What type of urinary diversion is right for me?

During your bladder removal surgery, your surgeon will make a new way for your urine (pee) to leave your body. This is called a urinary diversion.

There are different types of urinary diversions. This information can help you learn about your options and have a more informed discussion with your surgeon.

What is a urinary diversion?

Urinary diversion is a surgical procedure to make a new way for urine to leave your body after your bladder has been removed. Your surgeon will use a part of your intestine to make a new way for urine to come out.

Memorial Sloan Kettering Cancer Center

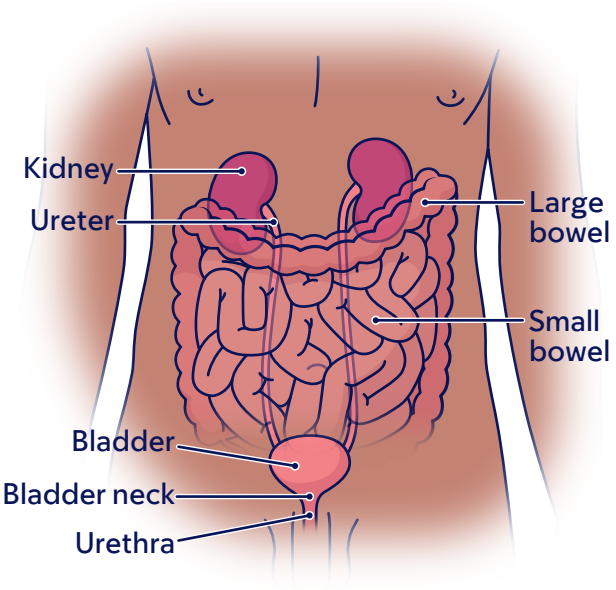
Funding: 2024 BCAN Patient-Centered Clinical Research Young Investigator Award

Table of Contents

This resource has a lot of information. Different parts may be helpful at different times. We suggest reading it once before your surgery so you know what to expect. Then, you can come back to the sections you find most helpful if you need to.

Questions:

Glossary of terms



ANATOMY TERMS

Intestine: A long tube inside your body that helps digest food and get rid of waste. It moves food and nutrients from your stomach throughout your body.

Your intestine has 2 parts:

- Your **small intestine** absorbs nutrients from food.
- Your **large intestine** absorbs water and helps form solid waste (stool or "poop") before it leaves your body.

Bowel: Another name for your intestine. People also sometimes use this word to talk about going to the bathroom. For example, the phrase "bowel movement" means passing stool.

Ureters: The 2 tubes that carry urine from your kidneys to your bladder or urinary diversion.

Urethra: A small tube that carries urine from your bladder or neobladder urinary diversion to the outside of your body. In males, the urethra goes through your penis. In females, the urethra is shorter and opens just above your vagina.

Urinary sphincter: The muscle that helps control when you urinate (pee). It acts like a valve, keeping urine in your bladder until you release it.

Bladder neck: The area where your bladder connects to your prostate (in males) or urethra (in females).

Pelvic floor: A group of muscles at the bottom of your belly that act like a hammock or a sling. These muscles support important parts inside your body, like your bladder, uterus (in women), and bowels. They help you control when you go to the bathroom and also play a role when you cough, sneeze, or lift something heavy.

DIVERSION-SPECIFIC TERMS

Urinary incontinence: Not being able to control when you pee. Incontinence can happen sometimes or often, and there are different types and causes.

Urethral stricture: A narrowing or blockage of your urethra. This narrowing can make it harder to pee and may cause a weak urine stream, pain, or other problems.

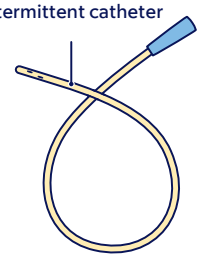
Ureteral stricture: A narrowing or blockage of your ureter. This can make it hard for the urine to flow, which can cause pain, swelling in the kidneys, infections and kidney damage.

Urinary catheter: A flexible tube used to drain urine from inside your body. Often, a urinary catheter is simply called a catheter.

There are 2 general types of urinary catheters:

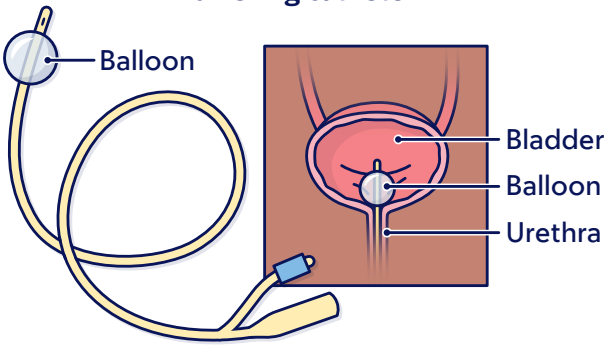
- An intermittent catheter stays in place for only as long as it takes to empty your bladder or urinary diversion. Patients put in and take out the intermittent catheter themselves.

Intermittent catheter

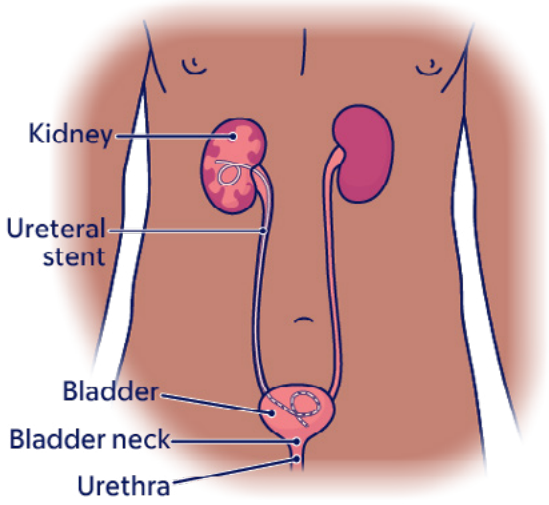


- An indwelling catheter, also called a foley catheter, stays in place for days or weeks. A small balloon inside your bladder holds it in place.

