

Urine sampling of non-toilet trained child

A urine sample is obtained of a non-toilet trained child into a collection bag, since it is not possible to obtain an uncontaminated midstream urinary sample. The best time for sampling is in the morning when the time since the previous micturition is at least 4–6 hours. If you did not follow these instructions, please let the laboratory personnel who receives the sample from you know.

Equipment needed (which you will get from the laboratory)

1. Collection bag and adapter for transfer of urinary sample (Fig. 1)
2. One or several underpressurized test tubes (vacutainers) with a volume of **4 milliliters**.
Do not open or remove the rubber stopper.
3. Stickers for marking patient identifiers.
4. Material for skin cleaning (gauze or similar)

Urinary sampling procedure

Wash your hands. Clean the genitalia of the child with lukewarm water before sampling. **Soap and disinfectants are not allowed.**

Cleaning and application of the sampling bag: boys

Moisten pieces of cloth cloth/gauze with lukewarm water for cleaning the genitalia. Make only one sweep with each moistened piece of cloth.

1. First, clean the area of the testicles (scrotum) and the outside of the foreskin.
2. Draw the foreskin back as much as is easily possible. Clean carefully the opening of the urethra.
3. Draw the foreskin forward again and then back, so that you may clean any extra secretions from under the foreskin. If the foreskin is drawn back for too long, the end of the penis may swell making it impossible to draw the foreskin forward into place again.
4. Finally, put a dry piece of gauze around the penis so that the end of the penis does not touch the testicles (scrotum).
5. Check that the **stopper in the bottom of the sample collection bag is securely closed.**
6. Remove the paper of the glued area of the urinary collection bag.
7. Remove the dry gauze and insert the boy's penis into the collection bag.
8. Gently stretch the skin to tighten it smooth and affix the collection bag by gluing it from below upwards.

Cleaning and application of the sampling bag: girls

Moisten the pieces of cloth/gauze with lukewarm water for cleaning the genitalia. Make only one sweep with each moistened piece of cloth

1. Spread the labia minora (inner labia) and clean the area around the urethra and the urethral opening carefully with pieces of cloth/gauze moistened with lukewarm water by wiping from front to back.
2. Place a dry piece of gauze between the inner labia to keep them apart.
3. Dry the skin around the urethra.
4. Check that the stopper in the **bottom of the sample collection bag is securely closed**.
5. Remove the paper of the glued area of the urinary collection bag.
6. Remove the dry piece of gauze from between the inner labia and place the urine collection bag securely around the opening of the urethra.
7. Gently stretch the skin to tighten it smooth and affix the collection bag by gluing it first in the area between the anal and vaginal opening.

Removing the urine collection bag

Keep an eye on when the collection bag begins to fill and **remove the bag as soon as there is urine in the collection bag**.

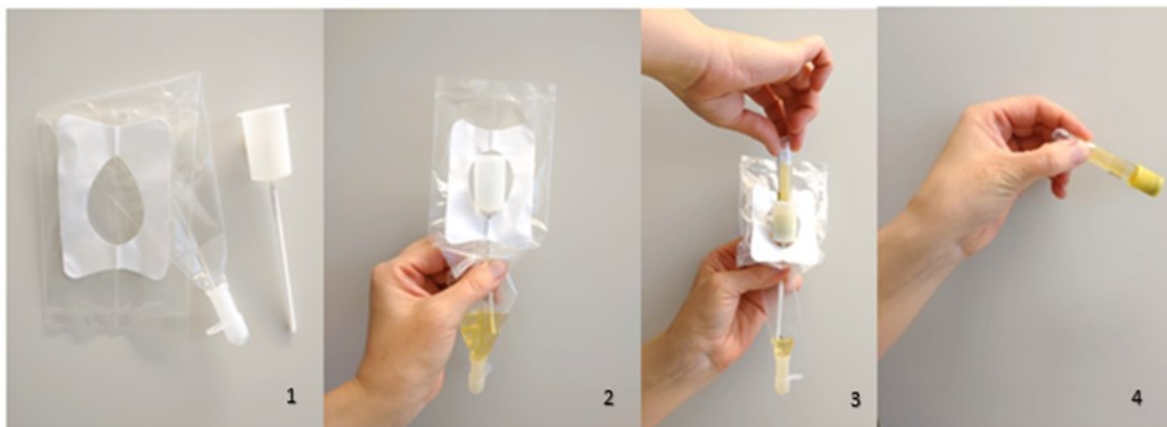
1. If the child has not urinated within **one hour after application** of the collection bag, redo the cleaning procedure and affix a new collection bag.
2. If there is **fecal material in the collection bag or the diaper, the sample cannot be used**. If this happens, redo the cleaning procedure and affix a new collection bag immediately.
3. When the collection bag contains urine, remove the bag, beginning from atop downward. Keep the bag upright all the time.

Sample handling and transfer into test tubes with the help of a transfer adapter

Do not open the rubber stopper of the tubes.

1. Keep the collection bag upright.
2. Place the tip of the adapter in the collection bag so that it reaches well into the urine in the bottom of the collection bag. Compress the collection bag slightly, if needed, so that the tip of the adapter reaches well into the urine at the bottom of the collection bag (Fig. 2).
3. With the one hand, keep the adapter steady. With the other hand, press the test tube with the rubber stopper first firmly against the sampling needle. Press all the way to the bottom until there is a stream of urine entering the test tube (Fig. 3).
4. When the stream of urine ceases, remove the test tube from the adapter.

5. Rock the test tube gently upside down and downside up 8–10 times. This makes the preservation substance in the test tube mix properly with the urine sample. **Do not shake the tubes (Fig. 4).**
6. Fill all test tubes the same way.



7. Dispose of the collection bag and adapter with your regular household waste.
8. **Write the name and social security number of the child, the sampling date and sampling time on the stickers that came with the materials from the lab. Write word BAG on the sticker.** Write also the time since the previous micturition (in number of hours). **Tubes with no name stickers will not be examined by the laboratory.**
9. Attach a sticker to each tube.
10. Take the test tubes with the urinary samples as soon as possible (same day) to the laboratory. The filled sample tubes are useable only for 8 hours in room temperature and please keep in mind that the samples may need some time for transportation to the analyzing laboratory.
11. The samples may not freeze.
12. You may dispose of the urinary sample container with your regular household waste.

Please contact the department or outpatient clinic if you have questions regarding the sampling procedure for this examination. You may ask for the result of this examination at the hospital unit where you are being treated.

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