

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

Usually Mild / Asymptomatic

- Leg cramps
- Constipation
- No ECG changes

MODERATE
2.6-2.9 mmol/L

- 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

Medications:

- Diuretics
- Laxatives / Enemas
- Corticosteroids

GI losses

Renal losses:

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

Hypomagnesmia

TRANSCELLULAR SHIFT

Medications:

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

Refeeding syndrome

Increased β₂ stimulation:

- Delirium tremens

Alkalosis

GENERAL MANAGEMENT

If pateint has K < 2.5 or SEVERE / LIFE THREATENING signs
then contact SENIOR IMMEDIATELY

>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