

Urine Collections

A complete 24-hour urine collection is required for many urine chemical analyses. The 24-hour specimen should be submitted in a chemically clean container which is properly labeled with the patient's name and test(s) requested. Containers may contain preservatives depending on test requested. Refer to individual test requirements.

A normal intake of fluids during the 24-hour collection period is recommended, unless otherwise specified by the attending physician.

24-Hour Collections—Use the following procedure for the correct specimen collection and preparation.

- Warn patient of presence of potentially hazardous preservatives in collection container(s).
- Instruct patient to discard **first-morning** specimen and to record time of voiding.
- Patient should collect all subsequent voided urine for remainder of day and night.
- Collect **first-morning** specimen on day 2 at same time as noted on day 1.
- Entire specimen should be refrigerated throughout collection period.
- Please mix well before aliquoting and provide total volume of 24-hour urine collection.

Frequently, renal stone risk tests are ordered together (ie, calcium, phosphorous, uric acid, magnesium, citrate, and oxalate). These tests usually require different preservatives. However, studies have indicated stability of these constituents if specimen is refrigerated during the collection period. Therefore, in order to reduce the burden for the patient, it is acceptable to collect 1 specimen without a preservative. Use a container with no preservative. Add preservatives and/or adjust pH at the completion of collection if necessary.

Measure the entire 24-hour volume and record the amount in milliliters on the request slip. Mix well and send a 100-mL aliquot per test. If unable to measure the volume or adjust the pH, submit the entire specimen. A specimen handling charge is added when entire specimens are submitted (urine specimen prep/measure, CPT code 81050, \$3.68). Label specimen with patient name, collection time interval, and test(s) requested.

Random Collections—A thorough cleansing is recommended prior to collection of all random urine specimens as bacterial contamination may interfere with chemical assays as well as with urine cultures. Adequate results can be obtained following a thorough washing of the external genitalia with antiseptic soap and thorough rinsing for females, and washing and rinsing of the glans for males.

A clean-catch or midstream specimen is preferred. The patient should first void a small amount of urine which is discarded. Some of the urine should then be collected in a sterile container before voiding is completed.

Refrigerate prior to transport.