Unit & Perinatal Ward: continue to use Hemocue.
(until a plan to transition to use iSTAT is implemented, once upskilling is completed).
If hypoglycaemia is initially detected on Hemocue, it should be managed with appropriate treatment, as per flowchart ([Appendix 1.](#)) and next blood glucose level is to be checked on iSTAT in SCBU.
- Taupo Maternity: use the Point of Care Glucometer, or iSTAT in Taupō Emergency Department.
If hypoglycaemia is initially detected on Glucometer, it should be managed with appropriate treatment, as per flowchart ([Appendix 2.](#)) and next blood glucose level is to be checked on iSTAT.

5.3 When to Stop Screening / Monitoring

For all newborns at risk of hypoglycaemia, demonstrating normal blood glucose concentrations ≥ 2.6 mmol/L, who demonstrate effective feeding behaviour, discontinue hypoglycaemic screening after 12 hours and three consecutive blood glucose concentrations ≥ 2.6 mmol/L.

For all newborns at risk of hypoglycaemia with a recorded hypoglycaemic episode (<2.6 mmol/L), monitoring must continue for a minimum of 12 hours **and** three consecutive blood glucose concentrations ≥ 2.6 mmol/L are achieved and infants are demonstrating well feeding behaviour.

If feeding regime changes (from breastfeeding with supplementary feeds to breastfeeding only), in the first 72 hrs of life, then pre-feed blood glucose monitoring is needed for 6-8 hrs after the last supplementary feed.

If signs and symptoms of hypoglycaemia remain present, then blood glucose screening should continue until hypoglycaemia is no longer considered to be a risk. This is to be discussed with the on call paediatric team.

6. Maintenance of Optimal Serum Glucose Levels

Desired Outcome	Recommended Best Practice										
Initial maintenance of optimal serum glucose levels	<p>Immediately after birth the baby should be dried and a hat put on. He/she should be placed in skin-to-skin contact with the mother to provide warmth and to facilitate the initiation of feeding within the first hour of life.</p> <p>Commence observations as per NOC/ NEWS. Assess necessary breastfeeding support, recognition of feeding cues and signs of effective attachment and document on the Infant Feeding Record (2927958) (see Appendix 4.)</p>										
Maintain normal body temperature (36.5°C - 37.0°C)	<p>Monitor baby's temperature as per NOC/ NEWS or more frequently if needed. Maintain the temperature between 36.5-37.0°C. Skin-to-skin contact between mother and baby provides warmth as well as facilitating the initiation of breast feeding.</p> <p>If temperature drops below 36.5°C, apply woollens and wrap well, recheck the temperature at 30 minutes. Consider using an Inditherm heat mattress.</p>										
Management of reluctant feeding in infants >37 weeks at birth, to maintain optimal serum glucose levels	<p>Referral to the Lactation Consultant must be completed for any infant who is reluctant to breastfeed at any stage.</p> <p>Aim for baby to have completed a second feed 3-4 hours following birth and subsequent feeds 3-4 hourly.</p> <p>Assess and document the quality of feeding, using the Infant Feeding Record.</p> <p>If the infant isn't breastfeeding effectively, initiate an Active Feeding Plan including supplementary feeds if necessary & seek support from a Midwife colleague.</p> <p><u>Supplementary Feed Volumes*</u> (preferably EBM, and/or formula milk)</p> <table border="1"> <thead> <tr> <th>Age of Baby (Hours)</th> <th>Volume per Feed</th> </tr> </thead> <tbody> <tr> <td>0 - 24 hrs</td> <td>2 - 10mLs per feed</td> </tr> <tr> <td>24 - 48 hrs</td> <td>5 - 15mLs per feed</td> </tr> <tr> <td>48 - 72 hrs</td> <td>15 - 30mLs per feed</td> </tr> <tr> <td>72 - 96 hrs</td> <td>30 - 60mLs per feed</td> </tr> </tbody> </table> <p>Document all supplementary feeds on the Infant Feeding Record.</p> <p>Any feeding concerns are also to be recorded as part of the completion of observations on the NOC/NEWS and appropriate escalation pathway followed according to calculated NEWS total.</p>	Age of Baby (Hours)	Volume per Feed	0 - 24 hrs	2 - 10mLs per feed	24 - 48 hrs	5 - 15mLs per feed	48 - 72 hrs	15 - 30mLs per feed	72 - 96 hrs	30 - 60mLs per feed
Age of Baby (Hours)	Volume per Feed										
0 - 24 hrs	2 - 10mLs per feed										
24 - 48 hrs	5 - 15mLs per feed										
48 - 72 hrs	15 - 30mLs per feed										
72 - 96 hrs	30 - 60mLs per feed										
Maintaining Lactation	<p>If babies are in SCBU, mothers must be advised to express a minimum of 3 hourly during the day (4 hourly overnight) using a double pumping method, as breast milk is the safest and nutritionally most appropriate for newborns.</p>										

