CenTre Feeding and IV Fluid guideline





Trust ref:C8/2025

1. Introduction and Who the Procedure Applies to

This guideline is aimed at all professionals involved in the transfer of babies by CenTre Neonatal transport service.

Aim of Guideline

This guideline aims to provide information about:

- Maintenance of stable blood glucose for babies during transfer.
- Intravenous fluids for babies not being fed during transfer.
- Enteral feeding for babies during transfer.

Key Points

- It is important to maintain normoglycaemia during transport, by careful monitoring of blood glucose and administration of intravenous glucose infusions or enteral feeds where appropriate.
- Intravenous glucose infusions should be given to maintain blood glucose and hydration, when babies are unable to have feed during transport.
- Enteral feeds should be continued for transport, when possible, and planned around transfer times.

Related UHL documents;

Hypoglycaemia Neonatal UHL Guideline Trust ref: C22/2008

<u>Hyperglycaemia on NNU UHL Neonatal Guideline</u> Trust ref: C26/2006

Enteral Nutrition UHL Neonatal Guideline Trust ref: C105/2005
Insulin Use on NNU UHL Neonatal Guideline Trust ref: C25/2006

2. Hypoglycemia and Hyperglycemia

Most sick newborns requiring transport do not tolerate oral feed. Hypoglycaemia and hyperglycaemia increases the risk of morbidity and mortality in sick newborns. It is therefore important to aim for normoglycaemia in babies requiring transfer.

^{*}This guideline should be used in conjunction with the relevant UHL/NUH guidelines for hypo/hyperglycaemia, Insulin and enteral feeding. *

- Ideally two forms of intravenous (IV) access should be obtained if possible 10% Glucose infusion is used at appropriate rate for baby on current day of life, up to 120mls/kg/day.
- Electrolytes can be added to infusion as required if necessary. However, to reduce risk of errors most babies can be transferred on 10% glucose without electrolytes for the short duration of a transfer.

Secure venous access is paramount and there should be no hesitation in placing an umbilical venous catheter (UVC) if peripheral venous access is difficult. Monitor the blood sugar in all babies who are at risk of hypo/hyperglycemia.

3. Enteral feeding

Where an infant is not on IV fluids, the time between feeds should not be made significantly longer by the transfer e.g. – an infant given a one-hourly feed amount should not go longer than one hour before the next feed etc.

At the time of referral, a feeding plan should be agreed with the referring unit staff. This should be clearly documented in the transport documentation.

On the day of the transfer the nurse undertaking the transfer should review the plan documented on the transport form and liaise with the referring unit regarding any updates that are needed, e.g. if the timing of the transfer has altered.

- The transport team member taking the referral should give the referring unit an estimated time of arrival and discuss plans for feeding.
- A pre-transfer blood glucose may be needed if the infant has changed feeds/fluid regime for transfer, or blood glucose has been unstable, or there are other concerns about the blood glucose.
- It is not necessary for the transport team to repeat blood glucose recently performed by the referring unit.
- If a naso/orogastric tube (NGT/OGT) is present it should not be aspirated routinely unless there are specific concerns that the infant will vomit/aspirate, then feeds may need to be discontinued and IV fluids may be needed.
- The transport team member should update the receiving unit if there are any unexpected delays and discuss the following, depending on the feed interval and the extent of the delay:
 - Stopping to give a feed.

A Datix incident reporting form should be completed if there is a transport-service cause for feeds delayed as below:

- hourly feed delayed for more than 15 minutes
- 2- hourly feed delayed for more than 30 minutes
- 3-hourly feed delayed more for than 45 minutes
- 4- hourly feed delayed more for than 60 minutes
- Demand feeding where the gap in feeds exceeds 5 hours
- o or any occasion where the post-transfer blood sugar is <2.0mmol/l

Post transfer blood glucose should be documented by the transport team if:

- The transfer has taken the baby beyond the next due feed.
- o IV fluid administration has been interrupted during transfer e.g. the cannula stopped working.
- There is any other concern about the blood glucose

On arrival at the receiving unit the receiving team should be made aware of when feeds are due.

SUMMARY OF ENTERAL FEEDING GUIDANCE

- All infants being fed should have a feeding plan discussed with the referring unit staff.
- A pre and post transfer blood glucose may be required for some infants.
- It is not necessary to repeat a recent blood glucose on arrival at the referring unit.
- NGT/OGT should not be routinely aspirated unless there are concerns.
- Receiving unit staff should be made aware when next feed is due

Hourly feeds + journey	Hourly feeds + journey	2 hourly feeds + journey	2 hourly feeds + journey	3 or 4 hourly feeds or
time < 1	time > 1	time < 2	time > 2	demand
If blood glucose level is stable there should be no need for IV fluids If there is a delay in the team arriving to undertake the transfer, advise to keep giving the hourly feeds when due	If the expected journey time is over 1 hour and /or the blood glucose is unstable it will usually be necessary to give IV fluids for the journey.	If the blood glucose is stable there should be no need for IV fluids but there should be careful timing of feeds to ensure there is no delay in the baby receiving their next feed.	If the journey is expected to exceed the gap between feeds and/or the blood glucose is unstable it will be necessary to consider a cannula and IV fluids for the journey. Some infants may tolerate 2-hourly feeds given in transit	The transfer should be planned to occur in the time between feeds where possible. If the journey is expected to exceed the gap between feeds and /or the blood glucose is unstable it will be necessary to consider a cannula and IV fluids for the journey Some infants may tolerate feeds given in transit.

3. Education and Training

None

5. Supporting References

<u>Hypoglycaemia Neonatal UHL Guideline</u> Trust ref: C22/2008

Hyperglycaemia on NNU UHL Neonatal Guideline Trust ref: C26/2006

Enteral Nutrition UHL Neonatal Guideline Trust ref: C105/2005

Insulin Use on NNU UHL Neonatal Guideline Trust ref: C25/2006

6. Key Words

Blood glucose, Enteral feeding, Hypoglycaemia, Hyperglycaemia

The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.

As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

EDI Statement

We are fully committed to being an inclusive employer and oppose all forms of unlawful or unfair discrimination, bullying, harassment and victimisation.

It is our legal and moral duty to provide equity in employment and service delivery to all and to prevent and act upon any forms of discrimination to all people of protected characteristic: Age, Disability (physical, mental and long-term health conditions), Sex, Gender reassignment, Marriage and Civil Partnership, Sexual orientation, Pregnancy and Maternity, Race (including nationality, ethnicity and colour), Religion or Belief, and beyond.

We are also committed to the principles in respect of social deprivation and health inequalities.

Our aim is to create an environment where all staff are able to contribute, develop and progress based on their ability, competence and performance. We recognise that some staff may require specific initiatives and/or assistance to progress and develop within the organisation.

We are also committed to delivering services that ensure our patients are cared for, comfortable and as far as possible meet their individual needs.

CONTACT AND REVIEW DETAILS					
Guideline Lead (Name and Title)	Executive Lead				
Sam Bird and Richard Hall	Chief Nurse				
Details of Changes made during review:					

Date	Issue Number	Reviewed By	Description Of Changes (If Any)
February 2025	1	CenTre Governance committee	New document