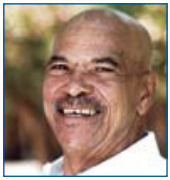
The Source

Your guide to better bladder control



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The Canadian Continence Foundation

The Source

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A message from TCCF

On behalf of The Canadian Continence Foundation, it gives me great pleasure to introduce The Source, the first-ever Canadian guide to urinary incontinence.

The foundation's mission is to enhance the quality of life of people who suffer from incontinence by helping them understand their symptoms and empowering them to seek help. Despite the many treatment options available, far too many Canadians continue to suffer in silence because they're embarrassed to talk about their symptoms. With this guide, we want to show you that there's no reason to be embarrassed anymore.

In the following pages, you'll learn everything you need to know about incontinence: the signs and symptoms of each type of incontinence; how it's diagnosed; and, most important, how to make it better. You'll learn that incontinence is not a disease; it's a sign that something else in the body is wrong. We've included checklists and charts that you can fill out before you meet with your doctor, to help him or her understand your symptoms and zero in on a plan of action.

For our male readers, the "Men's Room" — a recurring section you'll find throughout the guide — focuses on important topics that apply specifically to men who suffer from incontinence. Finally, we've created a special section on fecal incontinence, a less common though no less devastating condition that ranges from occasional leakage to complete loss of bowel control.

The Source was created for the 3.5 million Canadians who currently live with incontinence, their caregivers, families and friends. Together, we will bring incontinence out of the shadows and help sufferers lead a full, independent life.

The Canadian Continence Foundation

Frequently asked questions

Q. What is urinary incontinence?

A. Incontinence means losing urine when you don't want to.

Q. How common is it?

A. As many as 3.5 million Canadians — nearly 10% of the population — experience some form of urinary incontinence. Unfortunately, very few people talk to their doctor about their symptoms. According to the Canadian Urinary Bladder Survey, 16% of men and 33% of women over the age of 40 have symptoms of urinary incontinence but only 26% have discussed it with their doctor.

Q. Isn't urinary incontinence just a normal part of aging?

A. No! The changes that occur as we get older (like menopause in women or prostate enlargement in men) may contribute to incontinence, but that doesn't mean you just have to live with it. Almost all cases of urinary incontinence can be treated, managed or cured.

Q. What's the difference between urinary incontinence and overactive bladder (OAB)?

A. An overactive bladder* means you feel an urgent desire to go to the bathroom very frequently, whereas incontinence is leaking urine involuntarily. Sometimes, the two conditions go together. About half of people with OAB also have urge urinary incontinence (see page 6 for a definition), but you can have OAB without incontinence.

Q. Where can I get help?

A. The Canadian Continence Foundation website (www.canadiancontinence.ca) is full of useful information and tips on how to manage urinary incontinence. You can sign up for our monthly newsletter, download helpful documents and/or order books and videos online. You will also find a list of doctors in your area who have expertise in treating urinary incontinence.

*Words in red are defined in the glossary on page 36

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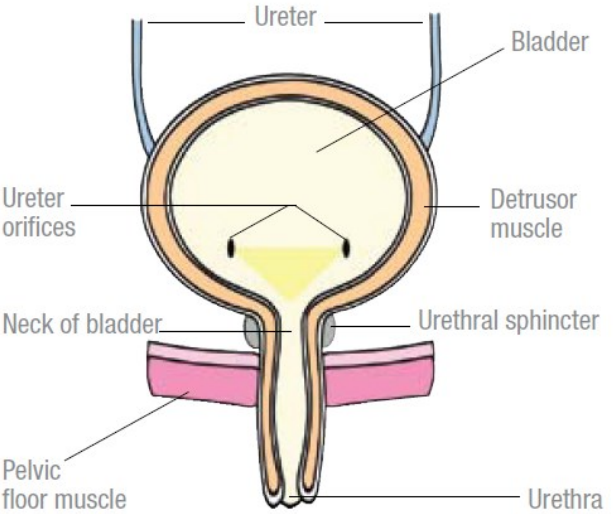
Proper bladder function

Incontinence can have many causes, from simple things like drinking too much liquid to more complex problems with your urinary tract or even your reproductive organs. Understanding your symptoms is easier if you understand how the normal bladder works.

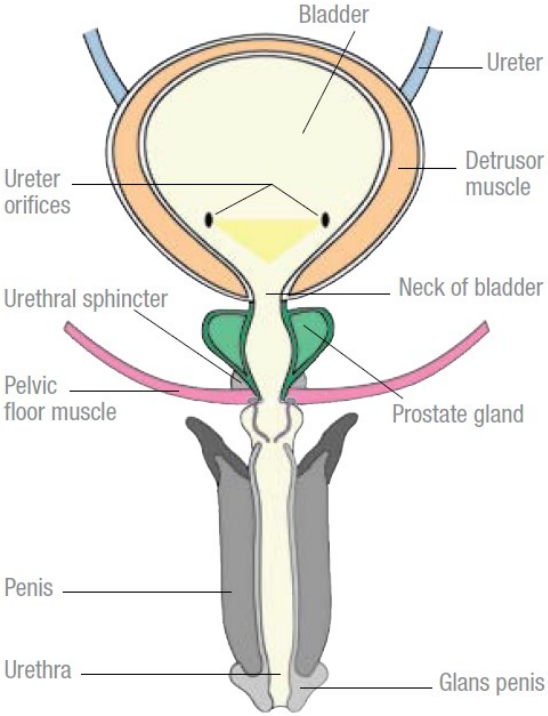
The bladder is the sac where urine is stored. It's the size and shape of a grapefruit and can hold about 300–500 ml of fluid. Urine is filtered by the kidneys and drains into the bladder through two tubes called ureters. From the bladder, urine leaves the body through the urethra. Together, this group of organs and tubes is called the urinary tract.

The wall of the bladder is made of several layers. The thickest of these layers is called the detrusor muscle. As the bladder fills up, the bladder wall expands. When it's time to urinate, the detrusor muscle contracts to push the urine out.

FEMALE URINARY TRACT



MALE URINARY TRACT



The urethral sphincter is a ring of muscle that surrounds the urethra and controls the flow of urine from the bladder. When the urinary sphincter is contracted, urine can't pass through; when it relaxes, urine is released.

Types of incontinence

There are several different types of incontinence. Your doctor will determine the type of incontinence you have based on how and when you experience leakage.

Knowing this will help determine what type of treatment is best for you.

Stress incontinence means you leak urine when you exert pressure on your bladder — when you laugh, cough, sneeze, exercise, bend over or lift something heavy. Stress incontinence is the most common type of incontinence in women. It is more unusual in men, except after some types of prostate surgery.

Urgency incontinence is the leakage of urine that happens with sudden, intense urgency to go to the bathroom. You may only have a few seconds to get to the toilet. People with urge incontinence may also need to urinate often, sometimes getting up several times during the night. The sound of running water or putting the key in the door on returning home may lead to incontinence.

Mixed incontinence is a combination of stress and urge incontinence.

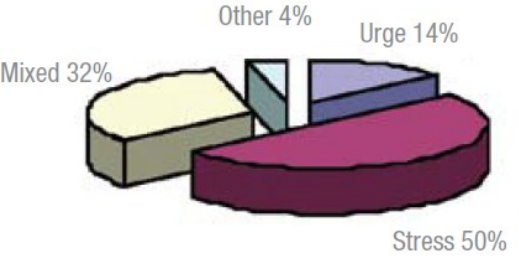
Overflow incontinence is a frequent or constant dribble of urine. This happens because the bladder is overfilled. People with overflow incontinence never completely empty their bladder and may only produce a small amount of urine when they go to the bathroom.

Functional incontinence is caused by a mental or physical disability (such as severe arthritis, Alzheimer's

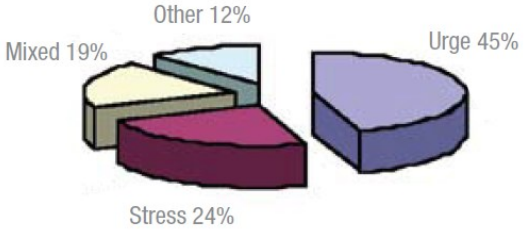
You may have incontinence if you...

