



## EMR Quick Reference Guide

### Infusions – Ordering Fluids in Paediatrics

This QRG will cover:

- [Using the Paediatric IV Fluids order set](#) – including **bolus**, **maintenance** and **TKVO** orders
- [How to order fluids outside the order set](#)
- [Replacement of losses – mL for mL](#) – e.g. surgical patients, severe gastroenteritis
- [Potassium chloride infusions](#)

Refer to the **Fluid Management Chart Paediatrics** QRG to calculate the Total Fluid Intake Plan for your patient.

#### Paediatric IV Fluids Order set

1. Select Orders and click **+Add**





2. Search for and select 

3. Click  to access the RCH Clinical Guidelines if required

#### 4. Fluid Bolus

Select a fluid bolus order if required – **10 mL/kg** or **20 mL/kg**






- EMR Dose Calculator will launch
- Review / modify calculated volume and click Apply
- All bolus orders have a pre-defined Rate of 999 mL/hr – this is the rate displayed on the Alaris pump when nursing staff select the bolus functionality.

Fluid Bolus		
<input type="checkbox"/>	 Sodium Chloride 0.9% intravenous solution (sodium chloride 0.9% infusion (BAG BY BAG))	10 mL/kg, IV Infusion, Rate: 999 mL/hr, 1 bag(s), BOLUS
<input type="checkbox"/>	 Sodium Chloride 0.9% intravenous solution (sodium chloride 0.9% infusion (BAG BY BAG))	20 mL/kg, IV Infusion, Rate: 999 mL/hr, 1 bag(s), BOLUS

#### 5. Fluid Maintenance

Select a maintenance fluid order if required

- All infusions here have a pre-defined duration of 1 bag.
- **\*All infusions containing potassium will appear in red to indicate high risk and ensure review.\***

Fluid Maintenance		
 Sodium Chloride 0.9% used for: - Initial boluses - Replacement of deficit - Replacement of losses		
<input type="checkbox"/>	 Sodium Chloride 0.9% intravenous solution (sodium chloride 0.9% infusion (BAG BY BAG))	1,000 mL, IV Infusion, mL/hr, 1 bag(s)
 Glucose 5% with Sodium Chloride 0.9% +/- 20 mmol/L Potassium Chloride used for: - Maintenance hydration - Replacement of deficit - Replacement of losses		
<input type="checkbox"/>	 Glucose 5% with 0.9% Sodium Chloride intravenous solution (glucose 5% with sodium chloride 0.9% infus...	1,000 mL, IV Infusion, mL/hr, 1 bag(s)
<input type="checkbox"/>	 High Alert Glucose 5% with 0.9% Sodium Chloride and Potassium Chloride 20 mmol/L intravenous so...	1,000 mL, IV Infusion, mL/hr, 1 bag(s) *Contains potassium chloride*

6. **TKVO Order**

Select TKVO infusion order if required.

To Keep Vein Open (TKVO)		
<input type="checkbox"/>	Sodium Chloride 0.9% intravenous solution (sodium chloride 0.9% infusion (BAG BY BAG))	1,000 mL, IV Infusion, Rate: 1 mL/hr, 1 bag(s), TKVO

7. Click **Orders For Signature** to review all selected orders.

Continuous Infusions		
	sodium chloride 0.9% infusion (BAG BY BAG) 120 mL	Order 120 mL, IV Infusion, Rate: 999 mL/hr, 1 bag(s), First dose 2 Target Dose: sodium chloride 0.9% infusion (BAG BY BAG)
	sodium chloride 0.9% infusion (BAG BY BAG) 1000 mL	Order 1,000 mL, IV Infusion, Rate: 1 mL/hr, 1 bag(s), First dose 26 AEDT, TKVO, Total volume (mL): 1,000
	glucose 5% with sodium chloride 0.9% and potassium chloride 20 mmol/L infus...	Order 1,000 mL, IV Infusion, mL/hr, 1 bag(s), First dose 26/10/20: *Contains potassium chloride*

