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**Lab Dept:** Urine/Stool

**Test Name:** POTASSIUM, 24 HOUR URINE

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***General Information***

**Lab Order Codes:** UKQN

**Synonyms:** K Quantitative, Urine; K 24 hour urine

**CPT Codes:** 84133 – Potassium; urine  
81050 – Volume measurement for timed specimen

**Test Includes:** Urine potassium in mmol/L and mmol/24 h

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***Logistics***

**Test Indications:**

- Urinary measurement of potassium is useful in classifying renal and non-renal loss.
- Determining the cause of hyper or hypokalemia

**Lab Testing Sections:** Chemistry - Sendouts

**Referred to:** Mayo Clinic Laboratories (Mayo test: KUR)

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 1-2 days

**Special Instructions:** Submit an entire 24-hour urine collection. No preservative. Refrigerate specimen during and after collection.

**Note:** Starting and ending times of collection are required for a timed urine collection and must be documented electronically or on the proper request form.

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***Specimen***

**Specimen Type:** Urine, timed collection. **A 24 hour specimen is required.**

**Container:** Plastic leak-proof container (No preservative). Urine GUARD® collection container is preferred for a timed urine sample.

**Draw Volume:** Submit an entire 24-hour urine collection

<b>Processed Volume:</b>	5 mL (Minimum: 0.5 mL) aliquot from a well-mixed 24 hour urine
<b>Collection:</b>	For timed urine collections, empty the bladder, discard the voided sample, and note the start time. Collect all urine voided for the specified time period. At the end of the period, note the finishing time, add the last voided sample to the container by emptying the bladder. Bring the refrigerated container to the lab. Make sure all specimens submitted to the laboratory are properly labeled with the patient's name, medical record number and date of birth.
<b>Special Processing:</b>	Lab Staff: Measure total volume of specimen submitted and record during specimen decant. Order code PVSO to record the Urine Volume and Collection Duration as 24. Store and ship refrigerated.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Mislabeled or unlabeled specimens; specimens collected for <24 hours

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### ***Interpretive***

<b>Reference Range:</b>	All ages: 17 – 77 mmol/24 hours  Interpretation: Hypokalemia reflecting true total body deficits of potassium (K+) can be classified into renal and non-renal losses based on the daily excretion of K+ in the urine. During hypokalemia, if urine excretion of K+ is below 30 mmol/24 hours, it can be concluded that renal reabsorption of K+ is appropriate. In this situation, the causes for the hypokalemic state are either decreased K+ intake or extra renal loss of K+ rich fluid. Urine excretion of more than 30 mmol/24 hours in a hypokalemic setting is inappropriate and indicates that the kidneys are the primary source of the lost K+.
<b>Critical Values:</b>	N/A
<b>Limitations:</b>	Ion selective electrodes are selective for the ion in question but are not absolutely specific. Other monovalent cations may interfere, but not in the physiologic range.
<b>Methodology:</b>	Ion-selected electrode using indirect potentiometry
<b>Referenced:</b>	<a href="#">Mayo Clinic Laboratories</a> October 2020
<b>Updates:</b>	9/28/2017: Lab processing update. 10/12/2020: Test moved from inhouse test to Mayo.