* Reference: [Academy of Breastfeeding Medicine. \(2017\). Clinical Protocol 3](#)

7. Active Feeding Plan

To empower parents of babies at risk of hypoglycaemia to serve as informed partners in their baby's care, they should be provided with information that explains why their baby is being monitored, how to assess their baby's general condition and how to assess feeding cues and effective feeding. Please use the [Infant Feeding Record](#) to assess and record feeding.

Mothers/parents should be provided with clear methods for escalating concerns to the health care team. This will be supported by documentation on the NOC/NEWS and the Escalation Pathway and by the documentation on the Infant Feeding Record ([Appendix 4.](#)).

<p>Active Feeding Plan</p>	<p>Place babies in skin-to-skin contact with their mothers immediately following birth & for at least an hour, unless there is a medical reason not to (such as a baby needs admission to SCBU straight after birth).</p> <p>Encourage mothers to recognise when their baby is ready to breastfeed, offering help if needed. Encourage the continuation of skin-to-skin contact.</p> <p>Monitor newborns as per NOC/NEWS and document feeding behaviour, from birth, on the Infant Feeding Record when on Maternity Ward.</p> <p>Complete breastfeeding assessment (within 6 hours after birth) and document accordingly on the Infant Feeding Record (Appendix 4.).</p> <p>Acknowledge, listen to and document maternal concerns, provide support.</p> <p>Review feeding plan every 3 hours, or review as needed sooner if concerned.</p> <p>Actively encourage breastfeeding, offer feeds according to feeding cues at least 8-10 times in 24 hours, until breastfeeding is established, then breastfeed on demand.</p> <p>If breastfeeding is not possible in the interim: express at least 8-10 times in 24 hours, 3 hourly during the day and 4 hourly overnight.</p> <p>Continue to provide EBM / nutrition and actively support until successfully breastfeeding. Supplementary feeds should preferably be administered via cup/ lactaid / syringe for all breastfeeding infants (see page 6. for feed volumes).</p> <p>Use nipple shields, teats and pacifiers with consent, where clinically indicated.</p> <p>In the absence of sufficient EBM the use of formula milk is medically indicated and should be advised. Verbal consent to be obtained from parents.</p>
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8. Treatment of Neonatal Hypoglycaemia

For full details of ‘Screening and Management of Newborns at Risk of Hypoglycaemia’ please see the flowchart for Rotorua in [Appendix 1](#), and Taupo in [Appendix 2](#).

Dextrose gel is the first line treatment for neonatal hypoglycaemia (for details about administration see [Appendix 3](#)).

This needs to be followed by enteral feed – breastfeed or alternative feed if breastmilk is not available, breastfeeding is not possible or insufficient. The treatment volume of EBM or alternative feed of 5-10mL/kg may be required as per flowchart.

Severe hypoglycaemia - blood glucose under 1.2mmol/l (measured on Haemocue or iStat or on blood gas by the laboratory) **is a neonatal emergency**. This will require immediate dextrose gel administration, followed by urgent admission to SCBU with IV access and glucose infusion.

9. Management of Hypoglycaemia in SCBU

Newborns with profound, or persistent hypoglycaemia (continues despite 2 dextrose gels) or recurrent hypoglycaemia (babies needing more than 6 dextrose gels within 48 hrs for hypoglycaemic episodes), need to be discussed with the on call paediatric team. These babies cannot be managed on the postnatal ward and require admission to SCBU.

Severe hypoglycaemia < 1.2mmol/l at any point or < 2.0mmol/L after/despite one dose of oral dextrose is considered a neonatal emergency.