Indwelling catheter



Ureteral stent: A soft tube that the surgeon might place in your ureter during surgery. Most stents are made from silicone, are temporary, and are taken out after a few days or weeks.



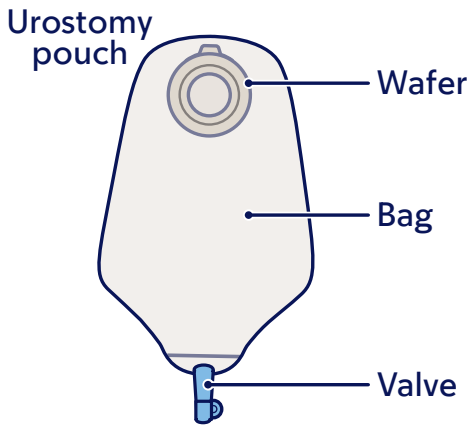
Stoma: A small permanent opening on the outside of your body created during surgery that connects your new urinary diversion to your skin and allows your urine to exit your body.

Reservoir: A sac inside your body created during surgery from the bowel to store or collect urine. A reservoir is sometimes called a pouch.

Catheterizable channel: A tube, made from a piece of your intestine or appendix, that connects a urinary reservoir to your stoma. A catheter is inserted through the channel to drain urine.

Urostomy pouch: An appliance you wear on your belly to collect urine that comes out of your stoma. You wear the pouch all the time. You will need to empty the urine a few times a day and change the pouch every 3 to 4 days. This is different for each person.

The pouch has several parts:



- A sticky part (called a flange or wafer) that helps the pouch stay on your belly and stops leaks.
- A bag that sticks to the wafer and stores urine.
- A valve at the bottom of the bag so you can easily empty the urine when the pouch gets full.

Surgical drain: A soft tube that your surgeon may place during surgery to check and collect the liquid in your abdomen. The tube comes out through the skin and connects to a small bag or bulb that collects the liquid.

Contracting: The process of tightening or getting smaller. For example, muscles contract when they tighten to help you move.

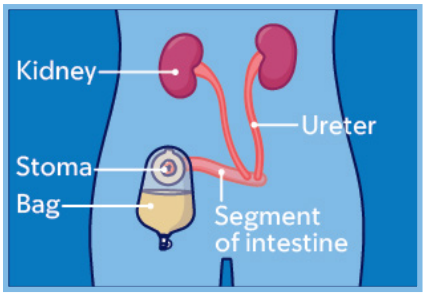
Irrigating: The process of gently flushing a special solution into a reservoir or neobladder and then gently suctioning it out. This helps keep the reservoir or neobladder clean and reduces infections.

Voiding: The process of emptying your bladder or urinary diversion to get urine out of your body. It's another word for peeing or urinating.

Timed voiding: The process of going to the bathroom to pee on a regular schedule, even if you don't feel like you have to go.

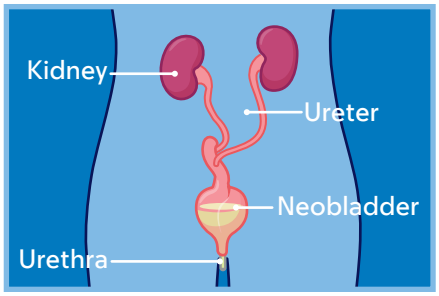
3 common types of urinary diversions

Ileal conduit



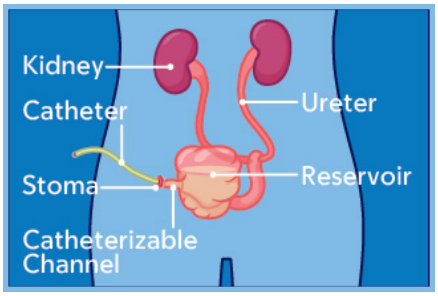
Your surgeon will use a small piece of your intestine to make the ileal conduit. They will connect one end to your ureters and the other end to a stoma. Your urine will collect in the urostomy pouch placed over the stoma.

Neobladder



Your surgeon will use a piece of your intestine to make the neobladder. They will connect your ureters to one end. They will connect the other end to your urethra. Your urine will collect in the neobladder, and you will urinate through your urethra.

Continent cutaneous reservoir



Your surgeon will use a piece of your small and large intestine to make the continent cutaneous reservoir. They will connect your ureters to the reservoir and link the end of the reservoir to a catheterizable channel that connects to a stoma. Your urine will collect in the reservoir, and you will drain your urine with an intermittent catheter through this catheterizable channel.

There are different types of continent cutaneous reservoirs. Some common types of reservoirs are the Indiana pouch, Kock pouch, and Mainz pouch .

Note:

Not all surgerons are experienced with all diversions. Discuss your options with your surgeon.

Even if you choose a urinary diversion ahead of time, your surgeon may learn more about your cancer or anatomy during your surgery. What they learn can change your urinary diversion options. If this happens, they may have fewer choices and will need to decide on the best option during your surgery.

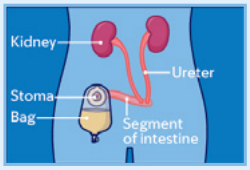
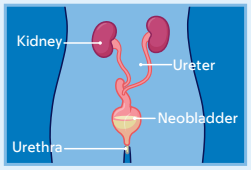
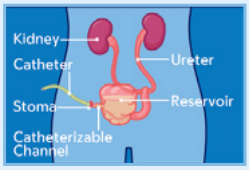
Notes:

Things to consider when making your choice

There are lots of things to think about when choosing your urinary diversion. Here are some examples.

