URINE SAMPLE COLLECTION

1. *Introduction*

Urine is one type of specimen that can be easily collected from a patient. Urinalysis testing can give the doctor valuable information about many body systems especially kidney function. The physician uses the information from urine culture and urinalysis to diagnose and treat many diseases.

2. *Material Required*

- Clean, screw-capped, wide mouth, leak proof container for microscopic routine examination.
- Sterile, screw-capped, wide mouth, leak proof container for culture & sensitivity.

Figure 1 *Urine containers*

3. *Procedure (for First voided specimen)*

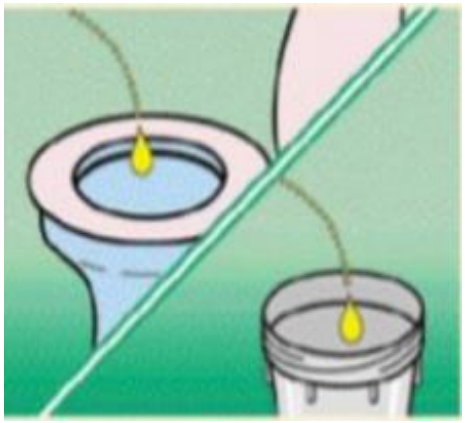
1. First morning voided urine specimen is preferred.

2. Clean external genitalia with soap and water if possible. Then wipe with tissue. Antiseptic should not be used.

   - For female, spread labia with two fingers and clean the area from front to back.

   - For male, gently pull the foreskin before washing glans penis.

3. Advise the patient to pass out the first portion of urine and to collect midstream urine specimen for culture and sensitivity into a wide mouth sterile container directly for about half of the container.



4. Tighten the container lid.

5. Do not collect the sample from bedpan and urine bag.

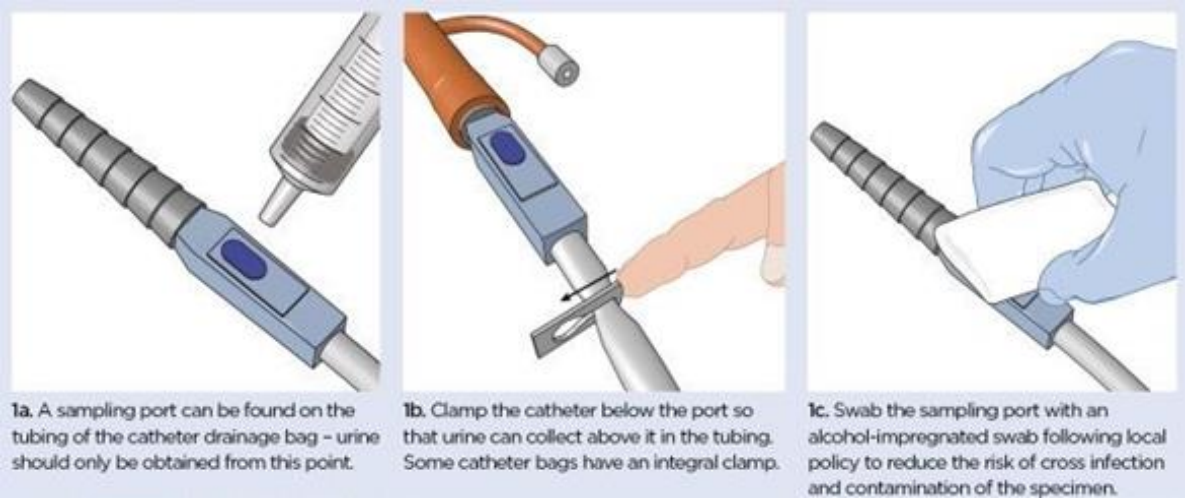
6. Transport immediately to the laboratory along with the requisition form.

7. If delay of more than one hour, refrigerate specimen at 4 °C until delivery to the laboratory with cold chain.

4. Procedure (for the patient with Urinary Catheter)

These specimens are collected by specially trained personnel (**special nurses**) only.

