

Infusions – Ordering Fluids in Paediatrics



This Quick Reference Guide will explain how to:

- [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](#)

Paediatric IV Fluids Order set

1. Select the Orders and Referrals tab and click **+Add**

Orders and Referrals **+ Add**

2. Search for and select **PAED Intravenous Fluids**

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 BAG BY BAG 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)
<input type="checkbox"/>	Sodium Chloride 0.9% intravenous solution (Sodium Chloride 0.9% infusion) 1,000 mL, IV Infusion, Rate: TITRATE, Indication: Replacement of losses, CONTINUOUS - PAEDIATRIC
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 Sodium Chloride 0.9% 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 Potassium Chloride 20 mmol/L in Glucose 5% and Sodium Chloride 0.9% intravenou... 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)

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
Potassium Chloride 20 mmol/L with Glucose 5% and Sodium Chloride 0.9% infusion (BAG BY BAG)	1000 mL	mL/hr	
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 Potassium Chloride 20 mmol/L with Glucose 5% and Sodium Chloride 0.9% infusion (BAG BY BAG)

Details **Continuous Details** Order Comments Diagnoses

Drug Form:

Route of administration: IV Infusion

*Duration: 1

*Duration unit: bag(s)

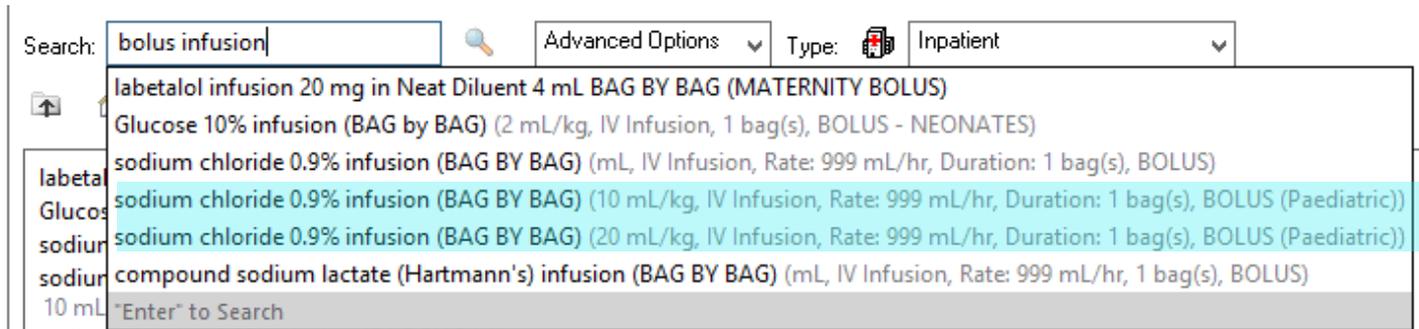
10. Click **Sign** and **Refresh** the **MAR** to review the orders before verbally communicating with nursing staff. As these are all BAG BY BAG infusions, only the Rate is seen on the MAR (i.e. no infuse over time).

Continuous Infusions	Status
Potassium Chloride 20 mmol/L with Glucose 5% and Sodium Chloride 0.9% i... 1,000 mL, IV Infusion, Rate: 29 mL/hr, 1 bag(s), First dose 09/05/2023 09:37:00, Stop date 10/05/2023 20:06:00, Total volume (mL): 1,000 *Contains potassium chloride*	Pending Not given within 5 days.
Administration Information Potassium Chloride 20 mmol/L in Glucose 5% and Sodium Chloride 0.9% intra...	
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 09/05/2023 09:37:00, Stop date 20/06/2023 01:36:00, Total volume (mL): 1,000	Pending Not given within 5 days.
Administration Information Sodium Chloride 0.9% intravenous solution	
sodium chloride 0.9% infusion (BAG BY BAG) 860 mL 860 mL, IV Infusion, Rate: 999 mL/hr, 1 bag(s), First dose 09/05/2023 09:37:00, Stop date 09/05/2023 10:30:00, BOLUS, Total volume (mL): 860 Target Dose: sodium chloride 0.9% infusion (BAG BY BAG) 10 mL/kg (Actual Do...	NOW Not given within 5 days.



Ordering Fluids outside the Paediatric IV Fluids Orderset

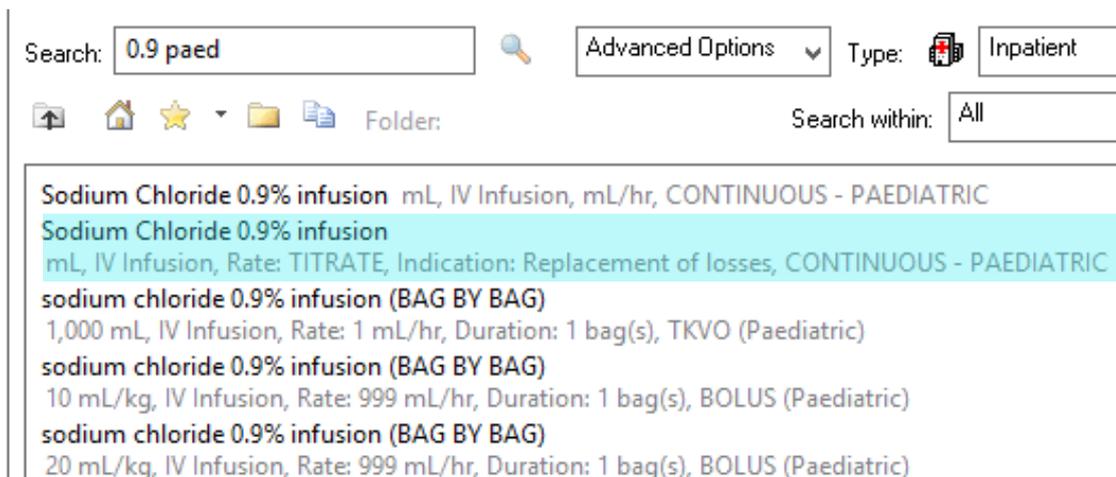
It is not a requirement to only order infusions via the orderset. Infusions can also be found directly in the Search results on the **Orders** page, for example:



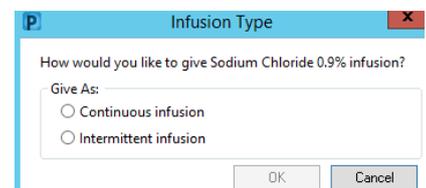
Replacement of Losses – mL for mL (e.g. surgical patients, severe gastroenteritis)

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

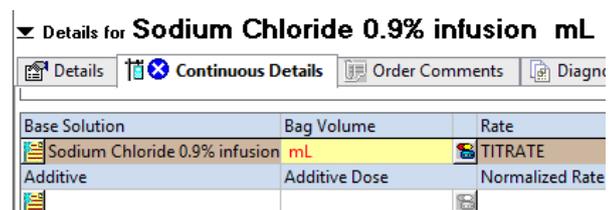
1. If the volume to replace is unknown or cannot be easily estimated, i.e. for a mL for mL replacement of losses, search for and select the TITRATABLE infusion order:



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



3. Enter the desired Bag Volume in mL



- 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

Base Solution	Bag Volume	Rate	Infuse Over
Potassium Chloride 20 mmol/L with Glucose 5% and Sodium Chloride 0.9% 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: Advanced Options Type:

Folder: Search within:

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

- 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