SODIUM CHLORIDE

This drug must be guardrailed

Trade Name	**IV:** Sodium Chloride 0.45% 0.075mmol/mL (Baxter) Sodium Chloride 0.9% 0.15 mmol/mL (Baxter) Sodium chloride 23% 4mmol/mL (BioMed) **Oral:** Sodium Chloride 2mmol/mL 25mL (BioMed)
Class	Resuscitation fluid, electrolyte supplement
Mechanism of Action	Restores water and sodium chloride in extracellular fluid compartment when used for resuscitation. Maintenance of serum sodium which is the principal extracellular cation, important for osmotic pressure control and water distribution
Indications	**Indication 1:** Resuscitation fluid **Indication 2:** Daily maintenance – iv or oral **Indication 3:** Mild Hyponatraemia (Na ≥ 130mmol/L) **Indication 4:** Severe Hyponatraemia (Na <130mmol/L)
Contraindications	Hypersensitivity to sodium chloride or any component
Supplied As	**Prepared Bags:** Half normal saline: 0.45% sodium chloride IV infusion 75 mmol sodium/L. Available in 500mL bags Normal Saline: 0.9% sodium chloride IV infusion 150 mmol sodium/L. Available in 5mL, 100mL, 500mL. Premix fluids: 10% dextrose with 15mmol sodium chloride and 10mmol potassium chloride in 500mL bag **Injection:** Strong sodium Injection = sodium chloride 4mmol/mL **Oral:** Sodium Chloride: 2mmol/mL solution 25mL bottle
Dilution	Not usually required
Dosage… ***Must chart guardrail and use Alaris pump for IV infusions (indication 4)***	**Indication 1:** 10-20 mL/kg IV of 0.9% sodium chloride over 20-30 mins, may be repeated if necessary. **Indication 2:** 3-5 mmol/kg/day, and may be much higher in preterms. **Indication 3:** Commence or increase maintenance dose by: Increasing the oral supplements Increase the TPN or premix fluids rate Individually prescribe fluids with additives Change to High Sodium TPN **Indication 4:** Chart correction using infusion sheet Infusion concentration should be **≤ 0.5mmol/mL.** When the deficit has been corrected, increase the daily maintenance amount by any of the methods above or consider an individual TPN bag

Guardrails	Concentration: Min – 0.2 mmol/mL Max - 0.5mmol/mL Soft Alert Min: 0.1 mmol/kg/hr Hard Alert Max: 2 mmol/kg/hr Soft Alert Max: 1 mmol/kg/hr Default Setting: 0.5 mmol/kg/hr
Interval	**IV:** Continuous infusion **Oral:** 6 hourly with feeds
Administration	IV or orally, as above
Compatible With	Majority of drugs and IV fluids
Incompatible With	Nil
Monitoring	For resuscitation: heart rate, respiratory rate, blood pressure and oxygen saturation. Serum sodium.
Stability	**IV:** Discard unused portion of vial immediately after use **Opened Oral Solution:** 7 days in the fridge
Storage	**Injection:** Room temperature **Unopened oral solution:** Room temperature **Open oral solution :** 2-8 ^{o}C in the fridge
Adverse Reactions	With resuscitation fluid, oedema, hypervolaemia, pulmonary oedema. Nausea, vomiting with oral use, mix with feeds
Metabolism	Renal excretion
Comments	Oral sodium chloride 2mmol/mL requires NPPA funding if prescribed for patients on discharge.
References	1. D.Bourchier Hamilton Drug Protocol 2. Trissell Handbook on Injectable Drugs 10th and 13th Edition 3. NZHPA Notebook on Injectable Drugs 5th Edition 4. Micromedex
Updated By	P Schmidt, B Robertshawe Dec 2005 A Lynn, B Robertshawe July 2008 A Lynn, B Robertshawe Dec 2012 (re-order profile) A Lynn, B Robertshawe Feb 2022 (Add solution strengths and update maximum concentration)