

Introduction

The bladder is a hollow muscular organ shaped like a small balloon that is located in the lower abdomen. The kidneys (bean-shaped organs near the middle of the back) normally remove excess water and waste products from the bloodstream and store it as urine in the bladder. The rate at which urine is produced depends on many things, such as fluid intake, activity, and environmental temperature.

As the bladder fills with urine over several hours, a normal bladder will send signals to the brain that the bladder is full and needs to empty. *Intermittent self-catheterization* (ISC) is a safe and effective alternative method to empty the bladder. ISC involves inserting a catheter (a flexible hollow tube) into the urethra (the urine channel that drains urine from the bladder) several times a day. ISC is used to help protect the kidneys, prevent incontinence (urine leakage), and lessen the number of infections by promoting good drainage of the bladder.

It has been used successfully for individuals with injury to the nerves of the bladder, spinal cord, and brain as well as in persons with diabetes, multiple sclerosis, spina bifida, myelodysplasia, enlarged prostate, and continent urinary diversion. It can be done on a short or long-term basis, depending on the bladder's ability or inability to return to normal function.

How to Perform ISC

ISC is performed by intermittently inserting a catheter into the urethral opening (meatus) and advancing it into the bladder to allow the bladder to empty. Only individuals who know the correct technique of proper insertion and care of the catheter should perform catheterization.

It is recommended ISC be performed at regular intervals throughout the day depending on the person's fluid intake and as directed by the healthcare provider. The ability to perform catheterization and adhere to a schedule is essential to success of the ISC program. You

may need to catheterize every 4 - 6 hours to keep the amount of urine in your bladder less than 400-500 mL (13-15 ounces). If you are urinating but continue with high residual urine volumes (the amount left in your bladder after urinating), your healthcare provider may ask you to increase the number of times per day you catheterize.

Many persons will catheterize using a *clean* method, which means you do not need to wear gloves, just wash your hands with soap and water before catheterizing. It is recommended that you use a new catheter each time you catheterize. For alternatives to single-use catheters, contact the healthcare provider who prescribed the ISC for you.

Materials Needed to Prepare

- Soap and water to wash hands and the urethral opening. If soap and water are not readily available, waterless alcohol-based hand rub or towelettes may be used.
- Urethral catheter (male or female). The size of the catheter should be the smallest size (called a *French* size) to pass easily into the bladder and allow drainage.
- The correct type and size of the catheter to be used will be determined by your healthcare provider.
- Lubricant (water-soluble jelly) packet or tube.
- Urinal or appropriate container to collect urine (if not emptying into a toilet).
- Mirror (for women to locate the opening of the urethra).

Set Up

- Gather all necessary products before beginning the procedure.
- Males and females should be instructed on anatomy and how to perform the procedure by a member of their healthcare team.

ICS Tips

- Never force the catheter. Difficulty inserting a straight catheter or not being able to catheterize may require you to see your urologist. Men who have difficulty with a straight catheter may require a Coudé catheter. Coudé catheters have a special curve at the tip that makes passage through the prostate easier.
- If you are at home and unable to pass the catheter and feel that your bladder is full, go to your nearest urgent care center/emergency room for appropriate evaluation.
- It is not uncommon to have an abnormal urinalysis (urine test). You should only be treated for a urinary tract infection if you have signs and symptoms of an infection such as tenderness in your lower abdomen or pelvic area, back pain, malaise, confusion, cloudy or foul-smelling urine, urgency (pressing need to urinate), frequency (urinating more often than usual), pain with urination, fever higher than 100.4° F, and/or chills, nausea, and vomiting. Contact your healthcare provider if these symptoms occur.
- For patients with multiple sclerosis or other conditions that may compromise their immune system, ISC may need to be performed using sterile technique which is when you use sterile gloves, antiseptic to wipe the area where the catheter is inserted, and a sterile catheter each time you catheterize. Contact your urologic healthcare provider for guidance.

Points to Remember

- Do not remove the catheter from the package until ready to use.
- Check the catheter for defects such as cracks or color changes before use.
- Avoid touching the tip of the catheter and avoid letting it touch other surfaces.
- A prescription or order from your healthcare provider is needed to state the number of times an individual catheterizes each day. Check with your individual insurance carrier to see which benefits are available to you.
- This fact sheet focuses on the adult patient. Children require special assessment and teaching to be successful. Contact your pediatric urology healthcare provider for guidance.
- If you encounter problems performing ISC, call your healthcare provider for timely advice.