- **Lose urine when you don't want to**
- **Have to go urgently, or can't make it to the toilet in time**
- **Leak urine when you laugh, cough, sneeze or lift something heavy**
- **Rely on disposable pads, adult diapers or anything else to absorb urine**
- **Find yourself limiting your activities because you're afraid of having an "accident"**

WOMEN



MEN



Sources:
Minassian VA, Drutz P. *Int J Gynecol Obstet* 2003;82:327-338
Diokno A et al. *Int Urol Nephrol* 2007;39(1):129-136

disease or a neurological problem like Parkinson's disease) that prevents people from getting to the toilet on time. This type of incontinence is most common in the elderly.

Nocturnal enuresis is the term used to describe bedwetting in children who are old enough to be toilet-trained and adults who experience loss of bladder control at night.

Causes of urinary incontinence

Sometimes, incontinence may be a reversible (take a look at the list of possible triggers on the right). Certain foods or liquids may irritate the lining of the bladder, or you may have a urinary tract or bladder infection. Even constipation can lead to incontinence, because hard stool in the rectum can interfere with the muscles that control urination.

For many people, though, incontinence is a more persistent problem that can't be explained by any of those triggers, or there may be several underlying causes. Many people suffer with their symptoms for years before they talk to their doctor about it.

The type of incontinence you have can give important clues as to what's causing it. Stress urinary incontinence,

Reversible causes of incontinence

- **Alcohol, and for some excess caffeinated or carbonated drinks.**
- **Drinking too much liquid**
- **Urinary tract/bladder infections**
- **Bladder irritants like carbonated drinks, citrus fruits and juices and artificial sweeteners**
- **Medications including sedatives, diuretics, muscle relaxants, antidepressants, blood pressure drugs, heart medications and cold medicines**
- **Constipation**

for example, is often caused by a problem with the pelvic floor muscles. Urgency incontinence, on the other hand, usually happens when the bladder muscle contracts more often than it should. Causes of persistent incontinence include:

- **Weakening of the bladder muscles:** This can happen to both men and women as they age. If the bladder muscles are weak, the bladder may not empty out properly.
- **Loss of estrogen:** Scientists believe estrogen keeps the tissue of the urethra plump and healthy. After menopause, women produce less estrogen, which may contribute to incontinence.
- **Previous pregnancy/childbirth:** The muscles of the pelvic floor and/or the urinary sphincter, or the nerves that control these muscles, can be damaged during childbirth (vaginal delivery). If the pelvic floor muscles are affected, the pelvic organs — the bladder, uterus, rectum or bowel — may fall into the vagina. This sagging, which is called a prolapse, can occasionally

THE MEN'S ROOM

In men, incontinence is often caused by problems with the prostate. This walnut-sized organ, located just below the bladder, produces the milky fluid that combines with sperm to produce semen.

- **Benign prostatic enlargement** (BPE, also called BPH): Prostate enlargement is common in men over the age of 40. As it gets bigger, the prostate can block the flow of urine through the urethra, resulting in frequent urination, a slow stream of urine and sometimes urge or overflow incontinence. More than half of men in their 60s and up to 90% of men over 70 have urinary symptoms linked to BPE.
- **Prostate cancer:** Men with prostate cancer may experience incontinence as a side effect of their treatment (usually surgery, radiation or both). Surgery can damage the urinary sphincter or bladder wall, while radiation may cause bladder irritation.
- **Prostatitis:** This inflammation of the prostate gland can cause urinary symptoms including painful and frequent urination.

lead to incontinence either right after childbirth or, more often, not until many years later. The hormonal changes that occur during pregnancy, as well as the added weight of the growing uterus, can also contribute to incontinence.

- **Surgery:** The reproductive organs and the bladder are close together and supported by many of the same muscles (see figures on pages 4-5). Any surgery in that general area risks damaging the pelvic floor muscles, which can lead to incontinence.
- **Neurological injury or disease:** Nerve signals between the brain and the urinary system play an important role in proper bladder function. Nerve damage caused by diabetes, multiple sclerosis, Parkinson's disease, stroke, brain tumours or spinal injuries may interfere with these signals and affect continence.
- **Bladder pain syndromes, (includes Interstitial cystitis):** This rare condition causes inflammation of the bladder wall, leading to painful and frequent urination and, rarely, incontinence.
- **Bladder cancer or bladder stones:** Incontinence, urinary urgency and burning when you urinate can occasionally be signs of both of these conditions. Other symptoms may include blood in the urine or pelvic pain.

Diagnosing urinary incontinence

As you can see, there are many possible causes for your incontinence. The first step is to see your doctor for a complete exam. He or she will ask you a series of questions (see the list of sample questions on the right).

Questions your doctor may ask

- **How many times a day do you urinate?**
- **Are you having problems holding your urine?**
- **How often do you get up at night to urinate?**
- **Do you lose urine when you don't want to?**
- **Do you leak urine when you cough, sneeze, laugh or lift heavy objects?**
- **Do you have to strain to urinate?**
- **Do you find it difficult to start urinating or have a slow, weak urinary stream?**
- **Do you feel that you are not completely emptying when you urinate?**
- **Do you have constant dribbling of urine?**

Before your appointment, take some time to look them over and write down any information you think may be useful. Answer the questionnaire on page 11 and bring a copy to your doctor — the more information he/she has about your symptoms, the better equipped he/she will be to help.

Keeping a bladder diary (also called a voiding record) for a couple of days is another great way to help your doctor understand your symptoms. Use it to record what you drink, how often and how much you urinate over the course of two days. You'll find an example of a bladder diary on page 12.

During the visit, your doctor will perform a thorough physical exam of your abdomen and genitals. He/she will look for things like a urinary tract or bladder infection, a mass or compacted stool. He/she may also do or order the following simple tests:

- **Stress test:** You'll be asked to cough or bear down while the doctor checks for urine loss.
- **Urinalysis:** A sample of your urine is sent to the lab to check for signs of infection, blood or other abnormalities.

Most often, these simple tests will be enough for your doctor to identify the type of incontinence you have and recommend some form of treatment. In some cases however, he or she may refer you to a specialist (see "Meet the experts" on page 28) for additional tests. These can include:

(continued on page 14)

THE MEN'S ROOM

One of the first things a doctor will do when a man complains of incontinence is check for prostate problems. This is usually done with a rectal exam to evaluate the size of your prostate (the prostate can be felt by inserting a finger in the rectum). In some cases, your doctor may also ask for a PSA test. This simple blood test measures the amount of prostatespecific antigen (PSA) — a substance naturally produced by the prostate — in the blood. Elevated levels of PSA could be a sign of an enlarged prostate, prostate cancer or prostatitis.

Symptom checklist

Do you lose urine when you don't want to?

Yes ❑ No ❑ Not sure ❑

When you need to urinate, is there urgency to do it right away?

Yes ❑ No ❑ Not sure ❑

Does leakage happen when you laugh, cough, sneeze or lift something heavy?

Yes ❑ No ❑ Not sure ❑

How long have you been losing urine?

Weeks ❑ Months ❑
Years ❑ Not sure ❑

Have you ever been diagnosed with a urinary tract infection?

Yes ❑ No ❑

Have you ever been diagnosed with an enlarged prostate?

Yes ❑ No ❑

Do you experience burning when you urinate?

Yes ❑ No ❑ Not sure ❑

Do you leak urine on the way to the bathroom?

Yes ❑ No ❑ Not sure ❑

Do you lose urine in your bed at night?

Yes ❑ No ❑ Not sure ❑

Do you go to the bathroom frequently to avoid losing urine?

Yes ❑ No ❑ Not sure ❑

Do you use disposable pads, adult diapers or anything else to absorb urine?

Yes ❑ No ❑

Do you dribble after urinating?

Yes ❑ No ❑ Not sure ❑

Do you have difficulty starting to urinate?

Yes ❑ No ❑ Not sure ❑

How many times at night do you wake up to go to the bathroom?

