

How to collect a 24-hour urine sample

The container

The laboratory usually supplies disposable plastic bottles that hold 2 litres (sometimes 4 litres). It is best to take two bottles if they hold 2 litres and return the second one empty if you don't use it. People with a very large fluid intake occasionally need enough bottles to hold more than 4 litres. In the emergency an empty soft-drink bottle can be pressed into service if it is thoroughly washed, rinsed, and suitably labelled.

Filling the bottle

Some people find it easier to pass urine into a separate container and then transfer it to the 24-hour container. A plastic 2-litre ice-cream container is ideal. The ones with a square shape pour well from one corner like a jug.

Choice of day

Weekday collections are better if your meals are different at the weekend (especially if you combine breakfast and lunch at the weekend). For many people a weekday collection will mean taking the bottle to work, also an ice-cream container if they need one.

Starting time

Most people find it convenient to start when they first get up in the morning. If you start for example on a Tuesday, the collection starts when you get up on Tuesday morning and go to the toilet as usual (you start with an empty bladder).

Start EMPTY

When you get up on Tuesday morning go to the toilet as usual—it is essential to start *EMPTY* (empty bottle and empty bladder). Note the time you went to the toilet and write this on the label as the *starting date and time* (say Tuesday, 7 a.m. and the date, month and year).

Collect the next specimen

The first sample for the bottle will be the next sample of urine that you pass. This may be as late as 10 a.m., but some of that urine dates back to the last time you emptied your bladder—which is why 7 a.m. counts as the starting time.

Continue to collect every specimen

From then on, collect all the urine that you pass on Tuesday and the following night. If you are likely to collect urine during the night when you are only half awake, it is worth placing an obstacle in the toilet that will remind you to collect it.

Finishing time

The next morning (in this case Wednesday), collect your last sample exactly twenty-four hours after the starting time—7 a.m. again. The sample on Wednesday morning goes into the bottle and completes the collection. On the label record your *name*, the *date* and the *finishing date and time*.

Delivering the collection

Take the container and pathology request form to the laboratory on Wednesday. The lids of these disposable bottles sometimes leak, so be sure to keep the bottles upright. If you take them by car they can be packed upright in a suitable cardboard box, or in a plastic bag hanging from a coat hook or one of the door handles in the car.

Common mistakes

1. Failure to discard the first specimen

Remember it is essential to discard the first urine passed on the first day (use the toilet). The 24-hour period starts with an *empty bladder*. People are naturally reluctant to discard urine when they have a bottle for collecting it, but on the first morning you must remember your first job is to *get rid of yesterday's urine*.

2. Incomplete collection

If at any time during the twenty-four hours you find yourself passing urine into the toilet by mistake, you will have to abandon the collection that day, ask for another container and start again on another day. One way to protect yourself from this mistake is to fasten a large safety-pin to the underclothes in a place where you will find it and be reminded in time.

3. Loss during a bowel movement

When you go to the toilet to have a bowel movement, be careful to collect urine first, otherwise you are likely to empty the bladder accidentally during the bowel movement. An accident again means of course that you will have to abandon the collection that day, ask for another container and make a new collection on another day.

4. Collecting during the premenstrual week

Women retain sodium during the premenstrual week, which in turn causes fluid retention, especially if they have premenstrual syndrome (PMS). They should preferably collect a sample during the first week or ten days after their period finishes.