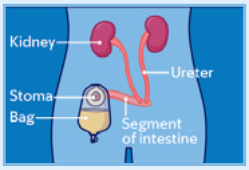
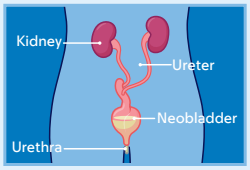
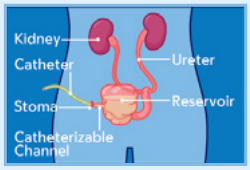
Medical factors to consider

Having a urinary diversion is a big change for your body, and it needs time and strength to heal afterward. Your overall health plays a big role in which urinary diversions are an option for you. Here are some things your care team will consider when deciding which type of urinary diversion is right for you.

This applies to me	Your body	 **Ileal conduit**	 **Neobladder**	 **Continent cutaneous reservoir**
☐	**You have cancer in your urethra (males and females) or bladder neck area (females)**	Yes	No	Yes
☐	**You have urinary incontinence, a urethral stricture, or have had pelvic radiation therapy**	Yes	Discuss with your surgeon	Yes
☐	**You have Crohn's disease, ulcerative colitis, other digestive problems, or have had extensive bowel surgery**	Yes	Discuss with your surgeon	Discuss with your surgeon
☐	**A healthcare provider has told you your kidneys don't work as well as they should**	Yes	Discuss with your surgeon	Discuss with your surgeon
☐	**A healthcare provider has told you your liver doesn't work as well as it should**	Yes	Discuss with your surgeon	Discuss with your surgeon
☐	**A healthcare provider has told you your heart or lungs don't work as well as they should**	Yes	Discuss with your surgeon	Discuss with your surgeon
☐	**You need help bathing, dressing, using the toilet, moving from one place to another, or eating**	Yes	No	No

Lifestyle factors to consider

If you are eligible for multiple types of urinary diversions, think about your daily life and what is important for you. Below are a few factors you may want to consider when making your decision.

This issue is important to me	Issue	 Ileal conduit	 Neobladder	 Continent cutaneous reservoir
☐	**Postoperative recovery time (varies by person)**	6 weeks to 3 months.	6 weeks to 3 months. *Up to 12 months to adjust to a neobladder.	6 weeks to 3 months. *Up to 12 months to adjust to a reservoir.
☐	**Wearing a urostomy pouch**	Yes.	No.	Very rarely.
☐	**Inserting a catheter to drain urine**	No.	Only if you cannot empty your neobladder on your own.	Always.
☐	**Following a schedule to empty your urine**	Empty urostomy pouch every 2 to 4 hours or when half full	At first: void every 2 hours, day and night. Over time: void every 4 hours during the day and 1 to 2 hours at night.	At first: catheterize every 2 hours, day and night. Over time: catheterize every 4 hours during the day and 1 to 2 hours at night.
☐	**Needing to wear pads or diapers**	No.	Yes, early on. Daytime leakage improves sooner than nighttime leakage. Occasionally, it can be permanent.	No.
☐	**Sleep schedule**	Connect the urostomy pouch to an overnight bag. No need to wake to empty it.	You will void overnight. Every 2 to 3 hours at first and 1 to 2 times overnight once the neobladder stretches out.	You will catheterize to empty the reservoir overnight. Every 2 to 3 hours at first, and 1 to 2 times overnight once the reservoir stretches out.
☐	**Travel considerations**	Always carry urostomy supplies. Consider informing TSA to speed screening.	You may need to carry pads or catheters, depending on your situation.	You will always carry catheters and irrigation supplies.
☐	**Sexual activity considerations**	Empty pouch before sex. You may use an ostomy wrap or a stoma guard.	Empty the neobladder before sex. You may have urinary leakage with arousal or climax.	Empty the reservoir before sex. You may cover the stoma with a dressing.

*See the 'what to expect' and 'FAQ' sections for more detailed information about each of these issues.

Risks and complications

It's common to have a complication (problem related to surgery) after bladder removal surgery. About 70 out of 100 people who have bladder removal surgery have a problem in the first 90 days after surgery. Most of these are lower-risk concerns that can be easily managed. About 20 out of 100 people have a serious problem after bladder removal surgery. Here are some examples of possible risks and complications:

How often?	Event
Common In 100 people who have this surgery, more than 20 may have the event.	Wound infections
	Urinary tract infections (UTI)
	Sexual dysfunction (erectile dysfunction, shortened vaginal canal)
	Readmission to the hospital
Occasional In 100 people who have this surgery, between 4 and 20 may have the event.	Ileus (slow return of bowel function)
	Anastomotic stricture (scar tissue where your ureters connect to your urinary diversion or where your neobladder connects to your urethra)
	Blood clots in the blood vessels of the legs or lungs.
	Low vitamin B12 levels over time
	Changes in bowel habits (needing to go more often, diarrhea, constipation)
Rare In 100 people who have this surgery, 3 or fewer may have the event.	Bowel obstruction (a blockage in your intestine) or bowel leak from where your surgeon reconnected your bowel back together
	Urine leak where your ureters connect to your intestine, or from the connections made within your urinary diversion
	Wound separation
	Incisional hernia (when part of your intestine or other tissue pushes through your abdominal muscles near the surgical cut)
	Death (risk increases with age)

