

Information on Female Incontinence provided by the Office on Women's Health in the Department of Health and Human Services

What is urinary incontinence and what causes it?

When you are not able to hold your urine until you can get to a bathroom, you have what's called *urinary incontinence* (also called loss of bladder control). In contrast, bladder control means you urinate only when you want to. Incontinence can often be temporary, and it always caused by an underlying medical condition.

More than 13 million Americans experience loss of bladder control. However, women suffer from incontinence twice as often as men do. Both women and men can have trouble with bladder control from *neurological* ([nerve](#)) injury, birth defects, [strokes](#), [multiple sclerosis](#) (MS), and physical problems associated with aging.

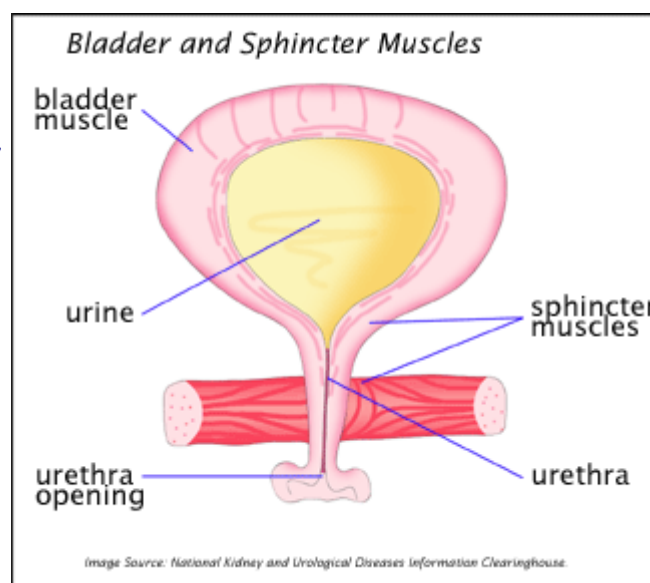
Older women have more bladder control problems than younger women do. The loss of bladder control, however, is not something that has to happen as you grow older. It can be treated and often cured, whatever your age. Don't let any embarrassment about incontinence prevent you from talking to your health care provider about your condition. Find out if you have a medical condition that needs treatment.

What does the bladder system look like and how does it work?

Bladder control means more than just telling yourself to wait to urinate until you get to the bathroom. It is not that simple. It takes teamwork from many organs, muscles, and nerves in your body.

Most of the bladder control system is inside your *pelvis*, the area of your abdomen between your hips and below the belly button. Your *bladder* is a muscle shaped like a balloon. When the bladder stores urine, the bladder muscle relaxes. When you urinate, the bladder muscle tightens to squeeze urine out of the bladder.

More muscles help with bladder control. *Two sphincter muscles* surround the tube that carries urine down to an front of the called the leaves your body The sphincter urethra closed rubber bands.



from your bladder opening in the vagina. The tube is *urethra*. Urine through this tube. muscles keep the by squeezing like

Pelvic floor muscles support the uterus, or womb, and rectum and bladder. They also help keep the urethra closed.

When the bladder is full, nerves in your bladder signal the brain. That's when you get the urge to urinate. Once you reach the toilet, your brain sends a message down to the sphincter muscles and the pelvic floor muscles. The brain tells them to relax. The brain also tells the bladder muscles to tighten up to squeeze urine out of the bladder.

Loss of bladder control in women most often happens because of problems with the muscles that help to hold or release urine: the bladder muscle, the sphincter muscles, and the pelvic floor muscles. Incontinence occurs if your bladder muscles suddenly contract (or squeeze) or if the muscles around the urethra suddenly relax.

Are there different types of urinary incontinence?

Yes, there are different types of incontinence. They include:

- **Stress incontinence** - Leaking small amounts of urine during physical movement (coughing, sneezing, exercising). Stress incontinence is the most common form of incontinence in women. It is treatable.
- **Urge incontinence** - Leaking large amounts of urine at unexpected times, including during sleep, after drinking a small amount of water, or when you touch water or hear it running (as when washing dishes).
- **Functional incontinence** - Not being able to reach a toilet in time because of physical disability, obstacles, or problems in thinking or communicating that prevent a person from reaching a toilet. For example, a person with Alzheimer's disease may not think well enough to plan a trip to the bathroom in time to urinate or a person in a wheelchair may be blocked from getting to a toilet in time.
- **Overflow incontinence** - Leaking small amounts of urine because the bladder is always full. With this condition, the bladder never empties completely. Overflow incontinence is rare in women.
- **Mixed incontinence** - A combination of incontinence, most often when stress and urge incontinence occur together.
- **Transient incontinence** - Leaking urine on a temporary basis due to a medical condition or infection that will go away once the condition or infection is treated. It can be triggered by medications, urinary tract infections, mental impairment, restricted mobility, and stool impaction (severe constipation).

