

Medical Research Institute Colombo, Sri Lanka	Subject title: Guideline for collection and transport of urine for culture	Version 1.1
		Date of issue: 03.06.2019
Clinical Bacteriology	Prepared by: Dr. Lilani Karunanayake	Annual review date: 03.06.2020

Annexure - 2

Guideline for collection and transport of urine for culture

Collection Techniques

Clean-catch urine / mid-stream urine (MSU) specimen (female)

The person obtaining the urine specimen should wash hands with soap and water and dry. If the patient is collecting the specimen, she should be given detailed instructions.

- a. Clean the genital area with soapy water
- b. Rinse the area well with water
- c. Hold labia apart during voiding
- d. Allow the initial part of urine to pass. Do not stop the flow of urine.
- e. Collect the midstream portion of urine (5-10ml) in to a sterile container

Clean-catch urine / mid-stream urine (MSU) specimen (male)

The person obtaining the urine should wash hands with soap and water and dry. If the patient is collecting the specimen, he should be given detailed instructions.

- a. Clean the penis, retract the foreskin (if not circumcised), and wash with soapy water.
- b. Rinse the area well with water
- c. Keeping foreskin retracted, allow initial part to pass. Do not stop the flow of urine.
- d. Collect the midstream portion of urine in to a sterile container

Catheterized urine

1. Indwelling catheters:

- a. Clamp the catheter about 1" above the bifurcation and until the patient senses the urge to urinate or the bladder becomes palpable
- b. Clean the catheter port with 70% alcohol
- c. Aspirate 10 ml of urine with a sterile needle and syringe. Insert the needle in a 'head to toe' direction at an angle to prevent leakage
- d. Collect the sample of urine in to a sterile container
- e. Remove the clamp

2. Straight catheter (in and out):

This technique is used by a specialist medical officer or trained health professional to collect the specimen from infants, or patients with neurogenic bladders. In/out catheter urine specimens are



Medical Research Institute Colombo, Sri Lanka	Subject title: Guideline for collection and transport of urine for culture	Version 1.1
		Date of issue: 03.06.2019
Clinical Bacteriology	Prepared by: Dr. Lilani Karunanayake	Annual review date: 03.06.2020

useful when clean-catch urine cannot be obtained. Prior to catheterization, the patient should force fluids until the bladder is full.

- a. Clean the patient's urethral opening with saline swabs
- b. Using sterile technique, pass a catheter into the bladder.
- c. Discard the initial 15 to 30 ml of urine
- d. Collect a sample from the mid flow of urine in to a sterile container

Suprapubic Aspiration

This is the preferred method of urine collection from infants. This technique should be performed by a specialist medical officer (consultant) or a trained medical officer under the supervision.

- a. Bladder should be full and palpable. Shave and disinfect the skin over the bladder.
- b. Palpate the bladder above the symphysis pubis and aspirate using a sterile needle and syringe.
- c. Collect sample in to a sterile container.

Specimen Transport and storage

- a. Label the type of specimen e.g. MSU, supra pubic aspiration etc. This is very important as interpretation of results and further processing of urine in the laboratory depend on the type of specimen
- b. Specimen should be transported to the laboratory as soon as possible.
- c. If there is a delay in transport keep the specimens at 4⁰C. Refrigeration should be for less than 24 hours.
- d. If transport take more than two hours transport in ice. *Do not freeze.*
- e. If boric acid containers are used (1.8% boric acid), only the amount of urine indicated on the bottle should be collected. Urine samples thus collected can be transported at room temperature

General Considerations

- ❖ Never collect urine from a bedpan or urinal
- ❖ Do not submit 24-hour collections of urine for culture
- ❖ Do not submit Foley catheter tips for culture
- ❖ The first voided morning urine sample is better

Contact details: General (0112) 69 35 32/33/34

Ext. Laboratory 336, Consultant 332

Head of Laboratory: Dr. Lilani Karunanayake, Consultant Clinical Microbiologist

