

Urine sampling with a closed vacuum system

Patient information

The purpose of this leaflet is to teach the patient how to collect a urine sample correctly with the closed vacuum system so that the urine analysis gives an accurate and trustworthy result.

Preparation for urine sampling

The first urine in the morning is the most suitable for urine strip analysis, urine sediment microscopy, clinical chemistry and microbiological tests.

- You have been given marked (barcode with your name and social security number) sample containers: a sterile sample cup and (a) vacuum tube(s).
- At least four hours must have passed since the previous urination.
- You should not eat or drink for eight hours before collecting the urine sample.

Urine sampling

1. Wash your hands and urethral area with warm water before collecting the urine sample. Do not use soap or disinfectants. Dry with a paper towel.
2. Remove the lid from the sample cup (Figure 1) and place it within easy reach without touching the inside (sticker down, suction nozzle upwards).



Figure 1. Sample cup and lid

1. Start urinating into the toilet and after a few seconds without interrupting the flow of urine, urinate into the sample cup by filling approximately three-quarters of the sample cup (at least 50 mL). Finish your urination into the toilet.
2. Close the sample cup lid tightly, shake the urine in the sample cup and partially open the protective sticker (Figure 2)



Figure 2. Protective sticker of the sample cup

Filling the vacuum tube(s)

Do not remove the cap of the vacuum tube!

After collecting the urine sample, the tube(s) must be filled according to the tests prescribed to you.

Order of filling the different vacuum tubes:

Tube with beige protective cap (conventional and clinical chemistry studies)



Tube with olive green cap (microbiological examination)



Figure 3. Vacuum tube caps

Fill the vacuum tube(s) **within 15 minutes** of sample collection to ensure proper preservation of the urine sample.

Push the vacuum tube through the opening in the lid of the sample cup with the cap facing the sample cup in the direction of the bottom of the sample cup (Figure 4). The vacuum tube fills with urine. Hold the tube in place until the urine flow stops.



Fill the second vacuum tube, if necessary. Then close the sample cup opening again with the sticker.

Gently invert the vacuum tube(s) 8-10 times (Figure 5) to dissolve the preservative in the tube.



Figure 5. Inverting the vacuum tube

Pour the remaining urine from the sample cup into the toilet and throw the sample cup into the household waste.

If possible, store the urine sample at **2-8 °C** and take the vacuum tube(s) to the laboratory within three hours.

Only take (a) filled and labelled vacuum tube(s) to the laboratory.

Acceptance of a urine sample:

- **18 Ravi St, room RC0247**
- **104 Pärnu Rd, room MC0251**
- **6 Hariduse St, room TP0118**

This information material has been compiled by the Laboratory of East Tallinn Central Hospital and Surgitech.

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