Females (see Figures 1 and 2)

- Wash hands thoroughly with soap and water or use a waterless alcohol-based hand rub or towelette.
- Find a comfortable position.
- Spread the labia apart using the hand you will not be using to hold the catheter.
- Clean the entire urethral opening area from front to back with warm, soapy water and a clean washcloth or towelette.
- Use a mirror initially to aid in the location of your urethra if needed. It is located below the clitoris and just above the vagina in most females, visually seen as “^”.
- Lubricate the tip of the catheter with the water-soluble jelly if not already lubricated.
- Rotate the tip to spread the lubricant along the entire length of the catheter.
- With a collection container ready, slowly and gently insert the catheter (2-4 inches) into the urethra until urine begins to flow.
- If resistance is felt with insertion, hold firm, gentle, steady pressure and the muscles should relax allowing the catheter to pass. You can also cough or take a few slow, deep breaths to help your muscles relax.
- Allow urine to empty into the collection container or into the toilet.
- When the urine flow stops, slowly withdraw the catheter, allowing the lower parts of the bladder to drain. When there is no further flow of urine, remove the catheter and dispose (if disposable) or clean it with warm soapy water (if reusable).
- Record the amount of urine, if requested by the healthcare provider prescribing the catheterization.
- Wash hands thoroughly with soap and water.

Males (see Figures 1 and 3)

- Wash hands thoroughly with soap and water or use a waterless alcohol-based hand rub or towelette.
- Find a comfortable position. Some men prefer to stand for the procedure but it can be done just as easily in the sitting position.
- Hold the penis in an upright position (pointing towards the belly button) and wash the urethral opening with soapy water and a clean washcloth or towelette (when away from home). For uncircumcised men, pull back the foreskin first and clean the meatus in the same way.
- Lubricate the tip of the catheter with the water-soluble jelly; if not already lubricated.
- Rotate the tip to spread the lubricant along the entire length of the catheter.

- With a collection container ready or over the toilet, slowly and gently insert the catheter into the urethra, approximately six to eight inches or until urine begins to flow. Often the entire length of the catheter must be inserted for urine flow to occur.
- There may be some resistance to the passage of the catheter halfway through the urethra, at the part of the urethra where the sphincter (valve) and prostate gland is found. If this happens, hold firm, gentle, steady pressure and the sphincter will open. Muscle relaxation will be felt and the catheter will advance through this part of the urethra. You can also cough or take a few slow, deep breaths to relax your muscles.
- There may also be resistance at the bottom of the bladder (*bladder neck*) which has another sphincter. Using firm, gentle, steady pressure should cause this

part of the bladder to open and allow the catheter to pass into the bladder. If not, bearing down or pushing down or a strong cough may also relax this muscle so you can pass the catheter.

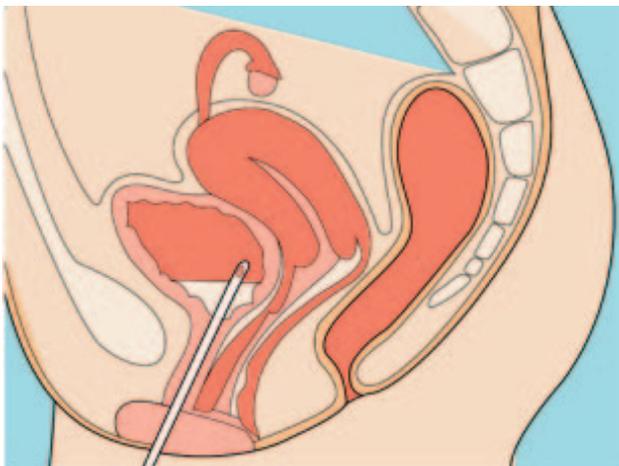
- Once inside the bladder, keep the catheter in place until the flow of urine stops. As soon as urine starts to flow, point your penis downwards over collection container or toilet. Slowly and gently withdraw the catheter allowing for any pockets of urine at the base of the bladder to drain. When there is no further flow of urine, remove the catheter and discard (if disposable) or clean with warm soapy water (if reusable).
- Record the amount of urine drained from your bladder, if requested by your healthcare provider.
- Wash hands thoroughly with soap and water.

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Figure 1.

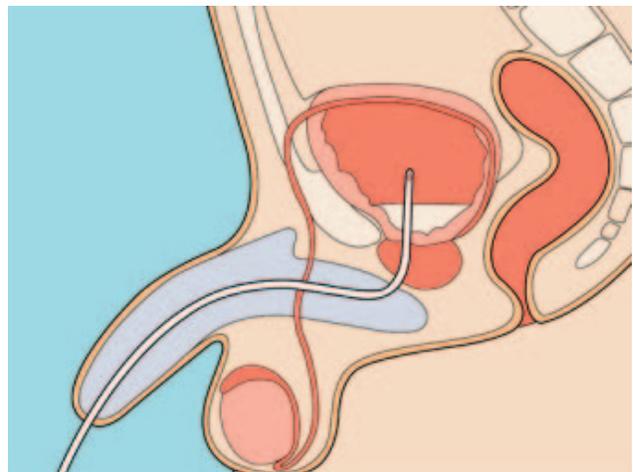


Figure 2.



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Figure 3.



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