0-2 ❑ More than 2 times ❑

Is your bowel function normal (i.e. no constipation, diarrhea or pain)?

Yes ❑ No ❑ Not sure ❑

Are you taking any medications? (Make a list of everything you are taking or bring your pills to your healthcare professional.)

Yes ❑ No ❑

Do you avoid certain activities because of your incontinence (such as shopping, golfing or gardening)?

Yes ❑ No ❑

Does incontinence affect your willingness or ability to exercise?

Yes ❑ No ❑ Not sure ❑

Does urine loss interfere with getting a good night's sleep?

Yes ❑ No ❑ Not sure ❑

Has incontinence affected your personal relationships?

Yes ❑ No ❑ Not sure ❑

Bladder Diary DAY 1

TIME	AMOUNT URINATED				URGENCY?		LEAKAGE				DRINKS	
	How many times	How much			Yes	No	How many times	How much			Which drink	How much
EXAMPLE:	3 times				✓		once				water	1 cup
6-8 am												
8-10 am												
10-12 pm												
12-2 pm												
2-4 pm												
4-6 pm												
6-8 pm												
8-10 pm												
10-12 pm												
12-2 am												
2-4 am												
4-6 am												

A little Some A lot

Bladder Diary DAY 2

TIME	AMOUNT URINATED				URGENCY?		LEAKAGE				DRINKS	
	How many times	How much			Yes	No	How many times	How much			Which drink	How much
EXAMPLE:	3 times			✓			once				water	1 cup
6-8 am												
8-10 am												
10-12 pm												
12-2 pm												
2-4 pm												
4-6 pm												
6-8 pm												
8-10 pm												
10-12 pm												
12-2 am												
2-4 am												
4-6 am												

A little Some A lot

- **Flow test and postvoid residual measurement (PVR):** This test is done to see if you have problems emptying your bladder. You will be asked to urinate into a special measuring container (so the doctor can check how fast you empty your bladder and how much you urinate). He or she will then measure the amount of urine left in your bladder, either by ultrasound or by placing a small tube (catheter) into the bladder.

- **Urodynamic testing:** Using a catheter, this test measures the pressure in your bladder when it's empty and as it fills, giving information about how the bladder and urethra are working. Some people find these tests embarrassing and uncomfortable, but they may help determine the best course of treatment for your symptoms.

- **Cystocopy:** A tube with a tiny lens at the end of it is inserted through the urethra and into the bladder, so your doctor can check for and possibly remove abnormalities in your urinary tract.

- **Pelvic ultrasound:** Like the ultrasounds done on pregnant women, this test lets the doctor get a better look at your urinary tract.

- **Voiding cystogram (rare):** During this test, a special dye is injected into the urethra and bladder. You will then be asked to urinate. Because of the dye, the flow of urine through the lower urinary tract can be seen by x-ray, allowing your doctor to look for problems with your urethra.

Treatment

The right treatment for you will depend on the type of incontinence you have, its severity and the underlying cause. Most people will see significant improvement — currently available therapies give satisfactory relief in up to 90% of patients.

Doctors will usually want to try more conservative therapies, like lifestyle changes and exercises, before resorting to more invasive treatments like surgery. As you will learn in the following pages, there are many different things that can help manage or even cure incontinence. Your doctor can give you advice, but only you can decide what's best for you.

Lifestyle changes

Maintaining a healthy body weight is important for your general health — and the health of your bladder.

Extra weight puts pressure on the bladder, which can contribute to incontinence. In the severely obese (more than 100 lb overweight), that extra weight may even be the primary cause of leakage. If the muscles of the urinary sphincter are already weak (from childbirth, for example), even 10–20 lb of overweight can worsen symptoms of incontinence.

Eating a well balanced diet and exercising regularly are crucial to maintaining a healthy body weight. People with incontinence should avoid beverages that can worsen symptoms, such as alcohol, caffeine, and carbonated drinks. You should also try to get one hour of mild to moderate physical activity (such as walking or gardening) on most days of the week. For more tips, see "Healthy bladder habits"
(opposite).

How much liquid you drink will obviously affect how often you need to go to the bathroom. Drinking too much will make you go more often, which increases your risk of having an "accident". But drinking too little isn't good either. If you don't stay well hydrated, your kidneys may not work as well.

Researchers have found that smoking also increases the risk of urinary incontinence. Smokers are more likely to develop overactive bladder than nonsmokers, possibly because of the effect of nicotine on the muscle of the bladder wall — and about half of people with overactive bladder also have incontinence. So if you haven't already, it's time to butt out for good. Talk to your doctor about nicotine patches, gums and other ways to help you quit.

Healthy bladder habits

- **Avoid excess caffeinated beverages and alcohol**
- **Eat more fibre to avoid constipation**
- **Maintain a healthy weight Stay active and mobile**
- **Don't smoke**
- **Empty your bladder every three to four hours during the day and before going to sleep**
- **Drink moderate amounts of fluid (six to eight glasses per day)**
- **Talk to your doctor about urine loss or other bladder symptoms. There's no reason to wait!**

Behavioural treatments

Pelvic floor muscle exercises

These exercises are designed to strengthen the muscles of the pelvic floor so that the bladder is kept in place and the urethra stays shut tight. Pelvic floor muscle exercises work best for people who have stress or mixed incontinence, but anyone can try them, even as a preventive measure to keep your pelvic floor muscles strong. Results are best when supervised by a trained physiotherapist.

How to do them

Stand, sit or lie down with your knees slightly apart. Relax. Find your pelvic muscle. Imagine that you are trying to hold back urine or a bowel movement. Squeeze the muscles you would use to do that. DO NOT tighten your stomach or buttocks.

Women: to make sure you've got the right muscle, insert your finger into your vagina while you do the exercise. You should feel a tightening around your finger.

Men: when you tighten the pelvic floor muscle, your penis will twitch and contract in towards your body.

Tighten the muscles for 5 to 10 seconds. Make sure you keep breathing normally.

Now relax the muscles for about 10 seconds.

Repeat 12–20 times, three to five times a day.

Stick to it! You should begin to see results after a few weeks, but you need at least four months of exercise to show sustained benefit. Like any other muscle in your body, your pelvic muscles will only stay strong as long as you exercise them regularly.

If you're having a hard time doing Kegel exercises, your healthcare professional can teach you how to do them correctly. He/she may even suggest a tool or device to help make sure you're using the right muscles (see "Behavioural training aids" in the sidebar).

Behavioural training aids

In addition to biofeedback, the following devices can assist you with pelvic floor muscle exercises and bladder retraining programs

- **Electrical stimulation**
  A probe placed on the pelvic floor muscles delivers a low-grade electrical current, causing the muscles to contract.
- **Vaginal cones or weights**
  Tampon-shaped cones that come in a set of increasing weights. The weight is placed in the vagina, forcing you to tighten the pelvic muscles in order to keep it from falling out.

**WARNING: electrical stimulation and vaginal weights aren't right for everyone. Talk to your healthcare professional before using any device.*

Pelvic floor retraining with vaginal cones (i.e. LadySystem) is a non-surgical method to help women strengthen their pelvic floor muscles by doing their exercise once or twice daily, at home. Using a set of small cones identical in shape and size but of differing weights, the exercise consists of inserting a cone in the vagina, starting with the lightest one that can comfortably be retained and moving up to increasingly heavier cones as the pelvic floor muscles become stronger.

Your doctor may also suggest biofeedback, a training technique that's used to monitor the contraction of the pelvic floor muscles as you do your Kegel exercises. Biofeedback uses a machine that records the contractions of your muscles and translates the movement into a visual signal that you can watch on a monitor. Some people find this helpful in learning how to do Kegel exercises correctly.

Biofeedback training is usually given in a hospital or private clinic by a physiotherapist, doctor, nurse or trained technician, but you can also buy or rent a machine to use at home.