The Paediatric Team needs to be informed urgently, SCBU admission is required and obtaining urgent venous access should be considered. If unable to get peripheral venous access, an Emergency Umbilical Venous Catheter pack can be found in the Emergency Trolley in SCBU.

If IV access is difficult/ or delayed and UVC needs to be inserted, consider giving IM Glucagon 200mg/kg whilst attempting an IV line/ UVC line.

9.1 IV Dextrose

Hypoglycaemia requiring intravenous therapy should follow the Starship Hypoglycaemia in the Neonate Guidelines. Newborn Services Clinical Guideline Glucose Calculator should be used to calculate the rates; see <https://starship.org.nz/health-professionals/calculators/glucose-calculator/>

Commence 10% dextrose infusion (4-9mg/kg/min) at a fluid volume rate depending on the age of a baby.

- Consider giving a bolus of IV 10% dextrose at 2ml/kg then;

Age of Baby	IV Dextrose
Day 0-1	60 mls/kg/day
Day 2	75mls/kg day
Day 3	90mls/kg/ day

Persistent hypoglycaemia or recurrent hypoglycaemia not responding to the above measures: increase rate/volume or concentration of glucose (to 12.5% or 15%).

Babies who need 15% glucose will need UVC access.

The glucose load: Rate of glucose (ml/kg/day) / 144 x glucose % = mg/kg/min

% Dextrose	Daily Fluid Volume	
	60 ml/kg/day	90 ml/kg/day
10% Dextrose	4.2 mg/kg/min	6.3 mg/kg/min
12.5% Dextrose	5.2 mg/kg/min	7.8 mg/kg/min
15% Dextrose	6.3 mg/kg/min	9.4 mg/kg/min

- If BSL < 2.6 mmol/L – increase IV Dextrose solution stepwise until a glucose infusion rate of 9.4 mg/kg/min is reached.
- If BSL ≥ 2.6mmol/L Titrate 10% Dextrose solution to maintain Blood Glucose levels between 2.6 - 4 mmol/L. As Blood Glucose level stabilises, commence enteral feeds and titrate.
- If BSL remains <2.6 mmol/L, proceed to further investigations.

9.2 Mild Hypoglycaemia

Babies admitted to SCBU with mild hypoglycaemia, who do not require IV dextrose therapy, need to be supported with breastfeeding (if maternal choice).

If baby is not breastfeeding, full volume enteral feeds (EBM or formula) via NGT or a cup/ bottle may be indicated to ensure normal blood glucose level is achieved. These volume feeds are aligned with fluid requirements in SCBU;

Full Volume Enteral Feeds

Age of Baby	Volume of Feed
Day 0-1	60mls/kg/day
Day 2	75mls/kg/day
Day 3	90mls/kg/day
Day 4	120mls/kg/day
Day 5	150mls/kg/day

10. Investigations

Investigations should be completed for any neonate with repeated, severe and persistent episodes of hypoglycaemia, i.e. <2.6 mmol/l, requiring more than 10mg/kg/min of glucose or lasting longer than 1 week (refer to [Starship Hypoglycaemia in the Neonate Guidelines](#)).

If possible, it is ideal to obtain blood to test for metabolic conditions at the time hypoglycaemia is occurring, however do not compromise immediate treatment to do this.

11. References

- Academy of Breastfeeding Medicine Clinical Protocol #3: Supplementary Feedings in the Healthy Term Breastfed Neonate, Revised 2017. <https://abm.memberclicks.net/assets/DOCUMENTS/PROTOCOLS/3-supplementation-protocol-english.pdf>
- Harris DL, Gamble GD, Weston PJ, Harding JE. What happens to blood glucose concentrations after oral treatment for neonatal hypoglycaemia? *J Pediatr.* 2017; 190:136-41.
- Starship Hospital's Hypoglycaemia in the Neonate Guidelines. <https://starship.org.nz/guidelines/hypoglycaemia-in-the-neonate/>
- Te Whatu Ora – Health New Zealand. 2023. Small for gestational age and fetal growth restriction in Aotearoa New Zealand He Aratohu Ritenga Haumanu mō te Tōhuatanga Kōpiri me te Pakupaku Rawa. A clinical practice guideline: Summary of recommendations. Wellington: Te Whatu Ora – Health New Zealand.
- Te Whatu Ora Waitaha/Canterbury. Hypoglycemia of the Newborn, Clinical Guideline. 2020. WCH GLM0056.
- <https://edu.cdhb.health.nz/Hospitals-Services/Health-Professionals/maternity-care-guidelines/Documents/GLM0056%20Hypoglycaemia%20of%20the%20Newborn.pdf>
- Waikato Guideline - Postnatal Screening And Initial Treatment Protocol For Babies At Risk Of Hypoglycaemia – Issued 2023, Document ID 6483. Available Online <https://healthshare.health.nz/resources/library>
- Weston PJ, Harris DL, Harding JE. Dextrose gel treatment does not impair subsequent feeding. *Arch Dis Child Fetal Neonatal Ed.* 2017:539-41.