***This list does not include every complication. Talk with your surgeon about your risks.**

Specific complications by diversion type

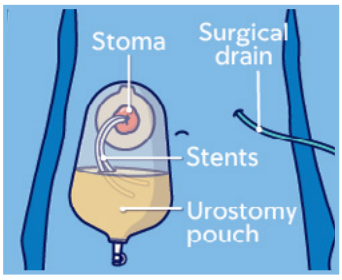
Common	In 100 people having surgery, more than 20 and as many as 100 may have the event
Occasional	In 100 people having surgery, between 4 and 20 may have the event
Rare	In 100 people having surgery, 3 or fewer may have the event

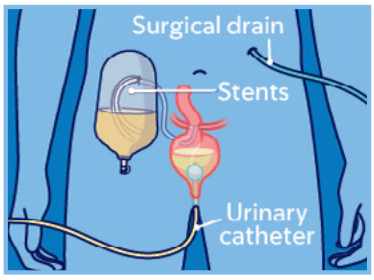
	Ileal conduit	Neobladder	Continent catheterizable reservoir
Problems with the stoma Your ostomy nurse and care team will help you address these problems if they come up.	**Parastomal hernia** (a bulge that appears next to the stoma because of muscle weakness): **Common** **Stoma dermatitis** (skin irritation around the stoma): **Common** **Stomal stenosis** (narrowing of the stoma that makes it hard for urine to drain): **Occasional**	No stoma	**Parastomal hernia** (a bulge that appears next to the stoma because of muscle weakness): **Occasional** **Stoma dermatitis** (skin irritation around the stoma): **Rare** **Stomal stenosis** (narrowing of the stoma that makes it hard to put a catheter in the stoma): **Common**
Urinary leakage If this doesn't go away, you may need more testing and treatment.	**Urostomy bag leaking** Right after surgery: **Common** As you get used to the urostomy bag: **Rare**	**Daytime urinary leakage that makes you need to wear a pad or diaper.** Right after surgery: **Common** 1 year after surgery: **Occasional** **Nighttime urinary leakage that makes you need to wear a diaper: Common**	**Urinary leakage from the stoma: Occasional**
Urinary retention (needing to use a catheter to empty the diversion)	**Rare**	Male: **Occasional** Female: **Common**	**Always (not a complication)**
Electrolyte or metabolic problems. This can be addressed with medications.	**Occasional**	**Occasional**	**Common**
Stone buildup in your urinary system. You can help keep this from happening by drinking enough water, timed voiding, and irrigating the diversion as recommended by your care team. This can be treated with medicines and surgery.	**Occasional**	**Rare**	**Common**

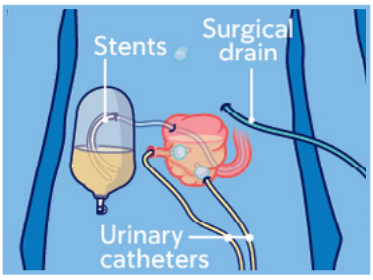
What to expect during each stage of recovery

Your recovery after surgery will be a little different based on which urinary diversion you have. Things get easier with time, but it can be helpful to know what to expect at each stage of your recovery. There are lots of resources to help you learn how to take care of your urinary diversion. Your care team, ostomy nurse, and others will be there to support you.

What to expect: Right after surgery



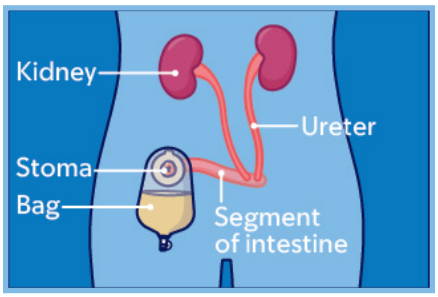


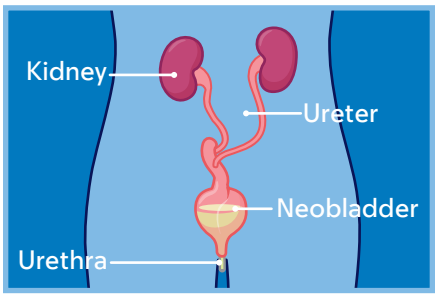


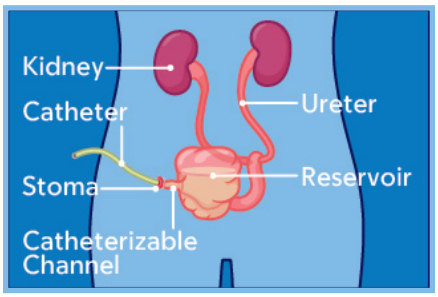
	Ileal conduit	Neobladder	Continent cutaneous reservoir
Tubes right after surgery	You will wake up after surgery with: • Stents, if needed • A tube in your stoma, if needed • A urostomy pouch • A surgical drain	You will wake up after surgery with: • Stents, if needed • 1 or more catheters in your neobladder • A surgical drain	You will wake up after surgery with: • Stents, if needed • 1 or more catheters in your reservoir • A surgical drain
During the hospital stay	• An ostomy nurse or your care team will teach you and your caregiver how to empty and change your urostomy pouch.	• Your care team will teach you and your caregiver how and when to irrigate the catheter in your neobladder. You will need to do this multiple times a day while the catheter is in place.	• Your care team will teach you and your caregiver how to irrigate the catheter in your reservoir. You will need to do this multiple times a day while the catheter is in place.
Tubes you will go home with	• You will go home with the urostomy pouch. • You may also go home with other tubes, depending on what your surgeon thinks is best for you.	• You will go home with a urinary catheter in your neobladder. This is in place to let your neobladder heal. • You may also go home with other tubes, depending on what your surgeon thinks is best for you.	• You will go home with catheters in your reservoir. These are in place to let the reservoir heal. • You may also go home with other tubes, depending on what your surgeon thinks is best for you.