Bladder retraining

Some people, especially those with urge incontinence, find that modifying their bathroom habits helps ease the symptoms of urinary incontinence. There are two basic strategies involved in bladder retraining:

Keeping a regular bathroom schedule (this is called "timed voiding"), gradually increasing the time between visits

Learning to suppress the urge to urinate by doing strong pelvic muscle contractions and distracting yourself with something else, like counting backwards

A person who drinks five to eight cups of liquid per day should be able to wait at least two hours between bathroom visits. If you're going to the bathroom more often, are getting up more than once or twice during the night, or can't delay the urge to empty your bladder for at least 30 minutes, bladder retraining may be helpful. To get started, keep a

- **Bladder retraining monitors/alarms**
  These pager-like devices let you know when it's time for your scheduled bathroom visit. This is particularly useful for people with functional incontinence, who are encouraged to use the toilet every two to three hours to prevent "accidents." Monitors not only tell you when it's time to go, but can also be used to record your trips to the bathroom, as well as "accidents". All the information is stored and can be reviewed by your healthcare professional at the next visit.

- **Nocturnal enuresis alarms**
  A sensor attached to your underwear or bedpad will ring or vibrate if it detects even a few drops of urine, waking you up so that you can go to the bathroom.

voiding diary for two days (page 12) and bring it to your doctor for advice on a training program that will work for you.

Mechanical treatments

Pessaries

Women who have a pelvic organ prolapse may use a pessary to keep the fallen organ in place. Usually made of rubber or silicone, the pessary is placed deep into the vagina so that it rests against the cervix and holds up the bladder and uterus. Pessaries come in several different shapes and sizes. In most cases, you'll have to visit your doctor or healthcare professional to have the pessary fitted. You don't have to remove the pessary when you go to the bathroom, but it should be taken out and cleaned regularly. You should also see your doctor for a vaginal exam on a regular basis.

Vaginal cones

Pelvic floor retraining with vaginal cones is a non-surgical method to help women strengthen their pelvic floor muscles by doing their exercise once or twice daily, at home, for three months. Using a set of small cones, identical in shape and size but of differing weights (ranging from approximately 5 to 55 g), the exercise consists of inserting a cone in the vagina, starting with the lightest one that can comfortably be retained, and moving up to increasingly heavier cones as the pelvic floor muscles become stronger. For the exercises to be effective, a slight effort should be necessary in order to hold the cone in place. If the cone stays in by itself, a heavier cone should be used.

Exercising regularly with increasingly heavier vaginal cones allows the individual to observe progress from one cone to the next as the pelvic floor muscles get stronger. The goal is to increase muscle strength and muscle tone for better urinary control.

Before purchasing vaginal cones, a woman should have her pelvic floor assessed by a professional and be taught how to do pelvic floor exercises correctly. Vaginal cones may not be appropriate if the pelvic floor is very weak. Cones should not be used during your period, during intercourse, during pregnancy, or if vaginal or uterine infection or severe prolapse are present. A physician should be consulted if you have an intra-uterine device (IUD), or if you have had a recent episiotomy, a Caesarean section or any other gynaecological procedure/surgery.

Catheters

If you're urinary incontinent or experiencing urinary retention because you're unable to empty your bladder properly your doctor may recommend a catheter. There are essentially three different types of catheters:

1. Indwelling (Foley) Catheters
2. Intermittent Catheters
3. External Catheters

1) Indwelling or Foley catheters are inserted into the urethra and can stay in for up to three months between changes and they should only be used by exception for Incontinence. Indwelling or Foley catheters are available in different materials, coatings, diameters and lengths and have holes, or "eyelets" through which the urine passes while the balloon holds the catheter in place. Indwelling or Foley catheters are recommended for patients who are unable to empty their bladder properly (urinary retention).

2) Intermittent catheters, or in-and-out catheters, are designed for immediate daily or chronic longer term use. Intermittent catheters are also made of different materials, coatings, diameters and lengths and have holes, or "eyelets" through which the urine passes. Intermittent catheters are a safe way to reduce bladder infections called "UTI" or Urinary Tract Infections due to their shorter term in-body use. They also reduce the risk of damage to the bladder and urethra and formation of bladder stones. Intermittent catheters are recommended for patients who are unable to empty their bladder properly (urinary retention/urinary incontinence).

3) External catheters, also referred to as condom catheters, offer users a comfortable and reliable urinary incontinence care choice (individuals who have leaking urine). External catheters can self-adhere to the patient for up to 24 hours and have a spout at the end that is connected to a urine collection device (i.e. leg bag) that allows the individual to live an active life style. External catheters are constructed with innovative materials, improved adhesives, and new product configurations that allow male external catheters to bring a greater sense of independence to users.

For all catheter products, your healthcare provider should recommend the right size catheter and teach you how and when to use it.

Most catheters are made to be single use only meaning it's recommended to use them once and then discard which will also help with reducing infections."

Medical treatments

Medications are often used in combination with the behavioural techniques described earlier to treat urinary incontinence. Again, your doctor will help you decide which is best for you based on the type of incontinence you have, as well as the severity of your symptoms.

Medications for overactive bladder

Drugs used to treat OAB block the abnormal contractions of the bladder and can therefore also help ease the symptoms of urge urinary incontinence in both men and women. You'll find a list of OAB medications available in Canada on page 20. Generally speaking, these drugs fall into three categories:

Anticholinergics

Anticholinergic medications block the action of acetylcholine, a chemical messenger that tells the muscles of the bladder wall to contract. Unfortunately, acetylcholine acts in other parts of the body as well, so medications that block it can cause unwanted side effects like dry mouth, blurred vision and constipation. New "extended" or "prolonged" release versions of anticholinergic medications reduce the incidence of side effects and improve adherence because they only need to be taken once a day.

(continued on page 22)

THE MEN'S ROOM

Men whose incontinence is thought to be caused by an enlarged prostate may benefit from drugs used to treat BPH. Medications available in Canada include:

Alpha-blockers. These drugs relax the smooth muscle of the prostate and the opening of the bladder, reducing the urgency and allowing urine to flow normally. Available medications: silodosin (Rapaflo®), tamsulosin (Flomax -CR®), alfuzosin (Xatral®), terazosin (Hytrin®) and doxazosin (Cardura®)

5-alpha reductase inhibitors. These medications block the production of the male hormone DHT, which is believed to be responsible for prostate enlargement. These types of drugs are most useful for men with larger prostates. Available medications: finasteride (Proscar®), dutasteride (Avodart®)

OAB or incontinence medications used in Canada

DRUG NAME	DRUG TYPE	DOSING
Oxybutynin, sold as: Ditropan® (generics also available)	Anticholinergic	Three times daily
Ditropan XL®, Uromax® (both controlled release)		Once daily
Oxytrol® (skin patch)		Twice weekly
Oxybutynin chloride gel, sold as: Gelnique® (rubbed into arm, thigh or stomach area)	Anticholinergic	Once daily
Tolterodine, sold as: Detrol LA® (extended release)	Anticholinergic	Once daily
Detrol®		Twice daily
Trospium chloride, sold as: Trosec®	Anticholinergic	Twice daily
Solifenacin, sold as: Vesicare®	Anticholinergic	Once daily
Darifenacin, sold as: Enablex® (extended release)	Anticholinergic (selective for bladder)	Once daily
Fesoterodine, sold as: Toviaz®	Anticholinergic	Once daily
Mirabegron, sold as: Myrbetriq®	Beta 3 receptor agonist	Once daily
Propiverine sold as Mictoryl®	Anticholinergic	Once daily
Mictoryl Pediatric®		As per healthcare professional instruction

SIDE EFFECTS
The most common adverse events found with anticholinergic medications include (but aren't limited to): dry mouth, constipation and blurred vision. Talk to your doctor about limiting these side effects and which medication may be right for you.

OAB injectables

DRUG NAME	DRUG TYPE	DOSING
OnabotulinumtoxinA, sold as: Botox® (injection)	Neurotoxin	Every 36 to 42 weeks

Although immediate release oxybutynin remains the most commonly prescribed drug in many provinces, it is the drug associated with most side effects. Should this drug be unsuitable for you, your clinician will prescribe an alternative. The evidence suggests these drugs should be used for three months before trying another or switching to another form of treatment.

