



CLINICAL GUIDELINE	
Fluid Management	
<b>Scope (Staff):</b>	Medal and Nursing Staff
<b>Scope (Area):</b>	NETS WA
<p align="center"><b>Child Safe Organisation Statement of Commitment</b></p> <p>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.</p>	

**This document should be read in conjunction with this [DISCLAIMER](#)**

**This is a quick reference guide for transportation purposes only.**

Type and volume of fluid depends on infant’s gestational age and disease process.  
**As a guide, recommended glucose percentages are as follows:**

Gestation	Glucose %
≤ 27 weeks	5% Glucose
>27 weeks	10% Glucose

Typical glucose requirements for term neonates: 4-6 mg/kg/min and preterm neonates: 6-8 mg/kg/min.

**Maintenance fluid requirements**

- Term neonates require approximately 60mL/kg/day on day.
- Preterm neonates between 27-34 weeks usually require 80mL/kg/day on day 1.
- Extreme Preterm neonate’s ≤ 27 weeks usually require 100-120mL/kg/day due to increased insensible fluid losses on day 1.
- **Asphyxiated neonates** are fluid restricted to approximately 40-50mL/kg/day. These patients require higher glucose concentrations. **See special considerations below.**

## Volume expansion

- Normal saline 0.9% is used for fluid expansion for neonates who present with shock / functional hypovolemia at 10mL/kg/dose.
  - If patient requires repeated boluses consider other fluids e.g. O-ve blood (ideally CMV negative) or inotropes **after discussion with NETS consultant.**
- For patients who are known to have acute blood loss e.g. Abruptio, foetal-maternal haemorrhage volume expand with O-ve blood (ideally CMV negative) at 20mL/kg.

## Special Considerations


- Asphyxiated neonates require higher percentage concentrations of glucose due to increased metabolic demand.
- Glucose requirements higher than 12.5% **must** be infused via central line e.g. umbilical venous catheter
  - **\*Note: avoidance of hypoglycaemia is more important than fluid restriction.** ([Formulas for Glucose & Metric conversion](#))
- Central lines such as umbilical arterial / venous catheters require additional heparin added to fluid to maintain patency of line.
  - **For dual lumen central lines BOTH LUMENS must have fluid running.**  
*\*\*Please note:* Aseptic Technique in preparation of fluids for administration via umbilical catheters is recommended where possible. ([Umbilical Arterial and Venous Catheters: Insertion, Management and Removal](#))

## Heparinising fluid for umbilical catheters

- Dose = Heparin Sodium 0.5 units / mL of fluid

**Preparation:** Add 250 units of Heparin Sodium (1000units / mL) to 500mL bag of base fluid = 0.5 units/mL Draw up 50mls fluid into syringe for infusion.

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Collaboration

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