

TriHealth Laboratories
Support Services
URINE SPECIMEN COLLECTION

PURPOSE

For chemical and microscopic examination, a voided specimen is usually suitable. Using a clean, sterile container, collect a midstream specimen to avoid excessive contamination. If the specimen is likely to be contaminated by vaginal discharge, a clean-catch voided specimen should be collected.

Clean-catch urine should be collected for microbiology and cytology studies. Give patient a clean sterile container and instructions for the use of vacutainer urine collection kit (on package of container).

SPECIMEN COLLECTION

- BD Vacutainer® Complete Kit (for Urinalysis and Microbiology)
 - 120 mL screw-cap specimen collection cup with integrated sampling device (sterile interior)
 - 8 mL conical urinalysis preservative tube with yellow and cherry red stopper (note expiration date on tube)
 - 4 mL lyophilized maintenance formula tube with solid gray stopper for microbiology (note expiration date on tube)
 - 2 cleansing towelettes
- (*See **PATIENT INSTRUCTIONS** handout)

PROCEDURE

1. Obtain filled urine cup from patient.
2. To transfer the specimen into evacuated tube(s):
 - a. Place cup upright on clean, flat surface. Container may be tipped at an angle if specimen volume is limited.
 - b. Peel back label on cap to expose the integral sampling device.
 - c. Place evacuated tube into cavity on cap, stopper down. Advance the tube over puncture point to pierce stopper. **The Urine Culture and Sensitivity Tube should be filled first when collecting multiple specimens.** (See NOTES below regarding low volume C&S specimens.)
 - d. Hold tube in position until filled.
 - e. Remove tube from device. (Repeat steps c-e if another tube is to be collected.)
 - f. Replace label over hole and reseal.
3. Label evacuated tube or cup appropriately. Deliver specimens to Laboratory as soon as possible.
4. Discard excess urine appropriately. **Dispose of the screw cap of the specimen container in a sharps container.**

NOTES**For Urine Culture and Sensitivity (C&S):**

1. Use 4 mL tube with light gray stopper.
2. Failure to add urine to minimum fill line on tube label (3 mL) could result in a reduction of microorganisms over a 24-hour period.
3. Shake tube vigorously to ensure complete dissolution of the preservative.
4. The urine maintenance formula holds the bacterial population in the urine specimen for a period of 48 hours at room temperature.

5. If the volume of the specimen is anticipated to be extremely low (<2 ml), place the specimen in a small, plain (no preservative) container (e.g., small red top tube) and send this unpreserved specimen immediately to the Laboratory on ice.

For Urinalysis:

1. Use 8 mL yellow and cherry red speckled top tube. Mix gently.
2. The urine preservative allows automated chemistry urinalysis and sediment analysis of the specimen for up to 72 hours at room temperature.

For Chemistry:

1. Use 6 ml plastic clear-pearl top tube.
2. Allow tube to fill with minimum amount of urine required for the ordered test.

For Cytology:

- Leave urine in specimen collection cup.

SAFETY

Follow Standard Precautions guidelines when performing this procedure.

REFERENCES

- 1) BD Vacutainer® Urine Products product insert (7/04)
- 2) CLSI document GP16-A2: *Routine Urinalysis and Collection, Transportation, and Preservation of Urine Specimens; Approved Guideline-Second Edition (2001)*.