Neurotoxins

OnabotulinumtoxinA (Botox®) is a neurotoxin that makes the bladder muscles relax by blocking the transmission of nerve signals. It has been approved by Health Canada for the two different types of bladder dysfunction in adults who don't respond to anticholinergic medications:

1. Overactive bladder with symptoms of urinary incontinence, urgency, and frequency
2. Urinary incontinence due to neurogenic bladder associated with multiple sclerosis or subcervical spinal cord injury.

Given by injection under local anesthetic, the effects of Botox® diminishes but not within three months of the last injection. Side effects include an inability to empty the bladder completely (very rarely requiring catheterization) and urinary tract infection.

Estrogen

Since estrogen helps keep the urethra healthy and strong, the drop in estrogen that occurs in women after menopause may contribute to incontinence. Applying estrogen in the form of a vaginal cream (e.g. Premarin®), tablet (e.g. Vagifem®) or ring (e.g Estring®) may help ease the symptoms of urgency incontinence.

Hormone replacement therapy (HRT) contains a combination of estrogen and progestin in pill form. Since it acts on the whole body, estrogen taken this way doesn't seem to help with incontinence and may actually increase the risk of breast cancer.

Generally speaking, there isn't a lot of scientific evidence to support the use of estrogen to treat incontinence, but some women have found it helpful. Doctors usually recommend estrogen in combination with behavioural treatments.

Desmopressin

This is a man-made version of antidiuretic hormone, which stops the production of urine while you sleep. Desmopressin is available as a nasal spray and in pill form and is taken at night to prevent bedwetting and nocturnal enuresis.

The main side effect of this medication is developing a low salt level in the blood - this can be serious and your doctor may order blood tests when you start the medication It is available in two doses (one for men and one for women) in some provinces which can avoid salt problems.

Urethral bulking agents

Bulking agents may be an effective treatment for both men and women with stress urinary incontinence caused by a damaged urinary sphincter, (the muscular valve at the bottom if the bladder or anus which protects from accidental loss of bladder or bowel contents). Bulking agents are injected into the tissue that surrounds the urethra, building it up to reinforce the sphincter. Several different agents can be used: collagen, hyaluronic acid, fat cells, Teflon and silicone rubber particles. The procedure can be done in just a few minutes with mild anesthesia. The downside is that the effects only last a few years so you'll have to go back for more shots, at a cost of as much as $2,000 per series of injections (which usually has to be paid by the patient, since provincial and private plans don't typically cover these treatments). Studies show that up to 75% of women with stress urinary incontinence will benefit from the injections, at least in the short term.

Surgery

If more conservative treatments haven't helped, your doctor may recommend surgery to treat stress urinary incontinence (most surgical procedures only work for this type of incontinence). The risks of surgery are higher, but it may also provide long-term relief in severe cases. Women who are still planning on having children are usually told to wait to have surgery, because the strain of pregnancy and delivery may "undo" the surgeon's work.

Risks of incontinence surgery

Surgery itself increases the risk of urinary incontinence (see page 9). Other potential risks are:

- **Having difficulty urinating or improper bladder emptying (this is often temporary)**
- **Developing overactive bladder, which can lead to urge incontinence**
- **Pelvic organ prolapse**
- **Urinary tract infection**
- **Painful intercourse and/or pelvic pain**

The type of procedure that's right for you will depend on the exact cause of your incontinence. Discuss the benefits and potential risks of each procedure (see "Risks of incontinence surgery", page 23) with your doctor before making a decision. Here's a brief description of some of the most common procedures.

Sling procedures

A sling is a strip of tissue, most often a synthetic mesh tape, that's placed under the urethra for support. There are several types of sling procedures (tension-free vaginal tape, transobturator tape), the main difference being where and how the sling is attached to the body. Your surgeon will explain the pros and cons of each option to you.

Sling procedures (also called "tapes") are the most commonly performed type of incontinence surgery in women and can be done under local or regional anesthesia, in an operating room or outpatient clinic. Recovery time is very short, usually one or two weeks.

THE MEN'S ROOM

Surgical procedures for male incontinence often center on correcting prostate problems or reversing the damage caused by prostate cancer treatments. Recently, sling procedures for men have also been developed. Here are some of the most common procedures.

Transurethral resection of the prostate (TURP) is a treatment for benign prostatic hyperplasia (BPH), a condition that may cause incontinence (usually urge incontinence). In this procedure, a small portion of the prostate is cut away using a wire heated with electrical current that's threaded up the penis, through the urethra.

Artificial urinary sphincter: Men who have had a radical prostatectomy for prostate cancer may suffer from incontinence, because the urinary sphincter can be damaged during the surgery. To correct this, a fluid-filled ring that keeps the urethra shut is implanted around the urethra, acting as an artificial urinary sphincter. A valve that causes the ring to deflate is implanted under the skin: when you need to go to the bathroom, you press it to allow urine to flow through.

Male sling procedures: Though they have been performed in women for years (see above), sling procedures for men are relatively new. As in women, a strip of synthetic tissue supports the urethra, keeping pressure on it to prevent leakage. Initial studies have shown a good success rate (80% improvement) but there isn't much data yet and the procedure is still under study.

ProActTM: Another option for post-prostatectomy relief from stress incontinence is an inflatable implant inserted near the bladder neck in a minimally invasive procedure and controlled through a port placed under the skin. The balloon lifts the bladder neck to improve continence.

Studies have shown that these types of operations are highly effective at reducing the symptoms of stress urinary incontinence. More recently, surgeons have developed sling procedures for men (see "The Men's Room", page 22).

Bladder neck suspension

This procedure is designed to lift the bladder up so it doesn't sag. It can be performed laparoscopically, which is less invasive and leaves smaller scars, but, unlike with sling procedures, you'll need about six weeks to recover. The good news is that many people find it provides significant long-term relief from symptoms of stress incontinence. Again, there are several variations of the procedure (you may hear the terms "retropubic suspension", "colposuspension" or the "Burch procedure"), which your surgeon will explain to you during your consultation.

Sacral nerve stimulation

Unlike the previous two procedures, which are only done in people with stress urinary incontinence, sacral nerve stimulation (SNS) is used to correct problems related to overactive bladder, urge urinary incontinence and urinary retention. A small device is surgically implanted next to the sacral nerve in the lower back, which plays a critical role in bladder emptying. By stimulating the nerve with electrical current, SNS restores the signalling pathways that are needed for the bladder to work properly. The procedure is reversible, meaning that the device can be removed at any time. Unfortunately, there are very few hospitals in Canada equipped to perform this procedure.

Self-Care

Absorbent products

Many people with urinary incontinence rely on absorbent products — like pads, guards, briefs and protective coverings — to manage urine loss. If other treatments don't

A word on menstrual pads

Many women rely on menstrual pads for protection from urinary incontinence, either because they're too embarrassed to buy incontinence products, or they just don't think there's a difference between the two. Even though menstrual and incontinence pads look similar, they are not the same. The type of material that will absorb blood well and keep you dry won't perform as well with urine, which has a very different consistency.

provide a complete cure, these products offer an extra measure of security so you can go on living your life and doing the things you enjoy most.

There are products to choose from and many things to consider when deciding which is right for you. Individuals come in all shapes and sizes, have different lifestyles and a wide range of symptoms. A person who is very active probably needs a different product than someone with a more sedentary lifestyle. Likewise, a person with milder symptoms will require a lower absorbency product than someone whose incontinence is more severe.

A single product may not meet all your needs. For example, you might want to wear a disposable brief if you suffer from heavy leakage at night, but may manage with a smaller product during the day.

Cost is also something you need to consider. A senior living at home will spend an average of $1,000–$1,500 each year on incontinence supplies, including absorbent products, additional laundry expenses, medications and other treatments. However, a less expensive product won't necessarily save you money if you have to change it more often, get skin irritations or infections or are doing more laundry because of leakage.

"Containment" or "absorbency" are terms that refer to a product's ability to hold lost urine without leaking. Products are classified for use for light through moderate to heavy

THE MEN'S ROOM

Pads, guards and pouches specially designed for men are also available. Like the pads designed for women, they stick to snug-fitting underwear, have a waterproof backing to prevent leakage and a gel-forming polymer for absorbency. Belted undergarments and disposable underwear and briefs are also available for men.