NOTE: Getting used to a urinary diversion is a big change for your body and your daily life. It can really help to have family or friends with you when you first go home. Some people also stay at a rehab center after surgery to build strength and get extra support.

What to expect: When you go home after surgery

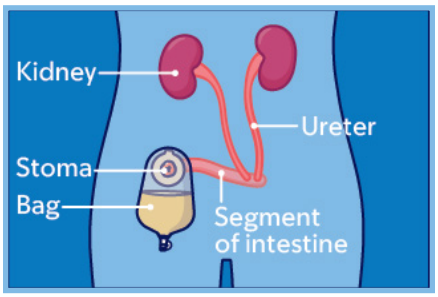


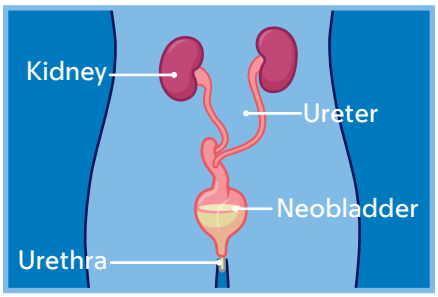


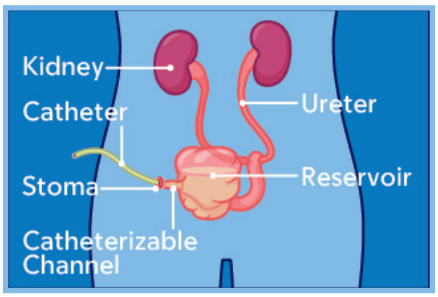


	Ileal conduit	Neobladder	Continent catheterizable reservoir
Imaging and follow up	• Most people do not need imaging scans right after surgery.	• You will go back to your surgeon's office to have the urinary catheter taken out. • They may recommend an X-ray of your neobladder ('cystogram') before catheter removal to check how the neobladder is healing. • Your care team will probably give you antibiotics to take before your catheter is removed.	• You will go back to your surgeon's office to have the urinary catheters from the reservoir taken out. • They may recommend an X-ray of your reservoir ('pouch-o-gram') before catheter removal to check the healing of the reservoir. • Your care team will probably give you antibiotics to take before your catheters are removed.
Taking care of your urinary diversion	• You and your caregiver will keep getting better at changing your urostomy pouch. Your care team and ostomy nurse will support you. • You will need to learn to care for the skin around your stoma.	• Your care team will teach you how to empty your neobladder. To do this, you will first relax your pelvic floor and then squeeze the muscles in your abdominal wall to void through your urethra. This is just like how you poop or let out gas. This is called the strain voiding technique. • You must void on a schedule during the day and night. About every 2 hours at first. As your neobladder stretches and can hold more urine, you will void less often. • Your care team will teach you how to strengthen your urinary sphincter muscle to control urinary leakage. This usually gets better over time. You will need pads or adult diapers until the leakage gets better. Most people notice their bladder control improves during the day before it does overnight. Seeing a pelvic floor physical therapist may help. • If you cannot empty your neobladder, your care team will teach you how to drain your urine using a catheter on a set schedule.	• Your care team will teach you how to drain your urine using an intermittent catheter. They will also teach you how to irrigate your continent cutaneous reservoir. • You must empty your reservoir on a schedule during the day and night. About every 2 to 3 hours at first. As your reservoir stretches and can hold more urine, you will need to catheterize less often. • In some cases, urine may leak from your stoma. • If you cannot get the catheter into your reservoir, you can try catheterizing in a different position (like sitting, standing, or lying down), staying relaxed, using plenty of lubricant on the catheter, or trying a smaller or different type of catheter. If you still can't get it in, contact your care team right away so they can help you.
Supplies to keep with you	• You will need to carry urostomy pouch supplies when you go to your doctor's office, have procedures or travel.	• You may need to carry pads, adult diapers, or catheters, depending on your situation.	• You will need to carry catheters with you at all times and irrigation supplies when you travel.