8. Click each order in turn to view the **Continuous Details**. Complete mandatory fields (in yellow).

Details   Continuous Details   Order Comments   Offset Details   Diagnoses			
Base Solution	Bag Volume	Rate	Infuse Over
glucose 5% with sodium chloride 0.9% and potassium chloride 20 mmol/L infusion (BAG BY BAG)	1000 mL	<b>mL/hr</b>	
Additive	Additive Dose	Normalized Rate	Delivers
Total Bag Volume	1000 mL		

9. The duration can be changed via the **Details** tab if required.

Details for **glucose 5% with s**

Details | Continuous Details | Order Comments

+

\*Duration:

\*Duration unit:

- Click **Sign** and **refresh** the **MAR** to review the orders before verbally communicating with nursing staff.  
As these are all “Bag by Bag” infusions, only the Rate is seen on the MAR (i.e. no infuse over time).

Continuous Infusions	
glucose 5% with sodium chloride 0.9% and potassium chloride ... 1,000 mL, IV Infusion, Rate: 29 mL/hr, 1 bag(s), First dose 26/10/2020 18:07:00, Stop date 28/10/2020 04:36:00, Total volume (mL): 1,000 *Contains potassium chloride* <b>Administration Information</b> Gluc 5% w 0.9% NaCl+KCl 20 mmol/L IV sol	<b>Pending</b> Not given within 5 days.
sodium chloride 0.9% infusion (BAG BY BAG) 1,000 mL 1,000 mL, IV Infusion, Rate: 1 mL/hr, 1 bag(s), First dose 26/10/2020 18:07:00, Stop date 07/12/2020 10:06:00, TKVO, Total volume (mL): 1,000 <b>Administration Information</b> Sodium Chloride 0.9%	<b>Pending</b> Not given within 5 days.
sodium chloride 0.9% infusion (BAG BY BAG) 120 mL 120 mL, IV Infusion, Rate: 999 mL/hr, 1 bag(s), First dose 26/10/2020 18:07:00, Stop date 26/10/2020 18:12:00, BOLUS, Total volume (mL): 120 Target Dose: sodium chloride 0.9% infusion (BAG BY BAG) 10 mL/...	<b>NOW</b> Not given within 5 days.

## Ordering Fluids outside the Paediatric IV Fluids OrderSet

It is not a requirement to only order infusions via the orderSet. Infusions can also be found directly in the Search results on the **Orders** page, for example:

Search:   Type:

- labetalol infusion 20 mg in Neat Diluent 4 mL BAG BY BAG (MATERNITY BOLUS)
- Glucose 10% infusion (BAG by BAG) (2 mL/kg, IV Infusion, 1 bag(s), BOLUS - NEONATES)
- sodium chloride 0.9% infusion (BAG BY BAG) (mL, IV Infusion, Rate: 999 mL/hr, Duration: 1 bag(s), BOLUS)
- sodium chloride 0.9% infusion (BAG BY BAG) (10 mL/kg, IV Infusion, Rate: 999 mL/hr, Duration: 1 bag(s), BOLUS (Paediatric))
- sodium chloride 0.9% infusion (BAG BY BAG) (20 mL/kg, IV Infusion, Rate: 999 mL/hr, Duration: 1 bag(s), BOLUS (Paediatric))
- compound sodium lactate (Hartmann's) infusion (BAG BY BAG) (mL, IV Infusion, Rate: 999 mL/hr, 1 bag(s), BOLUS)

"Enter" to Search

## Replacement of Losses – mL for mL (e.g. surgical patients, severe gastroenteritis)

Refer to the **Fluid Management Chart Paediatrics** QRG to add replacement fluids to the TFI Plan if the volume to replace is known or can be easily estimated.