Condom catheters are useful for men with heavy incontinence who find pads inadequate. Condom catheters are made up of a latex or non-latex sheath that's connected to an external urine bag. Some condom catheters stick directly to the skin, while others are held in place with an adhesive strip. It's very important to use the right size condom to prevent leakage.

urine loss. But there's no standardization between products, so what's considered "light" for one manufacturer may be different for another. Also keep in mind that absorbency isn't the only thing that controls leakage. A product that doesn't fit well, particularly around the legs, can also leak. You may need to test out a few different products before finding the one that works best for you. Products should be fitted body close to ensure the best protection.

Absorbent products can be either disposable or reusable. Disposable products like pads, guards, liners, protective underwear and briefs are sold in most pharmacies. Reusable products, which come in many of the same categories, can be found at medical supply stores or ordered on the Internet.

Pads, guards and liners

Pads and guards adhere directly within your underwear, have a waterproof backing to prevent leakage and are filled with a super absorbent polymer that wicks urine away from the skin and keeps you dry. Pads and guards are best for people with light to moderate incontinence. Many are contoured to fit comfortably between the legs and have elasticized sides to provide a cupping form. Pads and guards come in several sizes and levels of absorbency. Liners are another type of absorbent product that don't have the sticky backing. They can be used inside other products (like disposable underwear or briefs) for extra absorbency.

Belted undergarments

Belted undergarments are worn instead of ordinary underwear. A pad is attached (with buttons or Velcro) to an elastic belt worn around the waist. Belted undergarments can be pulled up and down when you need to use the toilet, and the pad can be easily changed. These products are available for both men and women with mild to moderate incontinence.

Protective underwear

Disposable underwear has a cloth-like waterproof backing (as opposed to plastic) and a built-in absorbent pad. Like

belted undergarments, it's made for mild to moderate incontinence, but the distribution of the padding makes it more appropriate for women. One drawback of these products is that you have to remove your trousers to change them.

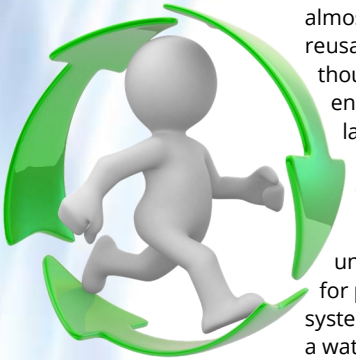
Disposable briefs

Are best suited for people with moderate to heavy urinary or fecal incontinence. They closely resemble baby diapers, except that they have two or three plastic closures on each side instead of just one. Some products have a plastic waterproof backing, while others are more fibrous and cloth-like, which many people prefer. They work equally well for men and women and can be changed without removing your trousers.

Many people find it psychologically difficult to use disposable briefs. They are, however, the best option for people with heavy incontinence. Besides, it's better to feel confident knowing you have that extra measure of protection so that you can go out and lead a normal life.

Reusable products

Though most people prefer to use disposable products, reusable (i.e. washable) products are also available in almost every category discussed above. Some people prefer reusable products out of concern for the environment, though it's not quite clear if they are in fact more environmentally friendly when you factor in the extra laundering. There's also some debate as to whether reusable products are more irritating to the skin than disposable ones.



In addition to pads, belted undergarments and underwear, pant-and-pad systems are another option for people who prefer reusable products. Pant-and-pad systems (available for both men and women) are pants with a waterproof pocket into which you can insert a pad, or that come with a built-in pad. Some people prefer these products because they are more like regular underwear. There are also mesh stretch pants, which can be used with many types of product to provide a snug fit.

Skin care

Choosing the right absorbent product is important, not only to give you confidence but also to protect your skin from moisture. If the sensitive skin around the genitals and groin is not kept dry, people with incontinence can suffer from rashes, skin infections and sores.

To prevent these complications, make sure to change absorbent products as often as is needed. Wash with a liquid soap, rather than bar soap, which can be more irritating to the skin. When choosing a soap, look for a gentle cleanser that also moisturizes and protects, and avoid using alcohol, which can dry the skin.

Barrier creams, ointment and gels can also be helpful. They act as a protective covering for the skin, preventing moisture from getting in.

Toileting aids

Many elderly people suffer from incontinence because they're unable to get to the bathroom on time or have difficulty using conventional toilets. Toileting aids such as bedpans, urinals and commodes are particularly useful for people who have to get up several times during the night or who have impaired mobility. Bedpans, usually made of plastic or metal, come in several shapes and sizes. A urinal is a bottle used to collect urine and specially designed for both men and women. A commode is a chair with a receptacle to collect urine that can be placed in the bedroom or other easily accessible place. Some are portable, so the person can sit on it and then make their way to the bathroom.

For people who have difficulty sitting on the toilet and getting up again, raised toilet seats, usually made of plastic, fit right on top of conventional toilets. Grab bars, placed around or beside the toilet, can also help people keep their balance and provide some leverage.

Meet the experts

When they do decide to see a doctor, most people with incontinence turn to their GP or family doctor for help. Some women will discuss it with their gynecologist. Unfortunately, not all GPs or gynecologists will wish to diagnose the cause of incontinence themselves. They may refer you to a specialist for additional tests or advice on treatment. Depending on your particular circumstances, the road to getting help may include these specialists:

A **urologist,** a doctor who specializes in diseases of the urinary system in women and men and the male reproductive system. Urologists are qualified surgeons.

A **urogynecologist,** a gynecologist with special training in urinary problems that affect women. Urogynecologists are also qualified surgeons.

A **nurse continence advisor**, a nurse who has been specially educated to help people with bladder control problems. The focus of the nurse continence advisor is to assess your bladder problem and help you learn what you can do to regain bladder control.

A **physiotherapist**, a healthcare worker who can give you valuable advice and information on how your bladder works and how to control leakage through behavioural treatments like pelvic floor muscle exercises, biofeedback and bladder retraining.

Useful links

The Canadian Continence Foundation (TCCF)
www.canadiancontinence.ca
Toll free: 1-800-265-9575

TCCF specializes in providing patients with important information on managing urinary incontinence.

The Society of Obstetricians and Gynaecologists of Canada (SOGC)
www.sogc.ca
Toll free: 1-800-561-2416
The SOGC is an association of gynecologists, obstetricians, family physicians, nurses, midwives and allied health professionals who specialize in women's health issues. They also provide educational materials for patients on a variety of related topics.

Canadian Urological Association (CUA)
www.cua.org
Tel: 514-395-0376
The CUA's patient information webpage contains a wide range of patient brochures that can be downloaded free of charge.

Canadian Nurse Continence Advisors (CNCA)
www.cnca.ca
Tel: 905-573-4823

Urology Nurses of Canada (UNC)
www.unc.org

Canadian Physiotherapy Association (CPA)
www.physiotherapy.ca
Toll Free: 1-800-387-8679

Prostate Cancer Canada (PCC)
www.prostatecancer.ca
Toll free: 1-888-255-0333
Visit their website for useful information or to find a prostate cancer support group near you.

World Federation of Incontinent Patients (WFIP)
www.wfip.org

International Continence Society (ICS)
www.ics.org

International Urogynecological Association
www.iuga.org

Canadian Society for Pelvic Medicine
www.canadiansocietyforpelvicmedicine.org

Crohns and Colitis Canada
www.crohnsandcolitis.ca

Fecal incontinence

Fecal incontinence is much less common than urinary incontinence, but its impact on well-being and quality of life can be just as devastating. The good news is you don't have to suffer in silence. Talk to your doctor about your symptoms and get help today. To get you started, here is some basic information about fecal incontinence and the treatments available to help you regain control of your life.

