What Is a Urostomy?

An ostomy is a surgically created opening in the abdomen for the discharge of body waste. An ostomy that discharges urine is a urostomy. After the ostomy is created, you will expel or release urine through a stoma.

Your stoma is the end of the small or large intestine that can be seen protruding or sticking out of the abdominal wall. It is the new site where urine will leave the body and be collected in the ostomy pouch. The size and location of the stoma depend on your specific operation and the shape of your abdomen.

Most stomas are similar and will:

- Stick out of the body, usually an inch or less above the skin
- Vary in size
- Be round or oval in shape
- ▶ Be red and moist (similar to the inside of your mouth)
- Have no feeling
- Be slightly swollen for the first weeks after the operation and then shrink to their permanent size



Who Needs an Ostomy?



Disease or injury, such as cancer, trauma, stricture, or certain birth defects, can block the flow and drainage of urine. There are two types of urinary diversion procedures: non-continent and continent.

Non-continent urinary diversion is called a urostomy. A urostomy reroutes your urine to a new opening on your abdomen. Your ureters are directed to a small piece of intestine (most commonly the ileum) and urine drains into an external opening called a stoma. It is called non-continent because you have no control over your urine flow. The urine drains continuously into an ostomy pouch.

Continent urinary diversion is when you have a new bladder-like pouch made out of a segment of the small and/or large intestine to hold your urine. Continence means that you still have the ability to retain urine within the body without an external bag. There are 2 basic types:

- 1. **Neobladder procedure:** Urine drains from the pouch into the urethra. You urinate the same way you did before.
- 2. Catheterizing pouch: A stoma is created and attached from the internal pouch through a small opening on your abdomen. A catheter tube has to be inserted into the stoma 4 to 6 times per day to drain the urine.¹⁻³

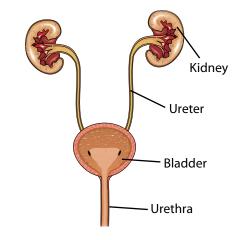
Of these types, a urostomy is the most common procedure. It has the least number of complications.



Your Urostomy Operation

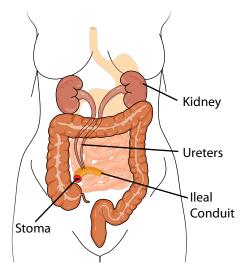
Understanding Your Urinary System

Your urinary system includes 2 kidneys, 2 ureters, a bladder, and a urethra. The kidneys make urine by filtering water and waste products from your bloodstream. The urine drains from the kidneys, through the ureters, and empties into the bladder. The bladder stores the urine. Urine is expelled or comes out when it passes from the bladder through the urethra. The creation of a urostomy changes how you expel your urine.



The Operation

A urostomy is an operation that reroutes urine to an opening on the surface of the abdomen. A conventional urostomy operation involves removing a small section of the ileum (small intestine). The intestine is reconnected so that it functions normally. The surgeon uses the small piece of that ileum that is removed to make a detour for urine, called an ileal conduit. One end of the piece is sewn closed, and the other end is brought to the surface of the abdomen to form a stoma. The ureters are removed from the bladder and attached to the new ileal conduit. Urine now flows from the kidneys, through the ureters, out the ileal stoma, and into the collection pouch. Your surgeon can also perform the operation using a section of the colon (large intestine), which is called a colon conduit.2



Urostomy Output

SAMPLE

Urine will start flowing into your ostomy pouch right after your operation. It may be pink or red for a few days before returning to the normal yellow color. Because the urine is passing through a segment of the intestine and the intestine produces mucus, you may see some mucus in your urine.

Ureteral Stents

Due to postoperative swelling, you will have small temporary tubes called stents extending out of your stoma. Stents are placed up the ureters and help keep them open. This allows urine to drain out through the stoma. Stent removal is painless. They will be removed by your surgeon or nurse once the swelling decreases.



Image © TG Eakin Ltd.