1. The nurse should wash hands & wear a new pair of clean, gloves.
2. Most catheters have a sampling port located on the catheter's tubing near the end of the catheter that is attached to the collection bag.
3. To obtain a sample, clamp the tubing a few centimeters below the sampling port. Wait until sufficient urine collects before proceeding.
4. Cleanse the sampling port with an alcohol-impregnated swab and allow to air dry.

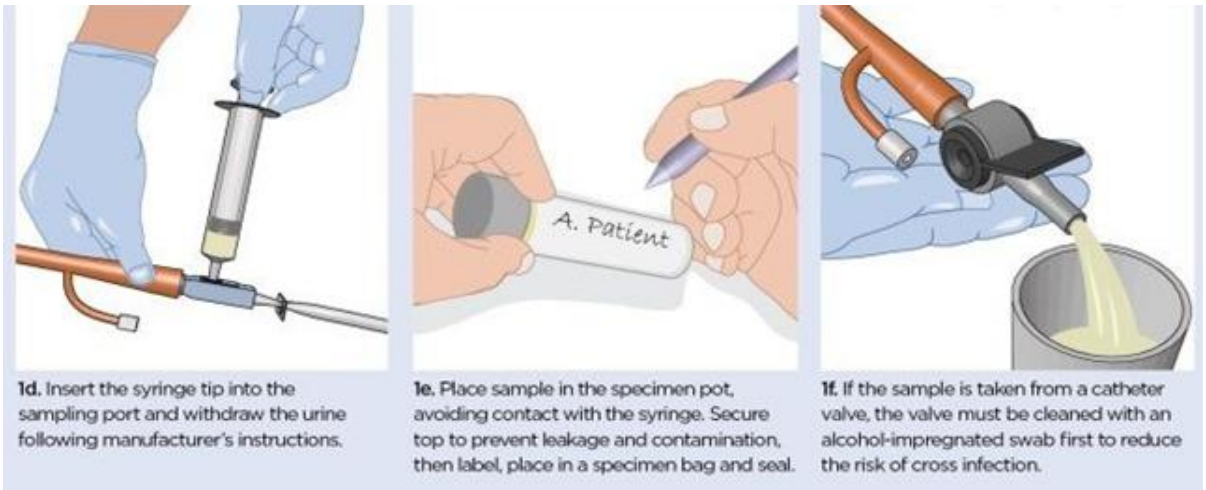


1a. A sampling port can be found on the tubing of the catheter drainage bag – urine should only be obtained from this point.

1b. Clamp the catheter below the port so that urine can collect above it in the tubing. Some catheter bags have an integral clamp.

1c. Swab the sampling port with an alcohol-impregnated swab following local policy to reduce the risk of cross infection and contamination of the specimen.

5. Insert the sterile syringe into the port. Aspirate urine and remove the syringe from the port.
6. Transfer the urine into the sterile container immediately to avoid contamination. Swab the port again to reduce the risk of contamination and remove any clamp used.
7. Transport immediately to the laboratory along with the requisition form.
8. If delay of more than one hour, refrigerate specimen at 4°C until delivery to the laboratory with cold chain.



1d. Insert the syringe tip into the sampling port and withdraw the urine following manufacturer's instructions.

1e. Place sample in the specimen pot, avoiding contact with the syringe. Secure top to prevent leakage and contamination, then label, place in a specimen bag and seal.

1f. If the sample is taken from a catheter valve, the valve must be cleaned with an alcohol-impregnated swab first to reduce the risk of cross infection.

References

- Basic Laboratory Procedures in Clinical Bacteriology, (2003), J. Vandepitte *et.al.*, WHO Geneva, 2nd Edition.
- https://www.nursingtimes.net/clinical-archive/assessment-skills/specimen-collection-2-obtaining-a-catheter-specimen-of-urine-10-07-2017/