

Urine Collections

Note: Clean catch or catheterized urine is required for all urine cultures. This source is optional for all other random urine test except for STD which requires a “dirty urine” (see below).

Collecting a Clean Catch Urine Specimen for the Female Patient

1. Wash hands thoroughly with soap and water, rinse and dry them on a disposable paper towel.
2. Open Towelette® and container, careful not to touch rim or inside of container.
3. To cleanse periurethral area (labial folds, vulva, urethral meatus) spread labia with 1 hand, wipe area 3 times front to back, each time with a fresh Towelette®: 1-right side/2-left side/3-down the middle.
4. Discard Towelette® after each cleansing.
5. Begin to urinate into toilet. Void approximately 20 mL to 25 mL and catch a portion of the rest of the urine in container without stopping stream. Do not touch legs, vulva, or clothing with cup.
6. Screw cap tightly onto container.
7. Place **labeled** specimen container in biohazard bag.
8. Refrigerate specimen within 1 hour of collection if it cannot be tested immediately. Specimen is stable in refrigerator for 24 hours after collection.
9. If a culture and sensitivity is to be performed on clean catch specimen, immediately transfer appropriate volume to a urine C&S grey-top VACUTAINER®, which contains a preservative that stabilizes any bacteria present in the specimen, following collection. Urine in this tube is stable for 48 hours. If other testing, such as routine urinalysis, is requested on the same urine specimen, in addition to the culture, submit original collection container for all other tests.

Collecting a Clean Catch Urine Specimen for the Male Patient

1. Wash hands thoroughly with soap and water, rinse and dry them on a disposable paper towel.
2. Retract foreskin completely. Cleanse tip of penis with Towelette®.
3. Open container, careful not to touch rim or inside of container.
4. Begin to urinate into toilet. Void approximately 20 mL to 25 mL and catch a portion of the rest of the urine in container without stopping stream.
5. Screw cap tightly onto container.
6. Place **labeled** specimen container in biohazard bag.
7. Refrigerate specimen within 1 hour of collection if it cannot be tested immediately. Specimen is stable in refrigerator for 24 hours after collection.
8. If a culture and sensitivity is to be performed on clean catch specimen, immediately transfer appropriate volume to a urine C&S grey-top VACUTAINER®, which contains a preservative that stabilizes any bacteria present in the specimen, following collection. Urine in this tube is stable for 48 hours. If other testing, such as routine urinalysis, is requested on the same urine specimen, in addition to the culture, submit original collection container for all other tests.

Catheterized Specimens: Indwelling Catheter

1. Check to be sure there is no backflow of urine from collection bag into catheter tubing.
2. Cleanse an area of tubing with alcohol. If system has a collection port, cleanse this area.
3. Puncture tubing at cleansed area with a sterile 18-gauge needle attached to a 10 mL syringe. If the system has a collection port, use the port.
4. Collect 1 mL to 8 mL of flow into syringe. Remove needle and expel urine into a sterile specimen container.
5. Place **labeled** specimen container in biohazard bag.
6. Refrigerate specimen within 1 hour of collection if it cannot be tested immediately. Specimen is stable in refrigerator for 24 hours after collection.
7. If a culture and sensitivity is to be performed on the catheterized specimen, immediately transfer appropriate volume to a urine C&S grey-top VACUTAINER®, which contains a preservative that stabilizes any bacteria present in the specimen, following collection. Urine in this tube is stable for 48 hours. If other testing, such as routine urinalysis, is requested on the same urine specimen, in addition to the culture, submit original collection container for all other tests.

Catheterized Specimens: Straight Catheter

1. Discard initial flow of urine from catheter. This portion may contain contaminating organisms acquired as a consequence of catheter insertion.
2. Collect a sample of the mid- or later-flow of urine into a sterile container.

3. Place **labeled** specimen container in biohazard bag.
4. Refrigerate specimen within 1 hour of collection if it cannot be tested immediately. Specimen is stable in refrigerator for 24 hours after collection.
5. If a culture and sensitivity is to be performed on the catheterized specimen, immediately transfer appropriate volume to a urine C&S grey-top VACUTAINER®, which contains a preservative that stabilizes any bacteria present in the specimen, following collection. Urine in this tube is stable for 48 hours. If other testing, such as routine urinalysis, is requested on the same urine specimen, in addition to the culture, submit original collection container for all other tests.

Random Collections:

For routine urinalysis and microscopic evaluation, have patient void into a clean container. The **first-morning specimen** is preferred for most tests since it usually is the most concentrated and has a more uniform volume and a lower pH.

Timed Urine Collections:

1. Obtain proper container for collection of specimen from laboratory.
2. Many urine tests require refrigeration of specimens during collection. Verify need to refrigerate before starting collections.
3. Start timing at the time of first urination. Discard first sample as it is not to be included as part of the specimen. Write down the time of this initial voiding. This is the specimen start time.
4. Collect urine voided within the time specified. The final voiding at the exact end of the timing period is to be included.
5. As soon as possible, at the end of the collection period, bring entire urine specimen, with timing noted, to the laboratory.

24-Hour Urine Collections:

Elliot Hospital Laboratory provides 24-hour urine collection containers and patient instruction sheets with the various types of preservatives, depending on test requested. Use following procedure for correct specimen collection and preparation:

1. Instruct patient to discard **first-morning** specimen and to record time of voiding.
2. Patient should collect ALL subsequent voided urine for remainder of day and night.
3. Collect **first-morning** specimen on day 2 at same time as noted on that of day 1. The collection is now complete.
4. Send entire 24-hour specimen to laboratory. If only an aliquot is submitted, please mix well before aliquoting and ALWAYS provide total volume of the 24-hour collection.

First-void (“dirty”) urine: (for STD testing only)

To provide accurate, sensitive nucleic acid amplification STD test results, the following urine collection is required for STD testing.

1. Patient must not have urinated for at least one hour prior to STD urine specimen collection.
2. No peri-urethral or uro-genital cleansing should occur.
3. First-void of initial urine stream should be collected in primary collection container. At most, 20-30 mLs of urine should be collected. Collection of larger volumes of urine may result in dilution that can reduce test sensitivity.
4. Clearly mark the STD urine specimen container with “first-void” (or “dirty”) urine, patient’s full name, collection date and collection time.
5. Specimen must reach the laboratory at 2-30°C within 24 hours. An aliquot of the first-void urine will then be transferred to a Gen-Probe transport tube. Alternatively, the submitting provider may choose to add an aliquot of the first-void urine to a urine Gen-Probe transport tube. The request form then must indicate the specimen submitted is a first-void (dirty) urine.

Clinicians who require patients collect urine for STD testing and urine for culture must instruct their patients to collect a first-void urine at the beginning of the office visit and then collect a clean-catch urine at the end of the visit. If this collection algorithm is not possible, then the clinician has the option to collect and submit a female vaginal or endo-cervical Gen-Probe swab or male urethral Gen-Probe swab for STD testing and a clean-catch urine for culture.

Clean-catch urines submitted for STD testing will be rejected. Conversely, first-void urines submitted for bacterial culture will not yield pure growth of pathogenic organisms. These cultures will be reported as mixed cutaneous or mixed uro-genital flora indicating contamination. The laboratory cannot guarantee accurate test results if improper urine specimens are submitted for STD testing and bacterial cultures.