12. Related Documents

- Lakes Infant Feeding Record Form (EDMS 2927958)
- Newborn Observation/Newborn Early Warning Score (NOC/NEWS) Chart
- Lactation Consultant Referral Form (EDMS 1870581)
- Clinical Pathway Support of the Unwell Mother
- Postnatal Admission - Non-Maternity Ward

Authorised by: Dr Sarka Davidkova, Paediatrician

Dr Sonja Crone, Head of Department - Paediatrics

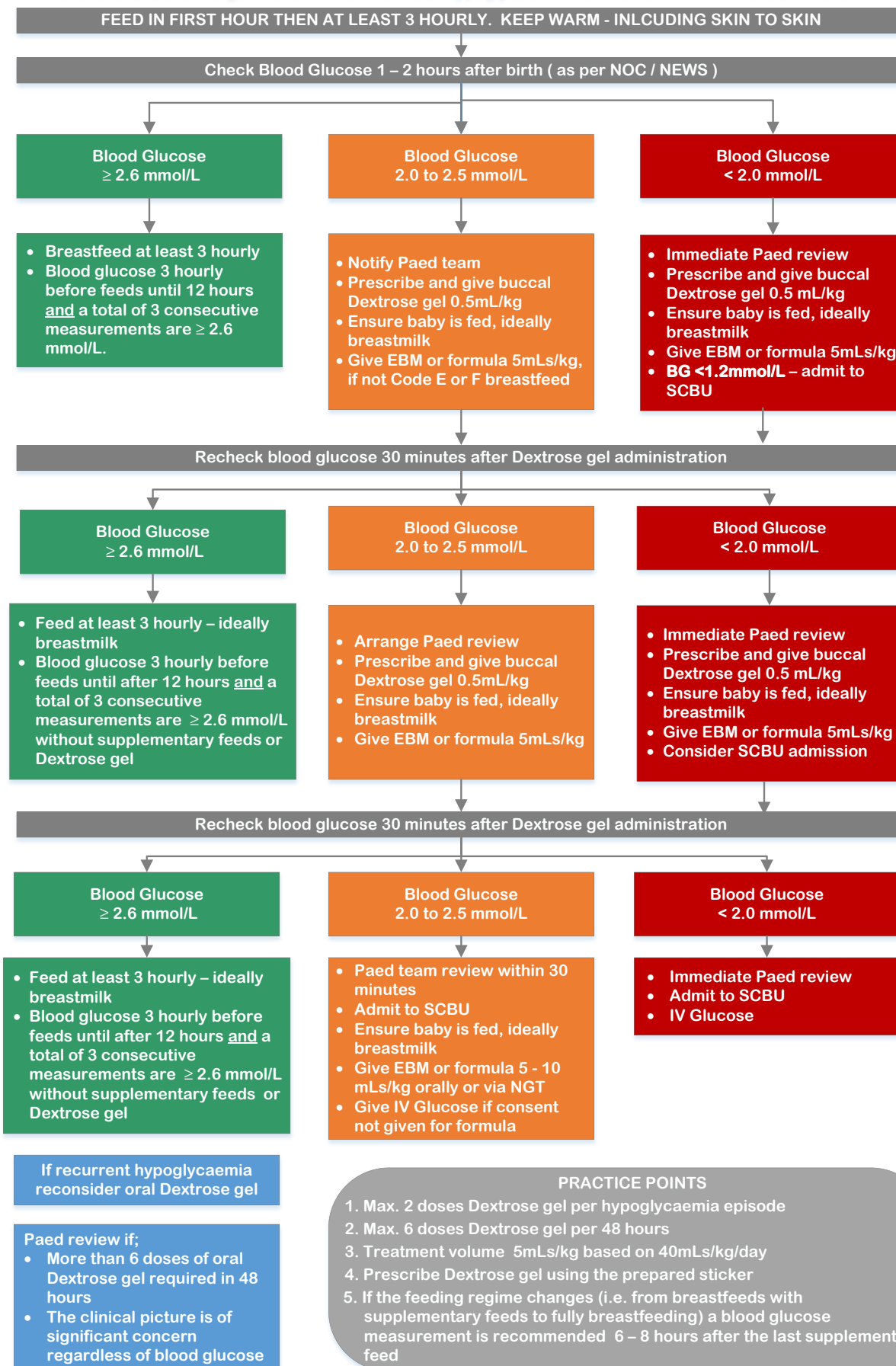
Endorsed by: Maternity Clinical Quality Improvement (CQI)

