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**Lab Dept:** Urine/Stool

**Test Name:** URIC ACID, 24 HOUR URINE

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***General Information***

**Lab Order Codes:** UUAQ

**Synonyms:** Uric Acid, Urine, Timed

**CPT Codes:** 84560 – Uric acid, other source  
81050 – Volume measurement for timed specimen

**Test Includes:** Urine uric acid concentrations in mg/dL and mg/24h.

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***Logistics***

**Test Indications:**

- Elevated uric acid levels suggest that the body is not properly metabolizing the breakdown of purines. The practitioner will need to investigate the over-production of uric acid or whether the patient is unable to clear the uric acid due to kidney malfunction. Quantitation of urinary uric acid excretion is an aid in selecting treatment for asymptomatic hyperuricemia.
- Assessment and management of patients with kidney stones, particularly uric acid stones.

**Lab Testing Sections:** Chemistry - Sendouts

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

**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, 24 hour collection  
**Note: A 24 hour collection is required.**

<b>Container:</b>	Plastic leakproof container (No preservative). Urine GUARD® collection container is preferred for a timed urine sample.
<b>Draw Volume:</b>	Submit an entire 24-hour urine collection
<b>Processed Volume:</b>	5 mL (Minimum: 1 mL) urine from a well-mixed 24 hour collection
<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. <b>Order code PVSO</b> 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; collections <24 hours

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### ***Interpretive***

**Reference Range:** ≥16 years: Diet-dependent: <750 mg/24 hours

**Interpretation:** Urinary uric acid excretion is elevated in a significant proportion of patients with uric acid stones. Uric acid excretion can be either decreased or increased in response to a variety of pharmacologic agents. Urine uric acid levels are elevated in states of uric acid overproduction such as in leukemia and polycythemia and after intake of food rich in nucleoproteins.

**Critical Values:** N/A

**Limitations:** High levels of bilirubin and ascorbic acid may interfere with measurement.

**Methodology:** Uricase

**References:** [Mayo Clinic Laboratories](#) October 2020

**Updates:** 10/12/2020: Testing moved from in-house to Mayo.