About the Pouch

Your urine will now exit from a new opening called a stoma and will be collected in an external pouch. You won't be able to feel or control your urine as it leaves your body through the stoma, so you will need to wear an ostomy pouching system at all times.

The pouching system sticks or adheres to the skin around the stoma. The pouch:

- Collects urine
- Contains the odor
- Protects the skin around the stoma

Urine on the stoma will not cause any problems. Urine on the skin surrounding the stoma can cause the skin to get red or irritated.

Ostomy pouching systems are lightweight and lie flat against the body. Pouching systems come in different sizes and styles. Your doctor, or a certified ostomy nurse, can help you choose which one is best for you. Many people try several types of pouches before they choose one permanently.

Pouching System/Types

Pouch systems are made up of the skin barrier that holds the pouch to the skin and the pouch that collects the drainage. They are available as a one-piece or a two-piece system.



ONE-PIECE SYSTEM

In a one-piece pouch, the pouch and skin barrier are attached together.

TWO-PIECE SYSTEM

In a two-piece system, there is a skin barrier and a separate attachable pouch. The skin barrier adheres to the skin around the stoma and protects the skin, giving you a place to attach the pouch. The skin barrier usually includes a flange or rim that is used to seal the pouch to the skin barrier. Flange sizes are made to fit exactly to a specific pouch.



UROSTOMY POUCH

All urostomy pouches are drainable and have a special seam inside the pouch that prevents the urine from backing up around the stoma. The drain expels urine at the bottom of the pouch. The drain can be a tap that turns to open or close, or a drainage nozzle that has a plug.

Many pouch taps have a colored marking to indicate when the pouch is open. The mark cannot be seen when the tap is closed. You do not need to remove the drainable pouch to empty it. It can remain in place for several days.







Color

Some pouches are clear or transparent, and others are opaque (you can't see through them). While in the hospital, the pouch will most likely be clear or transparent. When you go home, you may prefer to switch to an opaque pouch.

Pouch Sizes

Pouches can be small or large. The size you need depends on the amount of output that you produce, as well as your personal preference. A urostomy produces liquid output and needs to be emptied about 5 to 6 times a day. Other types of pouches are also available for specific needs. At nighttime or if you use a wheelchair, you may choose to wear a mini pouch connected to a drainage bag. During intimacy and exercise, a urinary mini pouch is also an option.



Pouch Belts and Wraps

Some people wear an ostomy belt or wrap around their abdomen. The belt/wrap provides extra support. Some pouch belts are made specifically for water sports. If you choose to wear an ostomy belt:

- Attach the belt so that it lies evenly against your abdomen and lies level with the stoma.
- ► The belt/wrap should not be so tight that it cuts into or leaves a deep groove in your skin.
- You should be able to place one finger between the belt and your abdomen.







Pouch Covers

Pouch covers are lightweight, soft coverings that go over the pouch. They come in a variety of colors and prints. The coverings may decrease any uneasiness associated with having someone view the pouch. They may also reduce heat and moisture caused by the pouch resting against the skin.



Daily Care

During the day, you will need to drain your urostomy pouch about every 2 to 4 hours. You should drink 8 to 10 glasses of water each day unless your doctor tells you not to.

Nighttime Drainage

All urostomy pouches come with adapters that can be attached to a larger drainage bag. This keeps the pouch empty while you are sleeping.

Connecting to the drainage bag:

- Place the adapter on the nighttime drainage bag
- Connect the end of the pouch to the connector on the long tubing on the drainage bag
- Open the pouch tap
- Unravel and free the long tubing from any kinks
- Drainage bags can be freestanding or hooked to the side of your bed

Disconnecting and emptying the drainage bag:

- ▶ Remove the drainage bag tubing from the pouch
- Close the pouch
- Empty the urine from the drainage bag into the toilet
- You may be instructed to rinse the drainage bag with water or water and vinegar to decrease odor. Other bag-cleaning products may be suggested by your nurse or doctor



