



SOS SPECIMEN OPTIMAL SAMPLING URINE COLLECTION CHECKLIST

Urine samples should be collected prior to the initiation of antimicrobial treatment, or as soon as the patient presents at the healthcare facility.

In the presence of clinical signs and symptoms suggestive of Urinary Tract Infection (UTI), take note of the following as you collect a quality urine sample for culture

1. Obtain patient consent for sample collection.
2. Provide patient with sterile sample container (with boric acid where possible).

Note: if sampling for Schistosoma, use sterile container without boric acid and collect terminal urine (ideally between 10am-2pm) to maximise yield of eggs. In the absence of boric acid, ensure the urine is refrigerated (2- 8°C) immediately.

3. Instruct the patient on how to collect urine:

Male: wash tip of penis in circular motion downward toward the shaft with running water and plain soap or normal saline cotton swabs. If uncircumcised, retract foreskin before cleansing. Retract only if easy and replace foreskin after cleansing.

Female: wash the vulva area from front to back with running water and plain soap or normal saline cotton swabs.

Instruct the patient to start voiding into the toilet; after a few drops, stop the flow, then urinate mid-stream urine into sterile container.

4. Collect approximately 20–30 ml of urine.
Note: If patient is between 1 and 5 years, instruct the caretaker to perform step 3 to 4 above.
5. Label the sample & place into the appropriate sample transport bag or container. Transport the sample immediately to the laboratory.

A urine sample can also be collected by invasive procedure such as suprapubic aspiration (SPA), straight catheter, cystoscopy, nephrostomy etc.

For catheterised patients;

1. Clean the soft rubber connector between the catheter and the collecting tube with 70% alcohol
2. Aspirate urine by a sterile syringe (do not obtain urine from the collecting bag).

For SPA in neonates and small children

1. Ensure the procedure is done by a qualified professional, preferably a Clinician.
2. Disinfect the skin with 70% ethanol followed by povidone iodine over the bladder.
3. Aspirate the urine using a 22-gauge short bevel spinal needle. Note: the sterile container should not contain boric acid for SPAs or if sample <10ml.

Ensure proper documentation of the following

1. Labelled accurately as “mid-stream urine” / “catheter stream urine” / “suprapubic aspiration.”
2. Sample collection time and date.
3. Clinical details, reason for sample or working diagnosis.
4. Test(s) required, i.e., MC&S, urinalysis.
5. Requesting clinician and contact details for results.

Note: If a delay of >1 hour is anticipated, refrigerate sample at 2 °C to 8 °C or store in container with boric acid if not done so already. Delay in transportation without correct storage may give false high colony count and multiplication of contaminants. Refrigeration should not exceed 24 hours. Occasionally, organisms such as Mycobacteria, Chlamydia, Mycoplasma and anaerobic bacteria may cause infections and will not be isolated using this technique.

Review results within 72 hours or as soon as ID and/AST results are available.