What to expect: 1 to 3 months after surgery

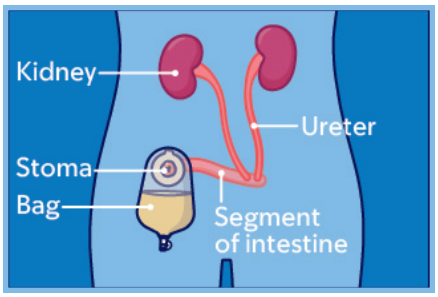


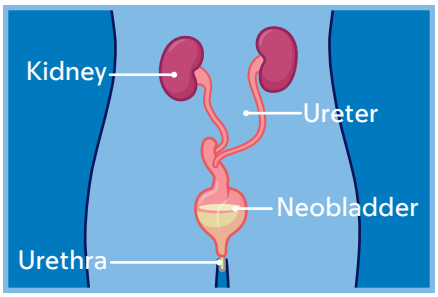


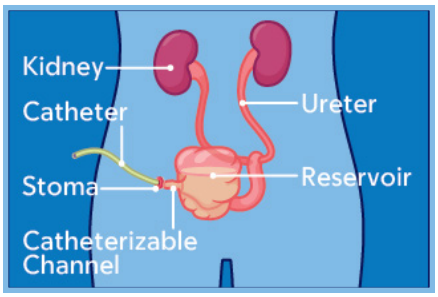


	Ileal conduit	Neobladder	Continent catheterizable reservoir
Taking care of your urinary diversion	• You and your caregiver will keep getting better at changing your urostomy pouch. Your care team and ostomy nurse will support you. • You will need to learn to care for the skin around your stoma.	• You will get more comfortable with relaxing your pelvic floor and with tightening your abdominal muscles to urinate through your urethra. • You will have urine leakage during the first part of your recovery. This should slowly get better over time. Most people notice their bladder control gets better during the day before it does at night. You will need to wear pads or diapers while your body heals. Doing pelvic floor exercises can help you regain control and reduce leakage. • You will need to follow a schedule for going to the bathroom, even during the night. This is called timed voiding and helps make sure your neobladder doesn't get too full or stretched out. Follow the schedule your care team gives you. • The time between bathroom trips will get longer as your neobladder gets used to holding more urine and stretches out. • If you cannot empty your neobladder well by strain voiding, your care team will teach you how to place an intermittent catheter through your urethra to drain the urine. Follow the catheterization schedule your care team gives you.	• You will use a catheter to drain your urine every 4 hours. • You may need to irrigate your reservoir a few times a week to clear out mucus. Follow your care team's recommendation. • If you cannot get the catheter into your reservoir, try troubleshooting yourself. If you still can't get it in, contact your care team right away so they can help you.
Supplies to keep with you	• You will need to carry urostomy pouch supplies when you go to your doctor's office, have procedures, or travel.	• You may need to carry pads, adult diapers, or catheters, depending on your situation.	• You will need to carry catheters with you at all times and irrigation supplies when you travel.

What to expect: About 1 year after surgery



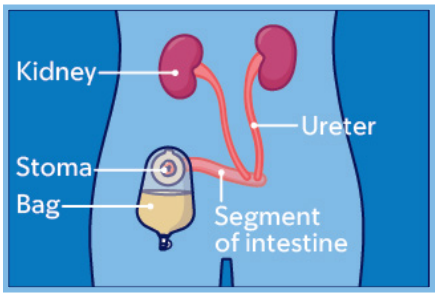


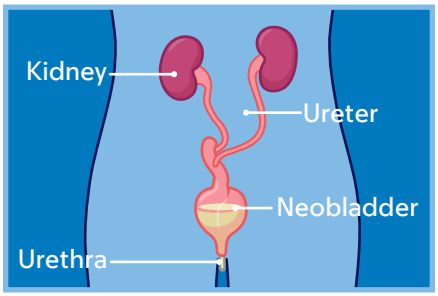


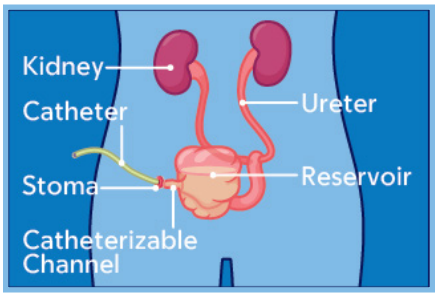
	Ileal conduit	Neobladder	Continent catheterizable reservoir
Taking care of your urinary diversion	• You and your caregiver will become comfortable with changing your urostomy pouch. • You will need to continue to care for the skin around your stoma. • If you lose or gain weight, you will work with an ostomy nurse to change the type of urostomy pouch you use.	• You will get more comfortable using the strain voiding technique. Timed voiding will become part of your daily routine with the goal of voiding about every 4 hours during the day and 1 to 2 times overnight. • Most people notice they have better control during both day and night and leak less urine. Daytime control often returns before nighttime. • If you still have urinary incontinence during the day or night, your care team may recommend that you see a pelvic floor physical therapist or a reconstructive urologist. They can help you improve your bladder control. • If you cannot fully empty your neobladder on your own, you may need to keep using a catheter to help. Your care team will tell you if this is necessary.	• You will get comfortable with using a catheter to drain your urine about every 4 hours during the day and 1 to 2 times overnight. • You will get comfortable irrigating your reservoir as often as needed to clear out mucus. Follow your care team's recommendation. • If you cannot get the catheter into your reservoir, try troubleshooting yourself. If you still can't get it in, contact your care team right away so they can help you.
Supplies to keep with you	• You will need to carry urostomy pouch supplies when you go to your doctor's office, have procedures, or travel.	• You may need to carry pads, adult diapers, or catheters, depending on your situation.	• You will need to carry catheters with you at all times and irrigation supplies when you travel.

Notes:

Which diversion feels right?







There is no perfect urinary diversion. Over time, people are just as happy with each option. The goal is to choose the option whose challenges best fit your life.

Ileal conduit *If you agree with these statements, an ileal conduit may be a good option for you.*	**Neobladder** *If you agree with these statements, a neobladder may be a good option for you.*	**Continent cutaneous reservoir** *If you agree with these statements, a continent cutaneous reservoir maybe a good option for you.*
I am willing to work with an ostomy nurse and my care team to learn how to care for my urostomy pouch.	I am willing to spend time, effort, and patience to learn how my new bladder works and how to take care of it. I know the time I spend learning now will help me adjust to my new normal in the long run.	I am willing to spend time, effort, and patience to learn how my reservoir works and how to take care of it. I know the time I spend learning now will help me adjust to my new normal in the long run.
I am willing to empty my urostomy pouch at regular intervals and change the urostomy pouch every few days. I will work with my care team to address skin-related concerns or hernias that may come up.	I understand I will need to learn a new way of voiding and void on a schedule to empty my neobladder, day and night. At first, I will need to go more often, but over time, I will be able to wait longer between voids. I understand that I may leak urine from my urethra after surgery, needing pads or diapers, at least during recovery, and sometimes long-term. I also understand that nighttime leakage takes longer to get better than daytime leakage.	I am willing to catheterize my reservoir on a schedule, day and night, for the rest of my life. I am willing to irrigate the reservoir to remove mucus. I understand that if I have trouble putting a catheter into my reservoir, I will need to troubleshoot this. If I still can't get it in, I will contact my care team right away so they can help me.
I am not willing or able to put a catheter in my body to empty my urine.	I am willing to learn how to use the strain voiding technique to empty my neobladder. If I can't empty it fully, I am willing to use a catheter to help.	I am willing to catheterize on a regular schedule for the rest of my life. I understand that I need to carry catheter supplies with me at all times.
I am ready to follow hydration guidelines.	I am ready to follow hydration guidelines, void at scheduled times, and learn a new way to empty my bladder.	I am ready to follow hydration guidelines, catheterize at scheduled times, and irrigate my reservoir to clear out mucus.
I feel comfortable adapting to having an external bag on my body as part of my diversion.	I want to prioritize having my body look the same way it does now, and this should be a part of the decision-making process.	I want to prioritize having my body look the same way it does now, and this should be a part of the decision-making process.