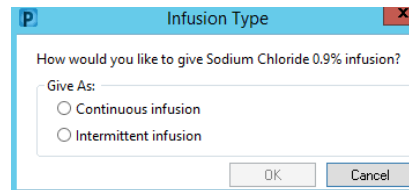
- If the volume to replace is unknown or cannot be easily estimated, i.e. for a mL for mL replacement of losses, search for and select the TITRATABLE infusion order:

Search:   Type:

Folder:

- Sodium Chloride 0.9% infusion mL, IV Infusion, mL/hr, CONTINUOUS - PAEDIATRIC
- Sodium Chloride 0.9% infusion mL, IV Infusion, Rate: TITRATE, Indication: Replacement of losses, CONTINUOUS - PAEDIATRIC
- sodium chloride 0.9% infusion (BAG BY BAG) 1,000 mL, IV Infusion, Rate: 1 mL/hr, Duration: 1 bag(s), TKVO (Paediatric)
- sodium chloride 0.9% infusion (BAG BY BAG) 10 mL/kg, IV Infusion, Rate: 999 mL/hr, Duration: 1 bag(s), BOLUS (Paediatric)
- sodium chloride 0.9% infusion (BAG BY BAG) 20 mL/kg, IV Infusion, Rate: 999 mL/hr, Duration: 1 bag(s), BOLUS (Paediatric)

- An alert will ask if you want to give this continuously or intermittently. Select **Continuous infusion** and click **OK**



Infusion Type

How would you like to give Sodium Chloride 0.9% infusion?

Give As:

Continuous infusion

Intermittent infusion

OK Cancel

- Enter the desired Bag Volume in mL

Details for **Sodium Chloride 0.9% infusion mL**

Details Continuous Details Order Comments Diagnoses

Base Solution	Bag Volume	Rate
Sodium Chloride 0.9% infusion	mL	TITRATE
Additive	Additive Dose	Normalized Rate

- Add an Order Comment if required
- Click **Sign** and **refresh** the **MAR** to review the orders before verbally communicating with nursing staff.

Details for **Sodium Chloride 0.9% infusion 1000 mL**

Details Continuous Details Order Comments Diagnoses

Order comments

Calculate NG losses every 4 hours and replace over next 4 hours

**\*Note\*:** As this is a truly continuous infusion with a rate of TITRATE, nursing staff can change the rate as per policy / order comments without the doctor having to modify the order each time.

## Potassium Chloride Infusions

- The potassium chloride infusion order in the **Paediatric Intravenous Fluids** orderset is for a **pre-mixed** bag of *20mmol/L KCl in glucose 5% with sodium chloride 0.9%*. The concentration of potassium can therefore **not** be changed by the prescriber.

Details Continuous Details Order Comments Offset Details Diagnoses

Base Solution	Bag Volume	Rate	Infuse Over
glucose 5% with sodium chloride 0.9% and potassium chloride 20 mmol/L infusion (BAG BY BAG)	1000 mL	mL/hr	
Additive	Additive Dose	Normalized Rate	Delivers
Total Bag Volume		1000 mL	

The use of bags that are not pre-mixed is **only recommended in Paediatric ED** following consultation with senior medical staff.

- To order an alternative concentration of KCl, select one of the following orders from the Search results on the **Orders** page:

Search:   Type:

Folder:

potassium chloride infusion xx mmol in Sodium Chloride 0.9% 1000 mL BAG BY BAG - PAED  
 potassium chloride infusion xx mmol in Glucose 5% & Sodium Chloride 0.9% 1000 mL BAG BY BAG - PAED

3. The KCl is an **additive** to the bag of sodium chloride 0.9%. Enter the **additive dose** in mmol and complete the order as usual.

▼ Details for **potassium chloride (additive) mmol + sodium chloride 0.9% infusion**

Details | Continuous Details | Order Comments | Diagnoses

Base Solution	Bag Volume	Rate	Infuse Over	
sodium chloride 0.9% infusion (BAG BY BAG)	1000 mL	mL/hr		
Additive	Additive Dose	Normalized Rate	Delivers	Occurrence
potassium chloride (additive)	mmol			EB