Key Word(s): WCF, CH, Maternity, Neonatal hypoglycaemia, newborn, low blood glucose				
EDMS: 56076	Version: 6.3	Issue: Feb 2024	Review: Feb 2026	Page: 10 of 15

13. Appendices

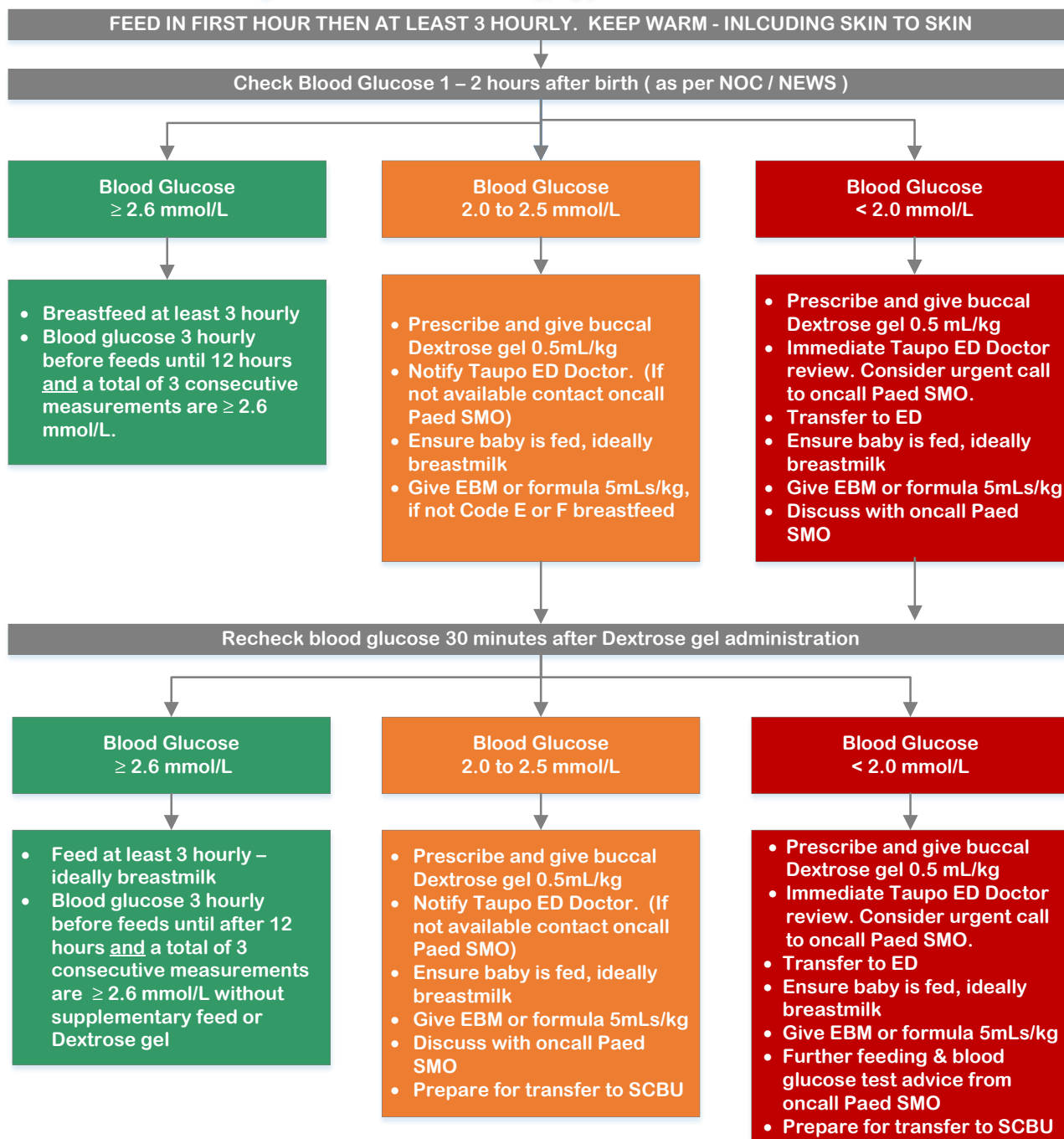
Appendix 1. Screening & Management of Newborns at Risk of Hypoglycaemia- Rotorua Maternity

