

Hypoglycaemia

| Scope (Staff): | Nursing and Medical Staff |
|----------------|---------------------------|
| Scope (Area): | NETS WA |

Child Safe Organisation Statement of Commitment

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.

This document should be read in conjunction with this disclaimer.

This guideline is for the purpose of the NETS WA transport team transporting patients between health centres.

The CAHS Neonatology <u>Hypoglycaemia</u> clinical guidelines should be referred to by health professionals within a hospital setting.

Aim

To facilitate early recognition and management of infants at risk of hypoglycaemia in the NETS WA transport setting including appropriate glucose monitoring during transport.

Risk

Severe hypoglycaemia can cause seizures and brain injury if not recognized and/or untreated appropriately.

Abbreviations

PIVC: Peripheral Intravenous Cannula

PGL: Plasma Glucose Level GDR: Glucose Delivery Rate

Infants at risk of hypoglycaemia:

- Infants of mothers with diabetes (insulin-dependent, type 2 diabetes mellitus or gestational diabetes mellitus).
- Infants weighing < 2.5kg

- Infants small for gestational age (< 10th percentile)
- Infants large for gestational age (>4.5kg or >97th centile)
- Preterm infants (<34 weeks' gestation)
- Infants of mothers who received antenatal corticosteroids >34 weeks' gestation
- Infants of mothers who received beta blockers in the 3rd trimester

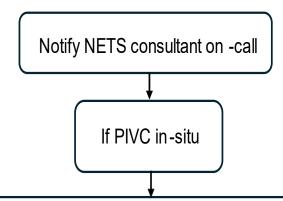
Hypoglycaemia management

- Agree departure PGL with Consultant, aim for at least 2.6mmol/L. Infants on IV glucose infusions should have a blood sugar higher than this. Transporting infants in a hypoglycaemic state should be considered as a last resort and needs to be agreed upon by NETS Consultant
- Identify newborns at <u>risk of hypoglycaemia</u>
- Symptomatic newborns will require close PGL monitoring and treatment
 - I. Symptoms of hypoglycaemia include:
 - CNS excitation: irritability, jitteriness, seizures
 - CNS depression: Hypotonia, lethargy, poor feeding, apnoeas
 - Non-specific: temperature instability, sweating, tachycardia
- Document plan as per <u>Neonatal Hypoglycaemia Monitoring and Management in Transport Plan</u> and should include:
 - I. Agree the treatment level
 - II. The frequency of monitoring
 - III. If PGL is below treatment level discuss with NETS Consultant what actions areto be taken and are feasible during transport
 - For >2 hours journey, consider checking the PGL at least once per hour during transit.
 - Set a reminder for next blood sugar check

Page 2 of 7 NETS WA Guideline

Symptomatic OR Severe Hypoglycaemia (PGL < 1.5mmol/L)

If PGL <1.5mmol/L on arrival to referring hospital the below steps are to be followed:



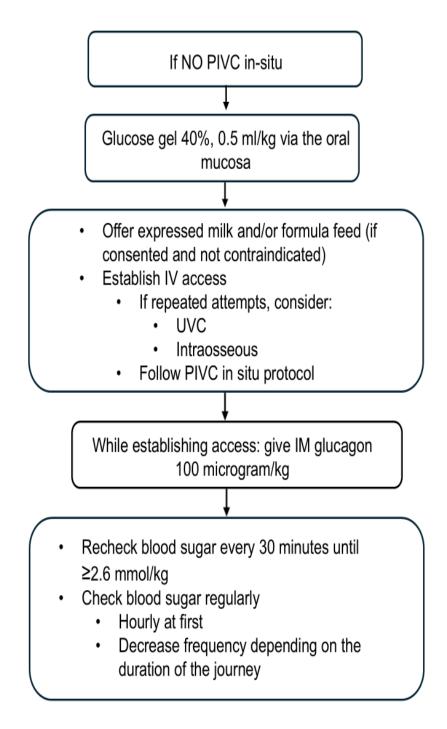
- Bolus: IV 10% Dextrose 2mL/kg
- Increase infusion rate by one increment

OR

- Increase dextrose concentration to 12.5% (see NETS WA drug calculator to calculate)
- If >12.5% dextrose is required, then central access is needed
- Consider IV/IM Glucagon 100 mcg/kg (discuss with NETS consultant)
- Recheck blood sugar every 30 minutes until ≥2.6 mmol/Kg
- Check blood sugar regularly
 - Hourly at first
 - Decrease frequency depending on the duration of the journey

