

Understanding **Urinary Tract Infections**

A basic guide to keeping your bladder healthy



About this booklet

Since our founding in 1957, we have worked closely together with healthcare professionals and users to create products and solutions that are sensitive to their needs. This journey has given us a deep understanding of continence issues and we know that urinary tract infections (UTIs) are particularly concerning for catheter users. In this booklet, we will answer some of the most common questions around UTIs. We have also gathered some facts and helpful advice that can help you keep your bladder healthy in order to minimize the risk of UTIs.

Coloplast develops products and services that make life easier for people with very personal and private medical conditions. At Coloplast, we understand what you're going through because we've helped hundreds of thousands of people living with an intimate healthcare condition. Our goal is to help you find the right products and solutions to lead an active, rewarding life.

All icons are for illustration purpose only

Concerned about UTIs? You're not alone

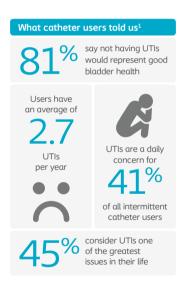
The precise cause of UTIs is unclear, and while there are several practical steps you can take to reduce your risk of having one, you should always consult a healthcare professional if you get one, or if you have guestions.

On the following pages you will find some good advice, grouped into three areas to give you a simple overview:

- Hygiene
- · Routine & compliance
- · Catheter options

A widespread issue. UTIs are a common issue for many catheter users. If you have worries, or feel uncertain about how to reduce your risk of UTIs, you're not alone. Indeed, with many catheter users experiencing two or more UTIs every year, they represent a significant source of concern.

1. Source: IC user survey (Countries: US, UK, DE, NL, FR, IT), January 2016 (n=2942)



What is a UTI?

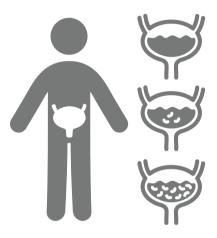
A Urinary Tract Infection (UTI) is diagnosed when there are a certain number of bacteria in the urine and one or more symptoms (mentioned on the next page) is present.

In most people, urine is usually sterile (free of germs or bacteria) and the presence of some bacteria in the urinary tract does not always mean that you have a UTI. If, however, the bacteria grow and multiply to a certain amount and if you are experiencing symptoms, this could mean that you do have a urinary tract infection that may need to be treated.

Anybody can get a UTI, though there is a higher risk if you are a catheter user. Women tend to get more UTIs due to their comparatively shorter urethra (the channel through which urine is passed) which gives easier access for bacteria to enter into the bladder.



It is important that you seek and follow the advice of your healthcare provider in the diagnosis and treatment of a UTI.



How can I tell if I have a UTI?

If you have any of the signs and symptoms¹ detailed below, it indicates the possibility of an infection. However, you might not feel pain and bladder irritation if the nerves to your bladder have been affected by your underlying medical condition. Remember, a UTI will only be diagnosed when there are also bacteria in the urine. You should always consult your healthcare provider to confirm the diagnosis and get the appropriate treatment:



Fever/sweating



Lower back pain (area below the ribs and above the pelvis)



Pain when urinating



Shivering and increased muscle spasms in the body and bladder



Increased frequency of urination



Dark-coloured and strong-smelling urine



Increased urge to urinate



Cloudy/ bloody urine

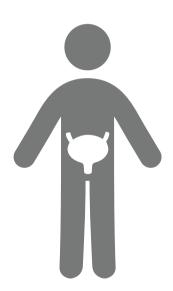
1. Grabe et al. 2015, EAU Guidelines on Urological Infections.

How does the bladder work?

Understanding how a healthy bladder functions is helpful because it is the process healthcare professionals try to reproduce with the use of catheters.

When the bladder is working optimally, people should feel the urge to go to the toilet when their bladder is partially full. They can decide if it is the proper time to urinate. Passing urine is ideally a controlled and voluntary activity. The key to bladder health is emptying the bladder regularly and completely.

The bladder is situated in the lower urinary tract together with the urethral sphincters (closing muscles) and the urethra (the tube that leads urine from the bladder to the outside opening). The bladder stores urine until the urethra carries it out of the body.



Bladder activity is regulated by your brain and the nervous system. The network of muscles in the bladder has stretch receptors, which respond when the bladder begins to fill with urine. All the stretch receptors are connected to nerves, which send signals up through the spine to the brain that it's soon time to urinate.

When people normally feel the urge to urinate, the first reaction is to squeeze the sphincter muscles. This lifts the pelvic floor in order to hold the urine inside the body until it's convenient to urinate. When it's a convenient time and place to urinate, the brain sends the message back that it's OK to release the urine.

People should optimally urinate 4 to 8 times a day, and to minimize the risk of UTI, it's important to empty the bladder completely, as urine left in the bladder can lead to the development of urinary tract infections.

