

What action should be taken?

The clinical urgency should be assessed as indicated by:

- The severity of hypokalaemia
 - Mild 3.1 – 3.5 mmol/L
 - Moderate 2.6 – 3.0 mmol/L
 - Severe \leq 2.5 mmol/L
- The rate of change or extent of change if previous values available. Rapid changes over days are more likely to be significant than slower changes
- Identify patients at particular risk from the effects of hypokalaemia such as the elderly and patients with dysrhythmias or conditions predisposing to them. The classification of hypokalaemia as mild, moderate or severe may not be applicable to these patients and any low potassium may be significant

If the cause is obvious:

Treat any underlying cause such as diarrhoea and/or review medication
Consider oral potassium replacement treatment as outlined below

If the cause is unclear:

Consider sending a random urine for potassium:creatinine ratio to identify renal loss. A value of >2.5 mmol/L suggests renal loss. Unexplained renal loss, with or without hypertension, should prompt Endocrinology referral to investigate for rarer and complex electrolyte disorders such as Bartter's and Liddle's syndromes

Consider referral to Endocrinology to exclude Conn's and Cushing's Syndrome in hypertensive patients.

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Replacement:

Potassium 3.1 – 3.5 mmol/L

- Compare with previous result if available
- Values of 3.3 – 3.4 mmol/L in low risk patients may be of little clinical significance
- Sando K 2 tablets once a day until $K > 3.5\text{mmol/L}$
- Repeat potassium within 5 days

Potassium 2.6 – 3.0 mmol/L

- Compare with previous result if available
- Repeat measurement on same or next day if inconsistent with previous result
- Assess clinical features and risk status, if available perform ECG
- Seek urgent specialist advice (eg heart failure nurse) if clinical features of hypokalaemia are present and in high risk patients
- Consider referral to A&E if hypokalaemia is rapidly worsening (e.g. change of $>0.3\text{ mmol/L}$ in 2-3 days) for consideration of intravenous replacement
- Adjust medication to reverse falling potassium
- Sando K 2 tablets 2-3 times a day until $K > 3.5\text{mmol/L}$
- Regular potassium monitoring (weekly or more often depending on severity of deficiency)

Potassium $\leq 2.5\text{ mmol/L}$

- Compare with previous result if available
- Repeat measurement urgently if inconsistent with previous result
- High likelihood of referral of patients to A&E even if asymptomatic.
- Treatment with intravenous potassium may be required