Page 3 of 7 NETS WA Guideline

If on arrival to referring centre, PGL <1.5mmol and no PIVC in-situ the following steps are to be taken:

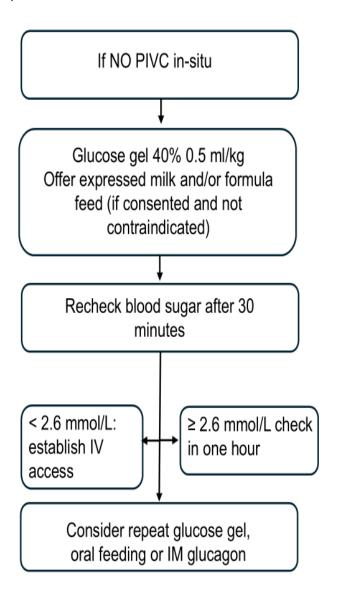


*Consider the total fluid volume administered during stabilisation along with the expected rate of fluids for that infant on that day, and the most recent sodium level via lab results or blood gas.

Page 4 of 7 NETS WA Guideline

Asymptomatic Hypoglycaemia: (<2.6mmol/L)

If the PGL is <2.6mmol/L on arrival to referring centre and no PIVC in-situ, follow the below steps:



- If serum glucose <2.6 mmol/L after departure from referring centre – contact consultant and
- Consider non-IV measures as above
- Transfer without IV, UVC or IO access should be a last resort in exceptional circumstances and only agreed with the NETS consultant

Page 5 of 7 NETS WA Guideline

Related CAHS internal policies, procedures and guidelines (if required)

Hypoglycaemia (CAHS Neonatology)

<u>Venous and Arterial Access & Fluid Management on NETS Retrievals (CAHS NETS WA)</u>

This document can be made available in alternative formats on request.

| Neonatology | | | | | |
|---|--|--|--|--|--|
| NETS WA | | | | | |
| August 2009 | Last Reviewed: | October 2025 | | | |
| | Next Review Date: | October 2028 | | | |
| Neonatology Coordinating Group | Date: | 28 th October 2025 | | | |
| Neonatology Coordinating Group | Date: | | | | |
| NSQHS Standards: Child Safe Standards: 1,10 | | | | | |
| | NETS WA August 2009 Neonatology Coordinating Group Neonatology Coordinating Group NSQHS Standards: | NETS WA August 2009 Last Reviewed: Next Review Date: Neonatology Coordinating Group Date: Neonatology Coordinating Group Neonatology Coordinating Group NSQHS Standards: | | | |

Printed or personally saved electronic copies of this document are considered uncontrolled



Page 6 of 7 NETS WA Guideline

Appendix 1: Neonatal Hypoglycaemia Monitoring and Management in Transport Proforma:

| Patient De Name: w | | g | DOB: Transport Date/Tir | | Gestati | onal Age: | | |
|--|-------------------------|--------------------------|---|---------|---------|--------------------|--|--|
| ☐ Infant o | | 3 SGA (<10 | Oth percentile) □ Luspected □ Maternal | • | - | • | | |
| ☐ Oral fee | • | _/kg) □ Di | ☐ Dextrose gel (40 scussed with NETS V | | - | ouccal) | | |
| | ess □ Lethargy □ | | ling □ H | | | | | |
| Glucose Monitoring Frequency ☐ Check on arrival of NETS WA team ☐ Check at time of departure if >60 minutes since last check | | | | | | | | |
| Document | tation Notes | | | | | | | |
| Next steps Clinician S | s / Plan: Signature: | | Date/Time: | | | | | |
| Serum Glucose Monitoring | | | | | | | | |
| Time Glucose (mmc | | Method | | Interve | ntion | Time Next Check | | |
| | | Glucometer □ Blood Gas □ | | | | | | |
| | | Glucometer □ Blood Gas | | | | | | |
| | | Glucome | ter □ Blood Gas | | | | | |
| Continuo | us IV infusion | | | | | | | |
| Time | Dextrose (%) | Rate (mL/hr) | Central Intervention GI | | GIR r | R mg/kg/min | | |
| | | Central □ Peripheral □ | | | | | | |
| | | | Central □ Peripheral □ | | | | | |
| | Central □ Peripheral □ | | | | | | | |

Page 7 of 7 NETS WA Guideline