If you cannot empty your bladder naturally, it is important to empty using a catheter. If you use an intermittent catheter, you should catheterize as often as your healthcare provider recommends – which is typically 4 to 6 times per day.



Maintain good personal hygiene

UTIs may result when bacteria – perhaps left behind after improper hand washing. or present near the urethral opening – are introduced into the urinary tract when you catheterize.

That's why it's important to wash your hands with soap and water or a hand sanitizer before carefully cleaning around the urethral opening or urethra before inserting your intermittent catheter.

Also, be careful how you clean yourself after urinating or after a bowel movement. Wipe from front to back so that bacteria from your anal area are not pushed into the urethral opening or urethra. It is a good idea to discuss optimal bowel emptying habits with your healthcare provider.



Hygiene

Regularly empty your bladder completely

Each time you catheterize, you remove urine in the bladder along with any bacteria that might be present in it. That's why it's important to create a regular flow through the bladder in order to "flush" it with fresh fluid during the day. See the next page for advice about drinking fluids.

Maintaining a catheterization schedule may help prevent UTIs. You should empty your bladder completely, as often as your healthcare provider recommends – which is typically 4 to 6 times per day.



Routine and compliance

Drink 6-8 glasses of fluid every day

Every person needs daily fluids to maintain their health. The recommended daily amount for most people is 6 to 8 glasses per day. If you are in doubt as to the amount that is best for you based on your medical condition(s), consult your healthcare provider

Water is the ideal choice. Beverages containing caffeine (cola, coffee, tea and some energy drinks) and artificial sweeteners are known bladder irritants and may need to be kept to a minimum.



Routine and compliance

Check if you empty often enough

Every once in a while, measure the amount of urine you empty. Your goal should be to empty between 250 and 400 ml of urine at a time, as this helps you avoid overfilling your bladder and prevents leaking. If you empty more than 400 ml, or less than 150 ml on a regular basis, you should consult your healthcare provider.

550 ml 500 ml 450 ml 400 ml 350 ml 300 ml 250 ml 200 ml 150 ml 100 ml 50 ml

600 ml

If the amount of urine you empty is in the yellow or red areas, you should consult your healthcare provider.

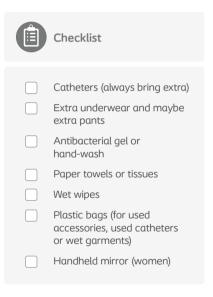
Routine and compliance

Out and about

It is important to maintain your catheterization schedule when you are out and about. However, being in an environment you're not used to might make it difficult to stick to your usual routine. Being fully prepared for any event can help you overcome that.

Plan ahead to be prepared for when you may need to catheterize away from home. Consider pre-packing a kit so you have all the supplies you might need. The checklist on this page can help you prepare.

There are also catheters developed especially for use outside of the home such as catheters with sleeves or catheters with drainage bags.



Routine and compliance

Use a sterile catheter every time you catheterize

To help maintain a healthy bladder, we recommend you use a new, sterile welllubricated catheter every time you catheterize.

A coated catheter (hydrophilic-coated or pre-lubricated) can help lessen friction as vou insert and remove your catheter. It makes catheterization more comfortable and convenient. Studies, data and findings also link the use of hydrophilic catheters to lower rates of infection^{1,2} and less urethral damage^{1,3,4} compared with other catheters.

^{1.} Cardenas et al. 2011, 2. De Ridder et al. 2005, 3. Stensballe et al. 2005,

⁴ Sutherland et al. 1996.

Choose a catheter that suits your lifestyle

Different lifestyles or everyday activities sometimes require different intermittent catheterization solutions. Catheters come in many styles: standard length catheters, compact catheters that can fit into your purse or pocket, and catheter sets where a urine bag is attached to the catheter.

Finding the right catheter is a very personal choice and the best one for you might not be the first one that you try. Research shows that being satisfied with your catheter solution is very important for maintaining your schedule and thereby ensuring good bladder health^{1,2}. That's why it is important to find the catheter solution that suits you. You might need to try different ones to find one that fits you the best.

Consult with your healthcare provider to help you select the best solution for your individual needs.



Remember, your overall health is important too

The advice in this booklet is intended to answer some of the most common auestions you may have about UTIs, and to help minimize your risk of getting one. It is also important to remember the importance of staving in good overall health. By getting enough sleep, eating a healthy diet, drinking the right amount of fluids, and exercising on a regular basis and maintaining your catheter schedule you may be able to strenathen your immune system and increase your chances of preventing UTIs.



You should always follow the specific instructions provided by your healthcare provider, and those included with your intermittent catheterization solution. If you still suffer from frequent UTIs despite all these precautions, talk to your healthcare provider for more advice.



