

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: 0.8 - 1.4mmol/L

SIGNS AND SYMPTOMS

MILD
0.6-0.8 mmol/L

MODERATE
0.3-0.6 mmol/L

SEVERE
<0.3 mmol/L

Asymptomatic / Mild:

- Muscle weakness
- Irritability
- Paresthesias
- Ileus

- Rhabdomyolysis
- Respiratory failure
- Arrhythmias
- Acute heart failure
- Seizures / Coma
- Haemolysis
- WCC dysfunction

CAUSES

ABNORMAL LOSSES

GI losses:

- Vomiting
- Malabsorption
- Diarrhoea

Renal losses:

- Diuretics
- Osmotic diuresis
- Hyperparathyroidism
- Proximal tubular dysfunction

REDUCED INTAKE

Starvation

Malnutrition

Long term IV nutrition

Low Vitamin D

Medications:

- Phosphate binders

REDISTRIBUTION

Re-feeding Syndrome

Insulin use in DKA

GENERAL MANAGEMENT

MILD
0.6-0.8 mmol/L

MODERATE
0.32-0.6 mmol/L

SEVERE
<0.32 mmol/L

Symptomatic

Symptomatic

NO

YES

NO

YES

Replacement not
usually required

Oral Replacement

IV Replacement

PHOSPHATE
SANDOZ
1-2 Tablets TDS
PO/NG

PHOSPHATE
POLYFUSER
-see dose below-

Review daily

IV PHOSPHATE POLYFUSER - EXAMPLE DOSING

Serum Phosphate mmol	WEIGHT 40-60kg		WEIGHT 61-80kg		WEIGHT 81-120kg	
	Phosphate mmol	Volume Polyfuser ml	Phosphate mmol	Volume Polyfuser ml	Phosphate mmol	Volume Polyfuser ml
< 0.3	25	250	35	350	50	500
0.3-0.6	10	100	15	150	20	200

These are example dosings, always follow local guidelines

- Generally 0.2-0.5mmol/kg/day

Rate of infusion:

- Over 6-24 hours
- Max dose of 15 mmol / hour
- Max dose of 50mmol in 24 hours

Monitoring

- Consider cardiac monitor / ECG during IV infusion
- Monitor BP / Heart rate during IV infusion
- Monitor serum Phosphate / Calcium / Magnesium / Potassium / Sodium during replacement

Phosphate is excreted renally caution should be used in patients with renal impairment:

- AKI / CKD

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