Common questions

What is the average recovery time?

Recovery times are different for everyone. In general:

- With an ileal conduit, it takes about 6 weeks to 3 months to go back to most usual activities.
- With a neobladder or continent cutaneous reservoir, it takes about 6 weeks to 12 months for full recovery and adjustment.

Some people may feel better sooner, but it often takes time to build strength and get used to lifestyle changes. Adjusting to a urinary diversion isn't just physical; it's a big mental and emotional change. It is OK to ask for support as you get used to a new way of life.

Can I sleep through the night?

This can vary based on the type of diversion you have and your stage of recovery.

If you have an ileal conduit, you can connect your urostomy pouch to an overnight drainage bag. You may need to change your sleeping position when you are using the overnight bag.

If you have a neobladder or continent cutaneous reservoir, you should empty your diversion at regular intervals overnight. This is more often in the beginning and less often once your neobladder or reservoir stretches out over time.

With a neobladder, nighttime leakage usually takes longer to improve than daytime leakage. You may need to wear adult diapers or pads at night to stay dry. Some males with neobladders use a condom-catheter overnight.

To sleep better, empty your neobladder or reservoir right before you go to bed, stop drinking for 4 hours before bedtime, avoid caffeine after lunch, and treat health problems like sleep apnea, which can cause your body to produce more urine while you sleep.

Will there be limits on my activity?

No, there are usually no limits on your activity once you've fully recovered from surgery, no matter what type of diversion you have. Staying active is strongly encouraged. Just keep in mind that because you've had abdominal surgery, you may have a higher risk of hernias, so be careful with heavy lifting or strenuous activities. Some patients use a hernia belt.

Will this impact sexual activity?

Recovery is different for everyone.

If you have a penis, your erectile function (your ability to get an erection) after surgery will depend on your erectile function before surgery and whether you can have nerve-sparing surgery. Your surgeon will determine if you can have nerve-sparing surgery. If you have erectile dysfunction (trouble getting an erection), treatment options, including medicines and surgery, are available.

If you have a vagina, your surgeon will assess if the vagina can be preserved based on the extent of the disease. If part of your vagina is removed, your vagina may be shorter after surgery. This can affect penetration (putting something into your vagina). In most cases, the clitoris stays intact. Vaginal dilators and hormonal therapy may help improve comfort.

Please talk to your surgeon about your options.

Will I need to stay near home with a continent cutaneous reservoir, or if I need to catheterize a neobladder?

No, you don't need to stay close to home. With the right supplies, you can use a catheter wherever you are and travel anywhere in the world with any of these diversions. Once you get used to it, most people say it takes less than 10 minutes each time.

Can I go swimming with a urinary diversion?

Yes, you can go swimming with all diversion types. It's helpful to empty the urostomy pouch, catheterize, or void before you go swimming. Some patients use a special urostomy bag for swimming with an ileal conduit, but this is not necessary.

How do I get supplies for my urostomy or catheters?

A medical supply company will ship your supplies to your home every month. An ostomy nurse or your care team will set this up for you. It's usually covered by insurance. With an ileal conduit, you can buy special clothes for swimming, sexual activity, and keeping the pouch hidden.

Can I change the type of diversion I have?

Changing your diversion type is very rare. In some cases, your surgeon may offer it, but it would require a more complex surgery and might mean using more of your bowel. This is something we try very hard to avoid.

Why can't I get a bladder transplant?

Bladder transplants are still experimental, and we don't know yet how well they work in the short or long term. Also, people who have had cancer usually can't get any kind of organ transplant until they have been cancer-free for at least 5 years. That's because the medicines needed after a transplant weaken the immune system and could make the cancer grow faster.

What should I be aware of for each urinary diversion as I age?

Some nursing home staff, home health nurses, and aides know how to care for urostomy pouches and reservoir catheters. It's a good idea to check their specific training and policies. If the staff isn't comfortable putting a catheter into a continent reservoir, and you can't do it yourself anymore, a catheter can be left in place. This type of catheter needs to be irrigated several times a day.

For patients with a neobladder, you may have new urinary leakage or not be able to empty all the way as you get older. You should update your care team with these changes. Consider wearing a medical alert bracelet to let emergency workers know you have a urinary diversion.

You will know more about your diversion than some healthcare workers. It is important to speak up and be your own advocate.

How do I manage UTIs?

Urine from a urinary diversion will always have some bacteria because the diversion is made from bowel. If you don't have any symptoms of a UTI, your care team will usually not recommend antibiotics. However, UTIs with a urinary diversion can be serious. To help prevent infections, it is important to drink plenty of fluids, empty your urine regularly, and flush out mucus with irrigation. If you keep getting UTIs, your care team may give you medicine or do more tests to help prevent future infections.

