

# Taking a Mid Stream Urine Sample (MSU)

## Information leaflet



## Why do I need to give a urine sample?

Urine samples (specimens) are an important part of the picture that health professionals use to decide the best treatment to give their patients. It is important to get a sample that is not contaminated by anything else. The best way to do that is by collecting a mid-stream urine sample (MSU).

## What is an MSU?

An MSU sample is urine from the middle of the bladder, not from the first or last part of the urine stream that comes out. This reduces the risk of the sample being contaminated with bacteria from your hands, or from the skin around the urethra, which is the tube that carries urine out of the body. Urine should be sterile and does not normally contain any germs (bacteria). If bacteria are found in the sample, it means that the urine is infected.

## What is the purpose of an MSU test?

### **To confirm the diagnosis of a urinary tract infection (UTI) —**

The usual symptoms of a urine infection are pain when you pass urine and passing urine frequently. However, symptoms are not always typical, particularly in the elderly, so a urine test may be needed. The “gold standard” for the diagnosis of urinary tract infection is culture of urine in a laboratory, which requires 18 -24 hours before a result is available.

**To decide the best antibiotic to use —** Some germs (bacteria) are resistant to some antibiotics. If the test shows that you have bacteria in your urine then they are tested against various antibiotics to find which ones will kill the bacteria. If your GP has given you a prescription for antibiotics, please try and get urine sample before you start them.

## MSU pots

Your GP practice will provide you with the urine collection system.

This consists of the yellow pot **1** and the green topped bottle **2** which contains the preservative.

## How do I collect a midstream specimen of urine (MSU)

- ◆ Before doing an MSU, wash your hands and ideally your genitals as well.
- ◆ When you are ready to take your urine sample remove the whole yellow lid off pot **1** but **do not** remove the sticky label from the top.
  - ◆ **Women** - hold open the entrance to the vagina (your labia).
  - ◆ **Men** - pull back your foreskin.
- ◆ Pass some urine into the toilet then, without stopping the flow of urine, catch some urine in the clear pot. Once your pot is about 3/4 full, finish off passing the rest of your urine into the toilet.
- ◆ Avoid touching any part of your genitals with the pot, as this will increase the risk of contamination. Put the yellow lid back on pot **1**.

**1**



**2**



As soon as possible and **within 2 hours** transfer urine to the green topped bottle **2** by following the instructions below.

- The green top bottle **2** contains preservative (white powder) which allows urine to be tested without the overgrowth of bacteria. Please do not open this bottle at any point of the process.
- Remove the label on top of pot **1** and place the top of the green bottle **2** into the hole in pot **1** so urine can be transferred without spillage or contamination. Do not turn pot **1** upside down during this process.
- Urine is now preserved. Label both bottles and take them to your GP Practice.

For further advice either speak to the nurse looking after you  
or contact the Infection Prevention and Control Team on

[nwicb.infectioncontrol@nhs.net](mailto:nwicb.infectioncontrol@nhs.net)