

Electrolyte Management Recommendations- Pediatrics

Magnesium

- Normal value 0.75-1.00 mmol/L
- If albumin is low, a lower measured magnesium may be normal
- Check ionized magnesium if serum magnesium and albumin are consistently low

- Replacement:
- For chronic or ongoing losses, oral therapy or a slow replacement is preferred (e.g. 1 liter normal saline with X mEq MgSO₄)
- Bolus IV MgSO₄ generally not needed unless magnesium <0.65 mmol/L
- Dose: 50 mg/kg MgSO₄. Infuse over 1 hour, maximum 2 grams/hour.

Potassium

- Normal value 3.3-5.1 mmol/L

- Replacement:
- For chronic or ongoing losses, oral therapy or a slow replacement is preferred (e.g. 1 liter normal saline with X mEq KCl or K-acetate- maximum concentration is 80 mEq potassium in 1 liter)
- Bolus IV KCl generally not needed unless potassium <3.3 mmol/L
- Maximum infusion rate is 10 mEq/hour if weight over 20 kg, and 0.5 mEq/kg/hour if weight under 20 kg.