

## IV FLUID CONTENT

### FOR CHILDREN (excluding neonates)

Specialist consultation recommended when prescribing for infants < 3 months neonatal fluids may be more appropriate.

#### For Resuscitation / Bolus

- **0.9% sodium chloride**

*Alternatively and ONLY under direction of Specialist:*

- *other crystalloids, eg. balanced salt solutions, or colloids may be used.*

#### For Replacement Fluids (dehydration or ongoing losses)

- **0.9% sodium chloride + 5% glucose +/- potassium chloride 20mmol/L**

*Alternatively and ONLY under direction of Specialist*

- *Plasma-Lyte148 + 5% glucose.*

#### For Maintenance Fluids

- **0.9% sodium chloride + 5% glucose +/- potassium chloride 20mmol/L**

*Alternatively and ONLY under direction of Specialist:*

- *0.45% sodium chloride 5% glucose +/- potassium chloride 20mmol/L or*
- *Plasma-Lyte148 + 5% glucose.*

*If electrolytes are outside the normal range, discussion with a specialist is necessary*

## IV FLUID CONTENT

### FOR NEONATES (less than one month of age corrected)

For neonates in neonatal nurseries (excluding neonatal intensive care), or presenting to emergency departments, or admitted to paediatric wards.

#### For Resuscitation / Bolus

- **0.9% sodium chloride**

#### For Fluids (dehydration or ongoing losses) or Maintenance

*Special Care Nurseries - DAY 1*

- **10% glucose**

*Special Care Nurseries – DAY 2 onwards*

- **0.225% sodium chloride + 10% glucose +/- potassium chloride 10mmol/500mL**

*Emergency Departments*

- **0.45% sodium chloride + 10% glucose (NO potassium chloride)**

*Paediatric Wards*

- **0.45% sodium chloride + 10% glucose +/- potassium chloride 10mmol/500mL**

*If electrolytes are outside the normal range, discussion with a specialist is necessary*

**The purpose of these standards is to enable safe and appropriate use of IV fluids for children and neonates across NSW.**

## IV FLUID BAGS PROCUREMENT AND USE

- It is **strongly recommended** that **pre-packaged bags** of appropriate IV fluids **are available and used** with the correct concentrations of sodium, glucose and potassium, **across all NSW facilities**, avoiding the practice of local additives, whenever possible.
- Fluids for children are recommended in 1000mL bags.
- Fluids for neonates are recommended in 500mL bags.

## IV FLUID BAG LABELLING

- The content of the IV fluid bag will be clearly indicated in an easy-to-read font and a prominent location on the IV fluid bag. Suitability for use in children will be indicated, where appropriate.
- IV fluids containing potassium chloride will clearly identify this additive.
- IV fluids containing 0.225%, 0.22% or 0.18% sodium chloride include a low sodium content warning.
- Bags used in children and neonates are expected to include 'Infusion Pump Recommended' on the label.

## IV FLUID ADMINISTRATION

- NSW Health PD2010\_034, states that *"Paediatric infusion sets with inline burette must be used for all children requiring intravenous therapy. An infusion pump should be used for all children"*. For the safety of paediatric and neonatal patients, **both infusion pumps AND inline burettes are strongly recommended** with all maintenance and replacement fluids.
- All user-applied Labelling of Injectable Medicines, Fluids and Lines to follow the national Labelling Recommendations.
- Hourly observations of the IV fluids and IV cannula site should be documented.

## EDUCATION AND COMMUNICATION

- The Skills in Paediatrics (SkIP) education module is being updated.
- Relevant current education and information resources will be updated to reflect the second edition of the Standards.
- The Standards are available via the NSW Kids and Families website.

## ADDITIONAL SAFETY MEASURES

- **If a child or neonate is prescribed IV Fluids not recommended in the Standards then please clarify reason and document in medical notes.**
- Local Health Districts/Specialty Health Networks have been asked to ensure that, as a low sodium containing product for neonates, 0.225% sodium chloride should only be available with 10% glucose and be stored only in dedicated maternity / neonatal units.
- Fluids with sodium chloride 0.225%, 0.22% or 0.18% may continue to be used in adult practice but should NOT be available for children.
- IV fluids containing potassium chloride are potentially hazardous and should be administered with extreme caution