

**Always follow local guidelines and discuss with Senior if unsure
Especially patients with significant fluid / electrolyte losses or
those with co-morbidities such as Heart / Renal Failure**

Normal range: 3.5 - 5.2mmol/L

SIGNS AND SYMPTOMS

**MILD
3.0-3.4 mmol/L**

**MODERATE
2.6-2.9 mmol/L**

Usually Mild / Asymptomatic

- Leg cramps
- Constipation
- No ECG changes

- ECG changes:
 - PR prolongation
 - U waves
 - T wave flattening
 - ST depression

**SEVERE / LIFE THREATENING
SERUM K < 2.5 mmol/L**

- Supraventricular / Ventricular ectopics
- Arrhythmias:
 - VT
 - VF
 - Torades de Pointes
- Heart Failure

CAUSES

ABNORMAL LOSSES

TRANSCELLULAR SHIFT

Medications:

- Diuretics
- Laxatives / Enemas
- Corticosteroids

GI losses

Renal losses:

- Osmotic diuresis
- Mineralocorticoid excess
- Polydipsia
- Renal tubular acidosis
- Dialysis

Hypomagnesemia

Medications:

- Insulin
- Beta₂ agonists
- Decongestants
- Xanthines:
 - Caffeine
 - Theophylline

Refeeding syndrome

Increased β₂ stimulation:

- Delirium tremens

Alkalosis

>3.0mmol/L

**SANDO K
2 Tablets TDS PO/NG**

Put end or review date
Usually 48hrs is sufficient

<3.0mmol/L

KCl 40mmol/L in NaCl 0.9% IV

Give no faster than 10mmol/hr

- (4 hours)

Consider fluid status regarding rate

KCl IV

- Cardiac monitor for <3.0mmol/L or any ECG changes

Always check Mg level and replace as required

Always consult BNF for dose / administration and contraindications for all above medications

If patient at risk / has RE-FEEDING SYNDROME - see linked document for further advice