

## Urinary Diversion

You do not need to have a bladder in order to live but it is critical to maintain an uninterrupted flow of urine from the body. Fortunately, this flow can be accomplished with a urinary diversion procedure. Read on to learn more.

### What happens under normal conditions?

The urinary tract is similar to a plumbing system, with special pipes that allow water and salts to flow through them. The urinary tract includes the kidneys, two ureters, the bladder and the urethra.

The kidneys act as a filter system for the blood, cleansing it of poisonous materials and retaining valuable glucose, salts and minerals. Urine, the waste product of the filtration, is produced in the kidney and trickles down hours a day through two 10- to 12-inch long tubes called ureters, which connect the kidneys to the bladder. The ureters are about one-fourth inch in diameter and their muscular walls contract to make waves of movement to force the urine into the bladder. The bladder is expandable and stores the urine until it can be conveniently disposed of. It also closes passageways into the ureters so that urine cannot flow back into the kidneys. The tube through which the urine flows out of the body is called the urethra.

### What is urinary diversion?

Urinary diversion is a term used when the bladder is removed or the normal structures are being bypassed and an opening is made in the urinary system to divert urine. The flow of urine is diverted through an opening in the abdominal wall. Individuals who might require urinary diversion would be those whose bladders were non-functional or needed to be removed either because of cancer or injury.

### What are the types of urinary diversion?

Urinary diversions may be divided into two types, continent and non-continent. Non-continent urinary diversions involve connecting the ureters to a segment of intestine and then bringing the intestine to the surface of the abdomen. The patient then wears an ostomy bag into which the urine continuously drains, but they are still able to participate in strenuous physical activity in addition to daily routines.

The second form of urinary diversion — continent urinary diversion — is subdivided into two basic types. Those that have a surgical opening brought out of the abdomen and those in which a replacement bladder is made out of part of the intestine. Those with a new bladder are able to urinate spontaneously whereas those patients with a surgical opening need to place a tube into the opening periodically to drain the accumulated urine. The advantage of the two types of continent urinary diversion is that no permanent ostomy bag needs to be worn.

### What can be expected after a urinary diversion?

Problems with urinary diversions do occur and may include: alterations in fluid and/or salt balance; difficulties in inserting the tube in those with surgical openings in the abdomen; problems with the skin growing over the surgical opening and general complications that might occur as a result of the abdominal operation — bowel obstruction, urine leakage and bowel leakage. In general, however, urinary diversions are tolerated extremely well. Patient satisfaction is very high and most patients are rehabilitated to normal activity and a normal lifestyle.

### Frequently asked questions:

#### Can I wear normal clothing if I have an ostomy bag?

Most individuals are able to wear their original clothes with a relatively quick adaptation period.