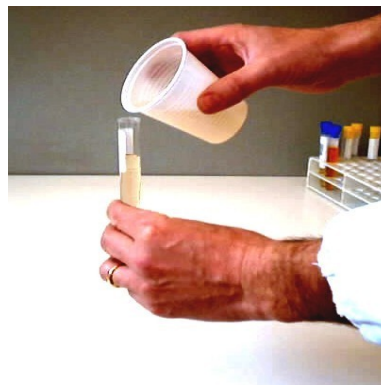
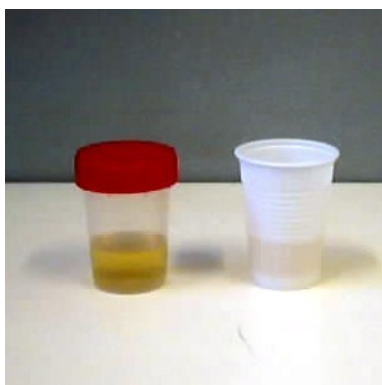


The specimen collector cups for the collection of urine samples are provided free of charge by the laboratory (for external users at the Public Healthcare Testing Lab) or can be purchased at the pharmacy.

1 CHEMICAL-PHYSICAL EXAMINATION OF URINE CULTURES

Use of first morning urine is suggested.

- 1 After thorough cleaning of the genitals, discard the first stream of urine.
- 2 Collect the second stream of urine in the conical test tube (using a container with a wide opening e.g. disposable cup or sterile container might be helpful)



- 3 Deliver the stoppered conical test tube to the reception staff.

2 URINE CULTURE

METHOD OF COLLECTION AND STORAGE

Unless otherwise specified, it is recommended to collect urine from the voiding in the morning or at least three hours after the last urination.

Collected samples must be delivered to the laboratory within 2 hours. If the delivery is deferred to the following day, keep the urine in the refrigerator for a maximum of 12 hours.

A) COLLECTION BY MID STREAM RANDOM URINE SAMPLE

Girls and Women

- 1 Wash your hands with soap and water and dry them.
- 2 Carefully wash the orifice of the urethra and the surrounding area thoroughly with soap and water, rinse with water and dry.
- 3 Separate the folds of the labia, void a small part of the urine without collecting it, then stop the flow.
- 4 Collect the second part directly in the sterile container (no more than 10 - 15 ml).
- 5 Carefully close the specimen cup in such a way that the urine does not leak during transport.

Boys and Men

- 1 Wash your hands with soap and water and dry them.
- 2 Retract the foreskin, thoroughly wash the orifice of the urethra and the surrounding area with soap and water, rinse with water and dry.
- 3 Keeping the foreskin retracted, void the first part of the urine without collecting it, then stop the flow.
- 4 Collect the second part directly in the sterile container (no more than 10 - 15 ml).
- 5 Carefully close the specimen cup in such a way that the urine does not leak during transport.

B) STERILE ADHESIVE PLASTIC BAG

Mod./ASST

This system, although not recommended owing to the greater risk of contamination, may be used for small children when it is not possible to obtain the urine from intermediary voiding:

- 1 Clean the external genitals and the surrounding area with soap and water, rinse well with water and dry.
- 2 Apply the bag by adhering it to the area around the genitals. If after about 60 minutes no urination has occurred, remove the bag and replace it, repeating the washing.
- 3 For Internal Users: as soon as urination has taken place, remove the bag, carefully transfer the urine into a sterile specimen container and take it to the laboratory.
- 4 For External Users: as soon as urination has taken place, remove the bag and place it in a sterile specimen container to be taken to the laboratory.

C) COLLECTION BY MEANS OF INTERMITTENT BLADDER CATHETERIZATION

- 1 With a full bladder, carefully wash the area surrounding the urethra with soap and water, rinse with water and dry.
- 2 Insert the catheter in accordance with sterile procedures
- 3 Collect the second part in a sterile specimen container.


D) COLLECTION BY MEANS OF INDWELLING CATHETERIZATION

NB: never collect urine from the collection bag; do not disconnect the catheter

- 1 Clamp the connecting tube between the catheter and the bag immediately below the junction with the catheter for at least half an hour.
- 2 Wash your hands and put on disposable gloves.
- 3 In catheters with a sampling valve, disinfect the valve and withdraw directly from it with a sterile syringe. Place the urine in a sterile specimen container.
- 4 In catheters without collection devices, disinfect the surface of the catheter and with a sterile syringe pierce the latex of the catheter and collect the urine present in the lumen. Insert the urine into the sterile container.