Note: Buccal Dextrose gel is used to treat neonatal hypoglycaemia ≥ 35 weeks and < 48 hours after birth



Appendix 2. Screening & Management of Newborns at Risk of Hypoglycaemia – Taupo Maternity

Note: Buccal Dextrose gel is used to treat neonatal hypoglycaemia ≥ 35 weeks and < 48 hours after birth



PRACTICE POINTS

1. If the feeding regime changes (i.e. from breastfeeds with supplementary feeds to fully breastfeeding) a blood glucose measurement is recommended 6 – 8 hours after the last supplementary feed.
2. Prescribe Dextrose gel using the prepared sticker

Appendix 3. Administration of Dextrose Gel

Recommended Best Practice

Dextrose gel is first line treatment for hypoglycaemia.

Indication	Management of hypoglycaemia in the first 48 h of life in babies ≥ 35 weeks' gestation with blood glucose concentration < 2.6 mmol/L.				
Dose	0.5 ml/kg/dose via buccal route.				
Prescribing	<p>As per standing order (see Appendix 4.)</p> <p>Or place a Dextrose Gel Prescription sticker on the baby's drug chart;</p> <table border="1" style="margin-left: 20px;"> <tr> <td style="text-align: center;">DEXTROSE GEL 40%</td> <td rowspan="3" style="vertical-align: top;"> Massage into buccal mucosa if blood glucose < 2.6mmol/L </td> </tr> <tr> <td>0.5 mL/kg =mL</td> </tr> <tr> <td>Max. 6 doses in 48 hours</td> </tr> </table> <p>e.g. dose for a 3kg baby is 0.5 mL x 3 = 1.5 mL gel (See Neonatal Hypoglycaemia Guideline)</p>	DEXTROSE GEL 40%	Massage into buccal mucosa if blood glucose < 2.6 mmol/L	0.5 mL/kg =mL	Max. 6 doses in 48 hours
DEXTROSE GEL 40%	Massage into buccal mucosa if blood glucose < 2.6 mmol/L				
0.5 mL/kg =mL					
Max. 6 doses in 48 hours					
Formulation	<p>Dextrose oral gel 40% 50 ml, gluten free. (Preservative: Citric acid)</p> <p>Suspending agent: carboxymethylcellulose sodium).</p>				
Administration	<ol style="list-style-type: none"> 1. Draw up dose (0.5 ml/kg) of dextrose 40% gel into an oral syringe. 2. Dry the oral buccal mucosa with gauze swab. 3. Place the dextrose gel onto a gloved finger; massage into the buccal mucosa. 4. Follow treatment with breast or EBM feed, or infant formula, in accordance with maternal wishes. 				
Storage	Always date and time the dextrose gel container when it is initially opened. Store at room temperature. Do not store in the fridge. Store away from heat, moisture, and light. 40% Dextrose Gel (Optimist Ltd) expires 14 days after opening.				

Appendix 4. Infant Feeding Record

(This document is to be used alongside NOC/NEWS).