Q. What is fecal incontinence?

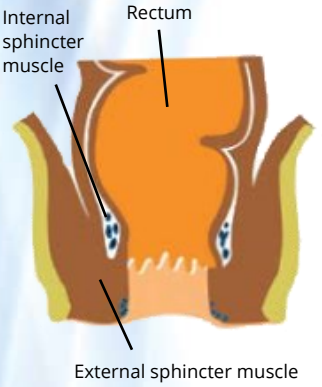
A. Fecal incontinence (also called bowel or stool incontinence) is the involuntary loss of stool from the bowel. It can range in severity from occasional leakage when you pass gas to the complete loss of bowel control.

Q. Who can get it?

A. Occasional soiling is reported by up to 20% of people, whereas complete loss of control is much less common. About 1% of people under the age of 65 and 4% –7% of people over 65 have fecal incontinence. It is three times more likely to occur in younger women than in men, until the age of 65 when things balance out and roughly the same number of men and women are affected.

Q. How does the bowel work?

A. Three things are necessary to maintain normal bowel function. If something is wrong with any of these functions, fecal incontinence can occur.



Anal sphincter muscles. Both the external and internal sphincters contract to prevent stool from leaving the rectum.

Rectal sensation. When your bowel is full, nerves send a signal to the brain warning you that it's time to go to the bathroom.

Rectal accommodation. The muscular wall of the rectum stretches to allow you to hold stool until you reach the toilet.

Q. What causes fecal incontinence?

A. A broad range of conditions and disorders can lead to fecal incontinence. Here are some of the most common ones.

Constipation: It may seem contradictory, but in fact, chronic constipation can lead to incontinence. Impacted stool — a mass of hard, dry feces that's too large to pass — can weaken the walls of the rectum and/or damage the nerves that control defecation. In addition, looser, more watery stool can leak out around the blockage.

Diarrhea: Loose stool is much harder to control than solid stool, so patients who suffer frequent bouts of diarrhea are more likely to have incontinence. Certain foods or infections can cause diarrhea and aggravate symptoms.

Muscle damage: Damage to the external or internal sphincter is a frequent cause of fecal incontinence. Like urinary incontinence, this can occur during childbirth, especially if the doctor must use forceps or perform an episiotomy. Symptoms sometimes don't show up until years later. The deterioration of pelvic floor muscles or the anal sphincter as you age can also cause incontinence.

Nerve damage: If the nerves that sense when it's time to go to the bathroom or the ones that control the anal sphincter are damaged, incontinence can occur. This can also happen during childbirth, in people who have suffered a stroke or spinal cord injury, or in those with diabetes, multiple sclerosis or any other disease that attacks the nerves.

Reduced elasticity: Inflammatory bowel diseases like Crohn's disease can irritate the lining of the rectal wall, interfering with its ability to hold stool. Previous surgery or radiation (such as for rectal cancer) can also scar or damage the rectum.

Other conditions: Rectal prolapse (a condition where the rectum drops and protrudes into the anus) or rectocele,

when the rectum protrudes through the vagina, can lead to incontinence. Hemorrhoids that prevent the anal sphincter from closing properly can also cause leakage.

Q. How is fecal incontinence treated?

A. Luckily, treatments are available that can help you regain control of your bowels or at least minimize your symptoms. The right treatment will depend on the cause of your incontinence. Your doctor may suggest you make changes to your diet or take medication or try special exercises and behavioural training. Surgery may be an option if other treatments fail.

Dietary changes centre around improving the consistency of your stool to prevent episodes of incontinence. If you suffer from constipation, you'll want to drink plenty of liquids and foods that are rich in fibre. Getting lots of fibre in your diet will also help bulk up the stools if diarrhea is contributing to your incontinence. See our list of Diet do's and don'ts (right) for more helpful tips.

Medications work by improving the consistency of stool or slowing down the movement of food through your intestine. This will allow water to be fully absorbed in the colon (to prevent diarrhea) and give you enough time to get to the bathroom when you feel the urge to defecate. Some of the most commonly recommended medications are available at your local pharmacy without a prescription.

Fibre supplements: There are all sorts of products available to give you an extra dose of fibre. Some come in chewable form, while the powdered versions can be mixed with water or sprinkled on your food. Try different things until you find one you like.

Antidiarrheal drugs: Loperamide (Imodium®) slows down the movement of food and waste through your intestine and helps treat diarrhea. It can be safely combined with other medications.

Laxatives and stool softeners: If you suffer from constipation, temporary use of a mild laxative to make you

Diet do's and don'ts

If you suffer from ...

... constipation

- **Drink at least 8 glasses of water a day**
- **Eat high-fibre foods such as fruits, vegetables, whole grains and cereals**
- **Eat smaller meals, more frequently**
- **Be as active as possible**

. . . diarrhea

- **Avoid spicy or greasy foods, cured or smoked meat, dairy products, caffeine, alcohol and artificial sweeteners**
- **Eat plenty of fibre**

go to the bathroom may provide relief, but using them continuously can make fecal incontinence worse. As the name implies, stool softeners will soften your stool to prevent impaction and make it easier to pass. Some products contain both a laxative and a stool softener in the same pill.

Bowel training is geared towards restoring lost muscle strength in your bowel wall or anal spincter and teaching you healthy behaviours that can put you back in control. Following an established bathroom routine is one way to make your bowel movements more predictable and reduce the risk of accidents. You can also practice contracting your anal sphincter to strengthen those muscles and prevent leakage. As with urinary incontinence, biofeedback may be helpful in making sure you're doing these exercises correctly.

Surgery can be an option for some causes of fecal incontinence, most often to repair a prolapse or a damaged anal sphincter.

Sphincter repair/replacement: In a procedure called a sphincteroplasty, the damaged area of the sphincter is detached and the edges are sown back together. If necessary, a piece of muscle can be taken from the thigh and wrapped around the sphincter to reinforce it. If the damage is more extensive, an artificial anal sphincter (essentially an inflatable ring) can be implanted, which you can deflate with a pump inserted under the skin of the scrotum (in men) or major labia (in women) when you need to go to the bathroom.

Surgery for rectal prolapse/rectocele: The fallen rectum is lifted back to the correct position and stitched in place. At the same time, the surgeon can repair any damaged muscles that caused the

prolapse in the first place.

Hemorrhoidectomy: Internal hemorrhoids can prevent the anal sphincter from closing properly. They can be removed with a scalpel (a surgical knife), a laser or electricity (cautery pencil).

Colostomy: This is a more drastic procedure reserved for people with severe incontinence and for whom other treatments have failed. The rectum is closed off and stool is diverted to an opening in the abdominal wall, to which a special bag is attached to collect the stool.

Sacral nerve stimulation: The sacral nerve controls the sensation and strength of the anal muscles as well as the bladder. The same procedure described to treat urinary incontinence (see page 24) can be used for fecal incontinence as well.

Bulking agents similar to those used to treat urinary incontinence (see page 22) have recently been developed for fecal incontinence. They've only been tried in a limited number of people, though, and larger and more rigorous studies are needed. However, they may soon become an option in people with severe incontinence that hasn't responded to other treatments.

Q. Where can I get more information on fecal incontinence?

A. The International Foundation for Functional Gastrointestinal Disorders (www.iffgd.org) is a nonprofit education and research group that provides information on gastrointestinal disorders including fecal incontinence.

The National Digestive Diseases Information Clearinghouse (NDDIC), a service of the U.S. National Institute of Diabetes and Digestive and Kidney Diseases (www.digestive.niddk.nih.gov) also publishes helpful information for patients with fecal incontinence.

Glossary

Absorbency: Refers to an incontinence product's ability to hold lost urine without leaking. Products are classified as light, moderate, or heavy. Also called "containment".

Acetylcholine: Substance that transmits signals between nerves, and between nerves and muscles throughout the body, including the bladder.

Anticholinergic: Refers to a substance that blocks the effects of acetylcholine, a naturally occurring chemical involved in the transmission of nerve impulses in the body. Anticholinergic drugs are used to treat a variety of conditions, including incontinence and asthma.

Benign prostatic hyperplasia (BPH): A noncancerous enlargement of the prostate gland common in men over the age of 50, and sometimes leading to incontinence.

Biofeedback: A method of treatment that provides sight or sound information about body functions, used to teach people how to control them. In urinary incontinence, biofeedback can be used to help people control urination and/or teach them how to do pelvic floor muscle exercises (see below) correctly.