What does catheterization feel like?

You may feel some discomfort when you are learning to self-catheterize, but this gets better over time. You will need to work with your care team to find a way to self-catheterize that works best for you.

If you have a continent cutaneous reservoir, your catheterizable channel has no nerve endings, so catheterization is usually painless. Your care team will teach you how to self-catheterize and help you figure out and fix any issues.

If you have a neobladder, it will not feel like your original bladder because it's made of a piece of your intestine. This can make it easier to self-catheterize, if you need to.

What is my follow-up plan for my care?

The follow-up plan for your care will depend on how aggressive your cancer is and the type of urinary diversion you have. It's important to talk about this with your surgeon to make sure you get guidance that's right for you.

No matter what type of diversion you have, it's important to get regular check-ups over the long term to watch out for any problems that may come up later.

How can I connect with someone who has a urinary diversion?

Many people find it helpful to speak with others who have gone through the same experience. You can ask your surgeon's office for information on local peer support groups or check on social media. You can also join the Bladder Cancer Advocacy Network (BCAN) support groups to connect with other patients and caregivers. Visit www.bcan.org/bladder-cancer-support-groups to learn more. The survivor-to-survivor program is especially highly recommended (www.bcan.org/find-support/survivor-to-survivor).

References and resources

General
- www.bcan.org
- https://med.virginia.edu/ginutrition/wp-content/uploads/sites/199/2014/06/Van-der-Aa-July-2012.pdf

Ileal conduit
- www.msk.org/pe/bladder_surgery_urostomy
- www.med.umich.edu/1libr/RogelCancerCenter/UrostomyBooklet.pdf
- www.med.unc.edu/urology/patientcare/procedures/cystectomy/postoperative-care/
- www.urmc.rochester. edu/medialibraries/urmcmedia/ urology/adult-patients/documents/cystectomy/53505- urmc-open-guide.pdf

Neobladder
- www.msk.org/pe/bladder_surgery_neobladder
- www.msk.org/pe/caring- ileal-neobladder
- www.kingstonhsc.ca/sites/default/files/legacy/files/subsite-basic-page/neobladder_en-april2022-final.pdf

Training your pelvic floor muscles:
- www.msk.org/pe/kegels_males
- www.msk.org/pe/kegels_females

Find local pelvic floor physical therapists:
- www.aptapelvichealth.org/ptlocator

Virtual physical therapy:
- www.kins.com/pelvic-health
- www.pelvicgym.co/

Sex Educators:
- www.aasect.org
- www.sstarnet.org/find-therapist

Virtual ostomy nursing:
- www.ostomy.org
- www.MePlusRecovery.com
- www.wocn.org

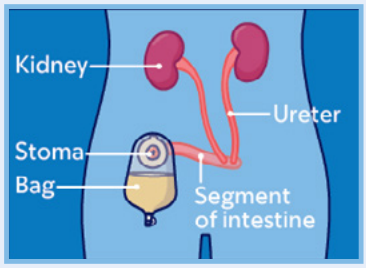
Continent cutaneous reservoir
- www.msk.org/pe/bladder_surgery_ccd
- www.bcan.org/treatment-talk-indiana-pouch

References

- Shabsigh, A., et al. (2009). "Defining Early Morbidity of Radical Cystectomy for Patients with Bladder Cancer Using a Standardized Reporting Methodology." *European Urology* 55(1): 164-176.
- Catto, J. W. F., et al. (2022). "Effect of Robot-Assisted Radical Cystectomy With Intracorporeal Urinary Diversion vs Open Radical Cystectomy on 90-Day Morbidity and Mortality Among Patients With Bladder Cancer: A Randomized Clinical Trial." *Jama* 327(21): 2092-2103.
- Clements, M. B., et al. (2022). "Health-related Quality of Life for Patients Undergoing Radical Cystectomy: Results of a Large Prospective Cohort." *European Urology* 81(3): 294-304.

Quick summary

Ileal Conduit

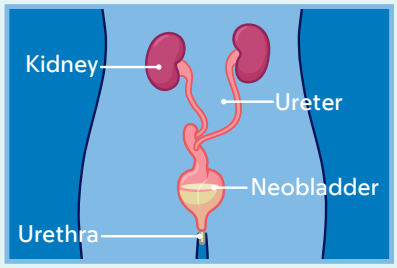


Urine drains continuously from a stoma (an opening on the abdomen) into an external pouch.

Daily Life Comparison

- ✓ **Will I wear an external pouch?** Yes, always
- ✗ **Will I need to use a catheter?** No
- ✗ **Will I need to wear a pad or diaper?** No

Neobladder

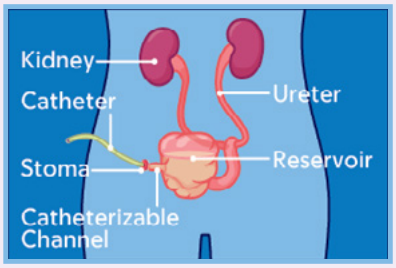


An internal pouch (reservoir) is connected to the urethra, allowing you to urinate.

Daily Life Comparison

- ✗ **Will I wear an external pouch?** No
- ? **Will I need to use a catheter?** Sometimes
- ? **Will I need to wear a pad or diaper?** Maybe

Continent Cutaneous Reservoir



An internal pouch is dreained on a schedule by inserting a catheter into a stoma.

Daily Life Comparison

- ✗ **Will I wear an external pouch?** No (or very rarely).
- ✓ **Will I need to use a catheter?** Yes, always.
- ✗ **Will I need to wear a pad or diaper?** No