I N F A N T F E E D I N G R E C O R D

Surname:

First Name:

Date Of Birth: NHI:

(or affix patient label)

Date of birth: ___/___/___ Time of birth: _____ Birth weight: _____

Mode of birth: _____ Gestation: _____ Centile: _____

FLUID TYPE CODES

DXT: Dextrose Gel
 IF: Infant formula (ready to feed)
 Yellow sticker placed in notes
 Consent information provided
 Formula book completed

COMPLETE FOR ALL BABIES & FILE IN HOSPITAL NOTES

Date/ Age	BREASTFEEDING OF EBM INPUT				BLOOD GLUCOSE				Reason Code	OUTPUT			Weight Day 5 (earlier if concerns)	Plan	Staff Initials		
	BF Code	Requires Assistance Yes / No	EBM Volume	EBM Method Code	Comments	BG	Before or After feed	DEXTROSE GEL or INFANT FORMULA INPUT		Fluid Type Code	Fluid Volume	Method Code				Urine	Bowel Motion & Colour

BREASTFEEDING CODES

A Offered breast but not interested
 B Interested, shows feeding cues but doesn't latch
 C Latches but on and off, or distressed or falling asleep
 D Latches but infrequent sucking (<5 mins)
 E Latches – rhythmic sucking but short feed (5-10 mins) with some swallows
 F Latches – rhythmic sucking, long feed (>10 mins), regular swallows seen or heard

If any consecutive breastfeeds are A-D, do a full set of NEWS observations and consider recording 'feeding concerns' on NOC/NEWS Chart

DEXTROSE OR FORMULA REASON CODES

1. Prematurity
 2. Low blood glucose (hypoglycaemia)
 3. Dehydration
 4. Excessive weight loss (≥ 7 hr)
 5. Severe hyperbilirubinaemia (jaundice)
 6. Maternal medication/separation
 7. Parental request. Not clinically indicated.
 8. Other:

METHOD CODES

Cup: Cup
 FF: Finger Feed
 SFT: Supplementary Feeding Tube
 NG: Naso Gastric Tube
 S: Syringe
 B: Bottle

Ref:EDMS 2927958

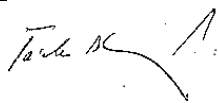
Approved by: Lactation Consultants

Next Review: August 2025

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Appendix 5. Standing Order for Dextrose Gel

Title	40% Dextrose Gel For Treatment Of Neonatal Hypoglycaemia
Ward/Unit/Clinic	Maternity wards - birthing unit and perinatal ward, SCBU
Medicine standing order scope	Midwives, LMC and RN in maternity wards and SCBU
Rationale	<p>Untreated or delays in treatment of neonatal hypoglycaemia is associated with adverse neurodevelopmental outcomes.</p> <p>Standing order is to prevent delays administering dextrose gel if paediatric doctor not immediately available to prescribe this treatment</p>
Medicine/s	40% dextrose gel
Indications	<p>For treatment of neonatal hypoglycaemia with blood glucose level <2.6mmol/l as per hypoglycaemia guideline.</p> <p>If blood glucose is 1.2- 2.6mmo/l, repeat blood glucose level in 30min, maximum 2 dose of dextrose gel for one episode of neonatal hypoglycaemia. Neonates with blood glucose level <1.2mmol/l, need an urgent paediatric review and admission to SCBU for IV glucose, in addition to dextrose gel treatment.</p>
Dose	0.5ml/kg
Route of administration	Buccal mucosa administration
Administration and documentation	<p>0.5ml/kg of 40% dextrose gel administered by massaging into buccal mucosa</p> <p>Needs to be prescribed on the hospital drug chart into PRN section</p>
Contraindications and precautions	Neonates with blood glucose level <1.2mmol/l, need an urgent paediatric review and admission to SCBU for IV glucose
Side effects	<p>Side effects (rare with the prescribed single dose)</p> <p>Nil</p>
Persons authorised to administer standing order	Midwives, LMCs, RNs in maternity wards and SCBU
Competency/training requirements for the person(s) authorised to administer	Be familiar with Neonatal hypoglycemia flowchart
Countersigning	Needs counter signing by another RN or midwife
Definitions	Neonatal hypoglycaemia- blood glucose level <2.6mmol/l, SCBU special care baby nursery, RN- registered nurse, LMC – lead maternity carer

Consultant (Issuer) Name	Signature	Date
Sarka Davidkova		19/10/2023