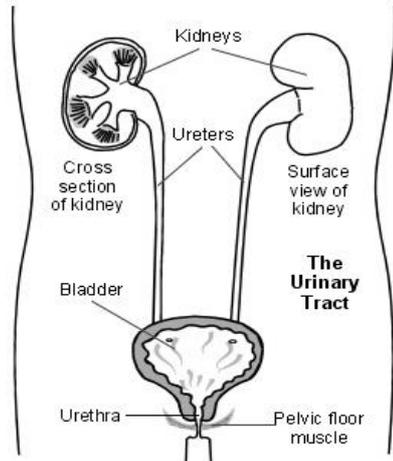


WHAT IS NORMAL URINARY FUNCTION?

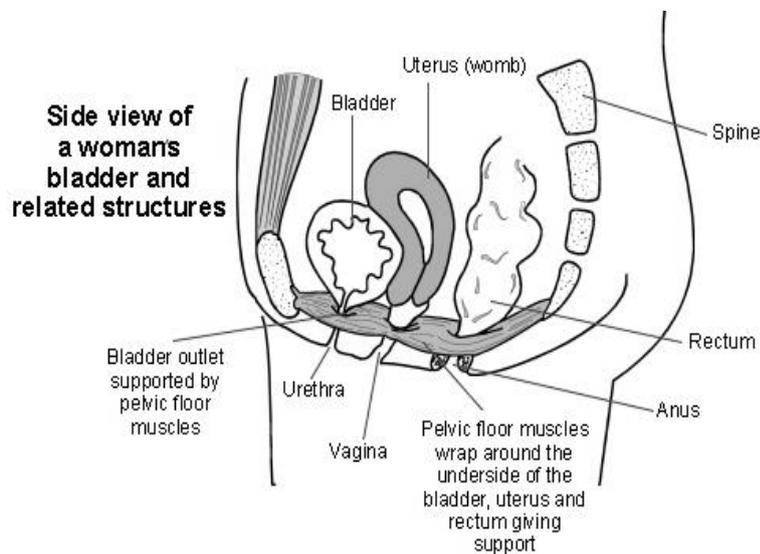
Urine is a normal waste product of the body that is manufactured by the kidneys and stored in the urinary bladder. From the bladder, the urine is eliminated through the urethra, an outlet tube which joins the bladder at the bladder neck. Elimination of urine is a normal voluntary process for adults. When the bladder becomes full, you experience the need to urinate.



Urination is a fairly complex function of various muscles and nerves, and therefore it is not uncommon for a disruption in normal bladder control to occur. When this happens, incontinence – the involuntary loss of urine from the bladder – is the result.

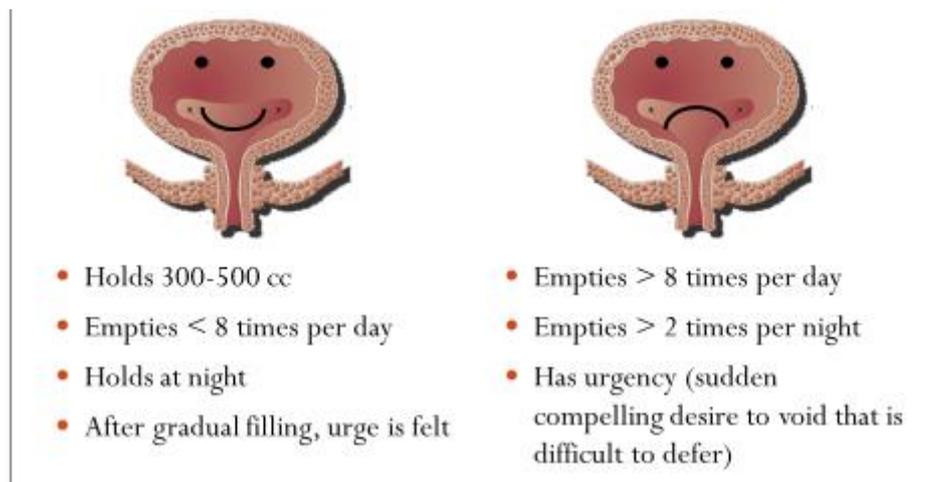
Overview of Passage of Urine

Urine is produced by the kidneys and passes into a muscular sac called the urinary bladder. The urethra is the tube that leads from the bladder to the outside of the body.



A ring of muscles, called the urinary sphincter, surrounds the urethra (the water pipe opening). As the bladder fills with urine, the sphincter muscles are contracted and the bladder muscle stays relaxed. This allows the bladder to fill with urine and prevents urine from leaking out.

When the bladder is nearing full, nerve signals are sent to the brain, letting the person know that the bladder is getting full. Additional nerve signals are sent out to begin urination. Some of these signals cause the bladder muscles to contract, which pushes urine into the urethra. At the same time, other signals cause the sphincter muscles to relax, which allows the urine to pass out of the body. Most people empty their bladder every three to five hours during the day and zero to one times during the night.



WHAT CAN GO WRONG WITH URINATION?

Simply put, four things can go wrong with this process:

- The bladder contracts when the person is not ready to urinate, called urge incontinence.
- The sphincter does not close properly or does not stay closed when there is increased pressure (as with a cough or sneeze), allowing urine to leak. This is called stress incontinence, and is a common reason for incontinence in women, especially women who have had children.
- The bladder is too weak to empty completely, causing leakage when the bladder is overly full. This is called overflow incontinence, and is uncommon.
- The urethra is obstructed, preventing urine from draining completely, which can also lead to overflow incontinence. This is common in men with an enlarged prostate.
- Urine leakage also can occur when a person is unable to make it to the toilet on time as a result of medical conditions, medications, and/or difficulty with thinking clearly.