

24-HOUR URINE COLLECTION

Urine collection containers for 24-hour specimens come in a variety of shapes and colors, but most are three (3) liter capacity and are amber colored to protect light sensitive analytes such as porphyrins and urobilinogen. When a preservative is required, it should be added to the collection container before the urine collection begins and warning labels should be placed on the container. Some common 24-hour preservatives are hydrochloric acid, boric acid, acetic acid and toluene. The healthcare provider should explain any potential hazards to the patient.

1. Requirements:

- a) 24-hour collection container
- a) Instruction for collection
- b) Specimen label
- c) 24- hour urine preservatives

2. Instructions to the Laboratory

- a) Review requirements for test(s) ordered.
- b) Label container with LIS label.
- c) If needed add appropriate preservative to container.

NOTE: *If there is more than one acceptable preservative for the analyte requested, the least hazardous one should be selected.*

- d) Give a collection container and detailed instructions to the patient. Record any medication that the patient is receiving on the test request form. Keep in mind that refrigeration and/or freezing is the most important part of specimen preservation.
- e) If a urine preservative is required, the designated preservative may be added into the urine collection container prior to the start of the collection.
- f) When the specimen is received by the laboratory, mix the specimen completely by inverting the container 15-30 times. Do not shake. Measure and record the volume on the test request form. If it is necessary to add additional preservative and/or adjust the pH, make adjustment on the entire specimen; adding preservative to only part (an aliquot) of the specimen is improper.
- g) Transfer the required volume to the appropriate number of reference laboratory's standardized transfer tubes and refrigerate or freeze. Do Not send the entire urine collection. All tests on a single 24-hour urine specimen should be listed on one test request form.
- h) Make certain all lids/caps are securely fastened.
- i) Peel off labels with name, time and volume and affix to each tube sent.

3. Instructions to the Patient

Do Not urinate directly into the 24-hour urine container. Urine should be collected in another clean container and then carefully poured into the 24-hour collection container.

- a) Follow your physician's directions regarding food, drink, or drugs before and during collection.
- b) Empty bladder completely on awakening in the morning and discard this urine specimen. Record date and time under "START" on the label and begin collecting the urine. (Example: 7/24/11 @ 7:00 AM)
- c) All urines passed during the rest of the day and night for the next 24 hours must be poured into the container. Keep the container refrigerated during the entire collection process.
- d) Make final collection the next morning at the same time and record under "FINISH" on the label. (Example: 7/25/11 @ 7:00 AM)
- e) Take the 24-hour specimen to the physician's office or laboratory as soon as possible.