What Is a Urostomy?

An ostomy is a surgically created opening in the abdomen for the discharge of body waste. Ostomies that discharge urine are urostomies. After the ostomy is created, your child's urine will exit the body through a stoma.

The stoma is the end of the small or large intestine that protrudes or sticks out of the abdominal wall. It is the new site where urine will leave the body and be collected in the ostomy pouching system. The size and location of the stoma depend on the specific operation and the shape of the 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 when urine flows through, so a pouch will always be worn over the stoma



Be slightly swollen for the first weeks after the operation and then shrink to their permanent size



Urostomy Home Skills Program: Welcome

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AMERICAN COLLEGE

Urostomy

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.

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

Continent urinary diversion is when a new bladder-like pouch is made out of a segment of the small and/or large intestine to hold urine. Continence means that your child will 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. Your child will urinate the same way as they did before.
- 2. Catheterizing pouch: A stoma is created and attached from the internal pouch through a small opening on your childs 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.





WATCH VIDEO Urostomy Home Skills Program: Your Urostomy

Your Urostomy Operation

Understanding Your Child's 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, down 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 your child expels their urine.



The Operation

A urostomy is an operation that reroutes urine to an opening on the surface of the abdomen. A small section of the ileum (small intestine) is removed. 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, into the ileal stoma, and into the collection pouching system. Your surgeon can also perform the operation using a section of the colon (large intestine), which is called a colon conduit.²

Kidney Ureter Stoma Segment of Intestine National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) WATCH VIDEO Urostomy Home Skills **Program: Your Operation**

Ileal Conduit with Stoma

Urostomy Output

Urine will start flowing into the ostomy pouch right after the 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 child's urine.

Urostomy Stents

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



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Pouching System

Urine will now exit from a new opening called a stoma and will be collected in an external pouch. Your child won't be able to feel or control urine as it leaves through the stoma, so an ostomy pouching system will be needed 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 ostomy nurse, will help you choose which one is best for your child. Many people try several types of pouches before they choose one for long-term use.

Pouching System

The pouch collects and holds the urine until the urine is emptied from the bottom through the tap. Pouching systems are available in many forms:

- One- or two-piece systems
- > Pouches that are clear (transparent) or opaque (cannot see through)
- ▶ Pouches that are drainable (for long-term wear) or not drainable (one-time use)
- Skin barriers that are cut-to-fit (often used immediately after surgery) or pre-cut
- Skin barriers are available as flat or convex (shaped)

Your ostomy nurse will help you decide the best fit for you.

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 urine. They are available as a one-piece or a two-piece system.

One-Piece System

Skin barrier Pouch In a one-piece pouching system, 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 and protects the skin around the stoma. The pouch attaches to the barrier with a snapped flange or adhesive seal. Flange sizes are made to fit exactly to a specific pouch. Skin barrier





WATCH VIDEO

Urostomy Home Skills Program: Pouching Systems Pouch



Urostomy Pouch Tap

All urostomy pouches are drainable and have a special seam inside the pouch that prevents the urine from backing up around the stoma. The tap on the bottom is used to drain urine out of the pouch. The tap can be a cap, a valve that twists, or a plug that is pulled out.



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

Barrier Shape

You will need a pouch barrier that fits your child's stoma type. Some stomas lie flat with the body, others sink in and most extend out. The barrier (convex or flat) will help to have the best



seal around the stoma. Your ostomy nurse can help you with the correct fit.

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 your child goes home, you may prefer to switch to an opaque pouch.



Pouch Size

Pouches can be small or large. The size that your child needs depends on the amount of urine produced. A urostomy produces liquid output and needs to be emptied about five times a day, so a larger pouch may be needed. If your child uses a wheelchair and has trouble emptying the pouch into the toilet, or moves a lot at night, a mini pouch



connected to a drainage bag is an option. For short bouts of swimming or exercise, a urinary stoma cap is available—which is a mini pouch filled with absorbent material.

Pre-Cut or Cut-To-Fit Barrier

A pre-cut barrier means that you order the size that fits closely around your child's stoma. A cut-to-fit barrier is measured and cut to the stoma size. Right after your child's operation, the stoma is swollen and continues to decrease in size over several weeks. A cut-to-fit is most common right after surgery as the stoma size changes.

Pouch Accessories

POUCH BELTS AND WRAPS

Some children wear an ostomy belt or wrap around their abdomen for added security or to help keep the pouch on during activity. The ostomy nurse may recommend wearing one if your child is having difficulty keeping the pouch on. If your child wears an ostomy belt:

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







Daily Care

During the day, the urostomy pouch will need to be drained about every 2 to 4 hours. It will need to be drained more often if your child drinks a large amount of fluids.

Nighttime Drainage

All urostomy pouches come with adapters that can be attached to a larger drainage bag that keeps the pouch empty while your child is sleeping.

Connecting to the drainage bag:

- Place the adapter on the tubing of the nighttime drainage bag.
- Connect the end of the pouch to the adapter on the nighttime drainage bag.
- Open the pouch tap.
- Unravel the long tubing from any kinks.
- Drainage bags can be freestanding or hooked to the side of your child's 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.







Additional Ostomy Resources

Resources

American College of Surgeons Ostomy Home Skills Program and E-Learning Course

facs.org/ostomy | 1-800-621-4111

Wound, Ostomy and Continence Nurses Society (WOCN®) wocn.org | 1-888-224-9626

United Ostomy Associations of America (UOAA) ostomy.org | 1-800-826-0826

American Urological Association (AUA) auanet.org

American Pediatric Surgical Association (APSA)

apsapedsurg.org

American Pediatric Surgical Nurses Association (APSNA)

apsna.org

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ACS SURGICAL PATIENT EDUCATION PROGRAM

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Assistant Director: Kathleen Heneghan, PhD, MSN, RN, FAACE

Senior Manager:

Katie Maruyama, MSN, RN

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OSTOMY TASK FORCE

Teri Coha, APN, CWOCN

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University of Chicago Medicine Chicago, IL

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Chief, Department of Urology Southern Arizona VA Healthcare System Tucson, AZ

John Easly

Patient Advocate Ostomy Support Group of DuPage County Clarendon Hills, IL

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Kathleen G. Lawrence, MSN, RN, CWOCN

Wound, Ostomy and Continence Nurses Society (WOCN[®]) Mt. Laurel, NJ

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Division of Urology Penn State Milton S. Hershey Medical Center Hershey, PA

Marletta Reynolds, MD, FACS

Pediatric Surgery Ann and Robert H. Lurie Children's Hospital of Chicago Chicago IL

David Rudzin

United Ostomy Associations of America, Inc. Northfield, MN

Nicolette Zuecca, MPA, CAE

Wound, Ostomy and Continence Nurses Society (WOCN®) Mt. Laurel, NJ

