

## UROFLOW

### What is a urine flow test?

A urine flow test calculates the speed of your urine flow over time and can be used to determine how well your bladder and sphincter muscle is functioning and whether there is a blockage to normal urine outflow.

During normal urination, the initial urine stream starts slowly, but speeds up until the bladder is nearly empty, at which point it will slow down again until the bladder is empty. In people with a urinary tract blockage, this pattern of flow is changed, and increases and decreases more gradually.

The bladder is part of the urinary tract, it is a hollow muscular organ that relaxes and expands to store urine. When it is full it contracts and flattens to empty urine through a tube called the urethra, which carries urine from the bladder out of the body.

The sphincter muscle is a circular muscle which closes like a rubber band around the bladder's opening which prevents urine from leaking.

For this test, you will urinate into a funnel that is connected to the flow meter, this will then calculate the amount of urine, rate of flow in seconds, and the length of time it takes you to complete urination.

### Why might I need a urine flow test?

A urine flow test is a quick, simple test that gives useful feedback about the health of the lower urinary tract. It is often used to see if there is blockage to normal urine outflow. Medical conditions that can change normal urine flow include:

- **Benign prostatic hypertrophy (BPH)** - This is enlargement of the prostate gland. It is not caused by cancer and usually occurs in men over age 50. The prostate gland wraps around the urethra, which when it becomes enlarged, it can narrow the urethra and interfere with normal passage of urine from the bladder. If left untreated, the enlarged prostate can block the urethra completely.

- **Cancer of the prostate or bladder**
- **Urinary blockage** - Blockage of the urinary tract can occur for many reasons along any part of the urinary tract – from the kidneys to the urethra. It can lead to a backup of urine causing infection, scarring, or even kidney failure if untreated.
- **Neurogenic bladder dysfunction** - This causes interference with the function of the bladder due to a nervous system problem, such as a spinal cord tumor or injury.
- **Frequent urinary tract infections** - These can cause scarring and damage to the urinary tract.

## What are the risks associated with this test?

A urine flow test is safe and non-invasive and is carried out in the bathroom.

Certain factors or conditions may interfere with the accuracy of a urine flow test. These factors include:

- Straining with urination
- Certain medicines that affect bladder and sphincter muscle tone

## How do I prepare for a urine flow test?

- No prior preparation, such as fasting (not eating or drinking) is needed.
- Please ensure that you drink about **1 litre of water at least one hour prior** to the test to be sure that your bladder is full.
- Make sure that you have with you a list of all medicines (prescription and over-the-counter), that you are taking.
- **Do not empty your bladder before arriving for the procedure.**

Following your uroflow study a bladder scan (ultrasound) will be undertaken to measure your post void residual volume PVR - What you have left behind in your bladder after voiding.