It is possible to keep the sample refrigerated for up to 48 hours using the special containers with bacteriostatic. If necessary, proceed with the collection as illustrated below:



	INSTRUCTIONS FOR THE CORRECT COLLECTION OF URINE	Attachment no. to PT LAB 001 Rev. 02 Page 3 of 3 08/03/2021
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3 24-HOUR URINE

- **CONTAINER:** Collect the 24-hour urine in a specific container distributed free of charge at the Public Healthcare Testing Lab Rooms. Alternatively, you can buy the container in the pharmacy/healthcare service. For some types of tests it is necessary to acidify/alkalize the container before urine collection; also in this case the container is provided free of charge by the Laboratory c/o the Public Healthcare Testing Lab rooms. Alternatively, it is possible to buy the container at the pharmacy/healthcare service and add 7 heaping spoons of muriatic acid (if acidification required) or 4 cooking spoons of sodium bicarbonate (if alkalization is necessary) to the empty container.
For particular tests it is necessary to use a container containing Sodium Hydroxide (NaOH), always provided free of charge by the Laboratory.
- **COLLECTION:** On the morning of the day of collection, empty the bladder and discard the urine. Make a note of the time. In the following 24 hours, collect all the urine emitted in the container. At the same time as the collection begins, empty the bladder completely and transfer this urine to the container as well. During collection, keep the container in the refrigerator or in a cool place. Do not urinate directly into the container.
- **DELIVERY:** deliver the container, accompanied by the M LAB 011 - "Indications on the correct management of 6N hydrochloric acid/muriatic acid for the collection of acidified 24-hour urine" duly completed and signed, to the reception of the Sampling Rooms or, after careful mixing, measure exactly the quantity and transfer about 10 mL of urine into one or more round-bottom tubes according to the tests required, indicating the quantity of urine collected on the tube.

NOTES FOR SOME 24-HOUR URINE EXAMS

Uric Acid	Alkalinized Urine	Before starting urine collection, add 4 tablespoons of baking soda to the collecting container.
Calcium, Phosphorus, Magnesium, Citrate	Acidified urine	Carefully read and fill in M LAB 011 - "Information on the correct management of 6N hydrochloric acid / muriatic acid for the collection of 24-hour acidified urine".
5-Hydroxyindoleacetic Acid	Acidified urine	Carefully read and fill in M LAB 011 - "Information on the correct management of 6N hydrochloric acid / muriatic acid for the collection of 24 hour acidified urine". For at least 3 days prior to the testing, follow a diet free of dried fruit, bananas, tomatoes, aubergines, plums, pineapples, avocados, kiwis, blackberries, coffee, tea, chocolate.
Vanillylmandelic acid total Catecholamines Metanephrines	Acidified urine	Carefully read and fill in M LAB 011 - "Information on the correct management of 6N hydrochloric acid / muriatic acid for the collection of 24 hour acidified urine". For at least 3 days prior to the testing, and for the whole day of the collection, follow a diet free of: coffee, tea, chocolate, dried fruit, bananas, avocado, kiwi, chilli and capsaicin derivatives.
Urinary Beta2-microglobulin	Urine supplemented with 10 ml of 1N Sodium	Before starting the urine collection, collect the special container with Sodium Hydroxide. During collection, store at a temperature of 2-8 ° C.
Aldosterone	/	For the 3 prior weeks, follow a diet with a normal sodium content.
Urinary porphyrins	/	Store the container and transport it to the reception centre of the laboratory, always protected from light.
Creatinine clearance	/	Taking the blood sample on the day in which the 24-hour urine sample is delivered is mandatory.

N.B. : In the event that it is necessary to perform a simultaneous examination that requires the collection of acidified / alkalinized / sodium hydroxide urine together with one that does not require it, **TWO SEPARATE COLLECTIONS** of 24-hour urine will be carried out.

Warning: 24-hour urine collection containers might contain dangerous substances (acids or alkali), do not ingest, do not leave within the reach of children. For correct handling of the containers, carefully read M LAB 011 - "Information on the correct management of 6N hydrochloric acid/muriatic acid for the collection of acidified 24-hour urine".

Updated 08/03/2021

Signature Department Head DR GRAZIELLA BONETTI

Verified and confirmed on the date of _

Signature _