



**BOX 1**  
 Causes of spurious:

1. Cold sample storage before arrival in lab eg put in a fridge
2. Contamination from FBC tube (K-EDTA)
3. Delayed arrival in lab (>6 hours)
4. Fist-clenching
5. Haemolysis. A comment will be added to the results if present.
6. High platelet count
7. High WCC

**BOX 2**  
 Some causes of true:

**Drugs**

- ACE inhibitors
- Angiotensin receptor blockers (ARBs)
- Antifungals
- Beta-blockers
- Ciclosporin
- Heparin
- K-sparing diuretics (spironolactone, eplerenone, amiloride, triamterene)
- NSAIDs
- Tacrolimus
- Trimethoprim

**Renal Failure**

- AKI
- Chronic (usually stage 4 or 5)
- Diabetic nephropathy (renal impairment may appear moderate)

**Iatrogenic**

- K-supplements
- Herbal medicines
- Salt Substitutes

**Metabolic Acidosis**

**Hypoaldosteronism**

**Review extent of change in K<sup>+</sup> and eGFR if previous results available.**  
**Significant changes are:**

- ≥ 0.5mmol/L increase in K<sup>+</sup>
- 10% decrease in eGFR

**5.4 – 6.0 mmol/L**  
 If eGFR has not decreased by >10% and the rise in potassium is not recent (within 1 week) and <0.5 mmol/L, suggest repeat potassium analysis within 1 to 2 weeks

If ? secondary to medication consider changing dose and/or drug (examples in BOX 2)

In general these patients do not require emergency admission

**6.1 – 6.9 mmol/L**  
**Recheck urgently** unless it has been previously raised.

Consider performing an ECG

**Drugs** which can raise potassium (exemplated in BOX 2) should usually be stopped immediately

Consider **emergency admission** to hospital. Base your decision on:

- Clinical changes / arrhythmias
- Severe muscle weakness, paralysis fatigue, paraesthesia
- Rapid fall in eGFR (>10% within 1-2 weeks)
- Rapid increase in potassium (>0.5 mmol/L within 1-2 weeks)

**≥ 7.0 mmol/L**  
**Recheck urgently** unless it has been previously raised

Perform ECG;  
 Usually requires **urgent admission to hospital**

**Drugs** which can raise potassium (examples BOX 2) should be stopped immediately

Advice for Barnsley patients is available via contacting Biochemistry on 01226 432733 and speaking to Dr.Straffen.