Bladder: Organ that stores urine before it is eliminated from the body. The bladder is made of flexible muscle tissue that allows it to expand and contract depending on the amount of urine present.

Bladder diary: Chart used to record fluid intake, urine elimination and leakage. Also called a voiding record.

Bowel: General term for the small and large intestines.

Catheter: A flexible tube used to drain urine from the bladder.

Compliance: Taking medication as prescribed by your doctor or healthcare professional. This means taking all the drugs you've been prescribed at the right times and in the right way, for as long as you've been instructed to.

Containment: Refers to an incontinence product's ability to hold lost urine without leaking. Products are classified as light, moderate, or heavy. Also called "absorbency".

Crohn's disease: A chronic, inflammatory disease of the digestive tract.

Detrusor muscle: Layer of the bladder wall that contracts to push urine out when you go to the bathroom.

Diuretic: A substance or medication that increases the amount of urine produced by the kidneys.

Episiotomy: a small incision (cut) made during childbirth to enlarge the vaginal opening.

Pelvic floor muscle exercises: Alternate contraction and relaxation of the muscles of the pelvic floor. These exercises strengthen the muscles as a treatment for urinary incontinence.

Kidneys: Bean-shaped organs that filter waste from blood.

Laparoscopic: Refers to a type of surgical procedure performed with a laparoscope, a lighted tube used to look at tissues and organs inside the abdomen. Laparoscopic surgery is minimally invasive. A smaller incision is needed than for traditional surgery and the recovery is generally shorter and less painful.

Neurotoxin: A substance that damages or destroys nerve tissue.

Overactive bladder (OAB): A urinary condition that involves frequent and urgent urges to go to the bathroom, with or without incontinence. OAB is caused by abnormal contractions of the bladder wall.

Pelvic floor muscles: Muscles at the base of the pelvis that form a sort of sling from the pubic bone in front to the base of your spine at the back. They support the bladder, uterus, vagina and rectum.

Progestin: A man-made version of the female sex hormone progesterone used, along with estrogen, in oral contraceptives (the pill) and hormone replacement therapy.

Prolapse: The falling down or slipping of a body part, such as the uterus, from its normal position.

Prostate: Male sex gland located just below the bladder. The prostate produces a milky fluid that mixes with sperm at the time of ejaculation to form semen.

Prostate-specific antigen (PSA): Protein produced by the prostate gland. A PSA test measures the amount of this protein in the blood. Having too much PSA can be a sign of prostate diseases, such as BPH or prostate cancer.

Radical prostatectomy: Surgical removal of the prostate for the treatment of prostate cancer.

Sacral nerve: Nerve that spreads from the lower spinal cord, carrying signals to the muscles of the pelvis, buttocks and perineum (the area between the anus and the vulva in women, and between the anus and the scrotum in men).

Self-intermittent catherization: The use of a catheter to empty the bladder at regular intervals during the day. People are taught how to do this themselves, in order to avoid having to leave the catheter in permanently.

Sphincteroplasty: Surgical technique designed to repair a circular muscle or sphincter, such as the anal sphincter.

Ureter: The tube that carries urine from the kidney to the bladder.

Urethra: The tube through which urine leaves the body.

Urethral sphincter: The valve that keeps urine from leaking out of the bladder. The urinary sphincter is made of muscle.

Urinary tract: The organs of the body that produce and discharge urine. These include the kidneys, ureters, bladder and urethra.

Product manufacturers

This list is by no means exhaustive and is intended as reference only. Please consult your doctor or healthcare professional about the products and treatments that are right for you.

Medications

NOTE: These medications cannot be purchased without a prescription from your doctor.

Allergan www.allergan.ca **Product:** Botox®

Astellas Pharma www.astellas.com/ca **Product:** Vesicare®, Mirabegron

Duchesnay www.duchesnay.com **Products:** Mictoryl®, Mictoryl pediatric®

Ferring Pharmaceuticals www.ferring.com **Product:** DDAVP Melt®, Nocdurna®

Janssen-Ortho www.janssen-ortho.com **Products:** Ditropan XL®

Oryx Pharmaceuticals www.oryxpharma.com **Product:** Trosec®

Pfizer www.pfizer.ca **Products:** Detrol®, Detrol LA®, Toviaz®

Watson Pharma Company www.watsonpharmacompany.ca **Products:** Gelnique®, Oxytrol®

Bulking agents

Carbon Medical Technologies www.carbonmed.com **Products:** Durasphere EXP®, Durasphere FI®

Cogentix www.cogentixmedical.com **Products:** Macroplastique®, PTQTM Implants

Add Red Leaf Medical http://redleafmedical.com **Products:** Deflux®

Mechanical and surgical devices

Bard Canada www.bardcare.com **Products:** Foley catheters, Intermittent, external or condom catheters, foley securement devices and drainage bags. Bowel managment products.

Boston Scientific www.bostonscientific.com **Products:** surgical slings, catheters and other surgical supplies

Coloplast Canada www.coloplast.ca **Products:** Catheters, drainage bags, anal plugs, surgical slings

Cook Medical www.cookmedical.com **Products:** surgical slings, catheters, sheaths and other surgical supplies

Duchesnay www.ladysystem.ca **Product:** Ladysystem® vaginal cones for pelvic floor re-education

Hollister Limited www.hollister.com/canada **Products:** Intermittent catheters and collection systems, skin care, pelvic floor therapy systems

iKare Med Inc. www.ikaremed.com **Products:** Contiform vaginal cones and men's incontinence products

Laborie www.laborie.ca **Products:** Urodynamics equipment, rehabilitation systems and electrical stimulation biofeedback system for urinary and fecal incontinence

Medtronic www.medtronic.com **Products:** Sacral neuromodulation (InterStim®) to improve bladder and bowel control

Red Leaf Medical www.redleafmedical.com **Products:** catheters, including hydrophilic, male external

Resilia Medical Solutions www.resilia.ca **Products:** Uresta™ Bladder support

Disposable absorbent products and skin care

NOTE: Disposable absorbent products can be bought at your local pharmacy or home health store.

Attends Healthcare Products Inc., maker of Attends® products www.attends.com **Products:** Pads, liners, belted undergarments, briefs, underwear for men and women, and guards for men

Essity www.essity.com **Products:** maker of TENA® products, disposable pads, liners and protective underwear for men and women; TENA for MENTM and TENA Skin Care range

First Quality Enterprises, maker of Prevail® products www.firstquality.com **Products:** Pads, liners, belted undergarments, briefs and underwear for men and women

Kimberly-Clark, maker of Poise and DEPEND® products www.depend.com **Products:** Belted undergarments, briefs and underwear for men and women, guards for men

Medline www.medline.com **Products**: Pads, liners, belted undergarments, briefs and underwear for men and women and skin care products

Principle Business Enterprises, maker of Tranquility® products www.tranquilityproducts.com **Products:** Pads, liners, belted undergarments briefs and underwear for men and women

Procter & Gamble https://alwaysdiscreet.com makers of Always Discreet briefs

3M Canada www.3m.ca/cavilon Maker of Cavilon, Incontinent skin care cream, ointment, and barrier films. No-Rinse skin cleanser, Advanced skin protectant

Reusable absorbent products

There are dozens manufacturers of reusable adult incontinence products across the US and Canada and it would be impossible to list them all. For advice on quality products, consult your healthcare professional, pharmacy or home health store.

Online distributers of all incontinence products and supplies

Note: there are many online distributers of incontinence products, below are just a few, please check online for others in your area.

AgeComfort https://agecomfort.com/
Healthwick https://www.healthwick.ca/
MyLiberty.Life https://myliberty.life/
Catherters Plus http://www.cathetersplus.com/ (not only catherters)

The Canadian
Continence Foundation

Does involuntary urinary leakage interfere with your daily activities?

You're not alone: over 10% of the Canadian population (and anywhere up to 50% of women 45 and older) experience some form of incontinence

Most people see significant improvement with available treatments

We're here to help!
Contact The Canadian Continence Foundation
www.canadiancontinence.ca

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