Do pregnancy, childbirth and menopause affect urinary incontinence?

Yes. During pregnancy, the added weight and pressure of the unborn baby can weaken pelvic floor muscles, which affect your ability to control your bladder. Sometimes the position of your bladder and urethra can change because of the position of the baby, which can cause problems. Vaginal delivery and an *episiotomy* (the cut in the muscle that makes it easier for the baby to come out) can weaken bladder control muscles. And, pregnancy and childbirth can cause damage to bladder control nerves.

After delivery, the problem of urinary incontinence often goes away by itself. But if you are still having problems 6 weeks after delivery, talk to your health care provider. Bladder control problems don't always show up right after childbirth. Some women do not have problems with incontinence until they reach their 40's.

Menopause (when your periods stop completely) can cause bladder control problems for some women. During menopause, the amount of the female hormone **estrogen** in your body starts decreasing. The lack of estrogen causes the bladder control muscles to weaken. *Estrogen* controls how your body matures, your monthly periods, and body changes during pregnancy and breastfeeding. Estrogen also helps keep the lining of the bladder and urethra plump and healthy.

Talk with your health care provider about whether taking estrogen to prevent further bladder control problems is best for you. Tell him or her if you or your family has a history of cancer. If you face a high risk of breast cancer or uterine cancer, your health care provider may not prescribe estrogen for you.

How is urinary incontinence diagnosed?

If you are having a problem with incontinence, the first step is to see your health care provider. She or he can refer you to a *urologist*, a doctor who specializes in treating the urinary tract. Some urologists further specialize in the female urinary tract. Gynecologists and obstetricians specialize in the female reproductive tract and childbirth. An *urogynecologist* focuses on urological problems in women. Family practitioners and internists treat patients for all kinds of complaints. Any of these doctors may be able to help you.

To diagnose the problem, your health care provider will first ask you about your symptoms and for a complete medical history. Your provider should ask you about your overall health, any problems you are having, medications you are taking, surgeries you have had, pregnancy history, and past illnesses. You will also be asked about your bladder habits: how often you empty your bladder, how and when you leak urine, or when you have accidents.

Your provider will then do a physical exam to look for signs of any medical conditions that can cause incontinence, such as tumors that block the urinary tract, impacted stool, and poor reflexes that may be nerve-related.

A test may be done to figure out how much your bladder can hold and how well your bladder muscles function. For this test, you will be asked to drink plenty of fluids and urinate into a measuring pan, after which your provider will measure any urine that remains in the bladder. Your provider may also recommend other tests, including the :

- **Stress test** - You relax, and then cough hard as the provider watches for loss of urine.
- **Urinalysis** - You give a urine sample that is then tested for signs of infection or other causes of incontinence.
- **Blood** tests - You give a blood sample, which is sent to a laboratory to test for substances related to the causes of incontinence.
- **Ultrasound** - Sound waves are used to take a picture of the kidneys, bladder, and urethra, so any problems in these areas that could cause incontinence can be seen.
- **Cystoscopy** - A thin tube with a tiny camera is placed inside the urethra to view the inside of the urethra and bladder.
- **Urodynamics** - Pressure in the bladder and the flow of urine are measured using special techniques.

You may be asked to keep a diary for a day or a week in order to record when you empty your bladder. This diary should include the times you urinate and the amounts of urine you produce. To measure your urine, you can use a special pan that fits over the toilet rim. These pans are available at drug stores or surgical supply stores.

How is urinary incontinence treated?

There are a number of ways to treat incontinence. Your health care provider will work with you to figure out which way(s) is best for you. Don't give up or be embarrassed! Remember, many women have incontinence and all types of incontinence can be treated, no matter what your age.

Treatments include:

- Pelvic muscle exercises - Simple exercises to strengthen the muscles near the urethra, also called **Kegel** exercises. Taking a few minutes each day to do these exercises can help to reduce or cure stress leakage. A health care provider can teach you these exercises, most of which require no special equipment. One exercise, however, does use cones of different weights. You stand and hold a cone-shaped object inside your vagina. You then substitute cones of increasing weight to strength the muscles that keep the urethra closed.
- Electrical Stimulation - Brief doses of electrical stimulation can strengthen muscles in the lower pelvis in a way similar to exercising the muscles. Special devices called *electrodes* are temporarily placed inside the vagina or rectum to stimulate nearby muscles. This treatment can be used to reduce both stress incontinence and urge incontinence.
- Biofeedback - Biofeedback used measuring devices to help you become aware of your body's functioning. A therapist trained in biofeedback places an electrical patch over your bladder and urethral muscles. A wire connected to the patch is linked to a TV screen. You and your therapist watch the screen to track when these muscles contract, so you can learn to gain control over these muscles.

Biofeedback can be used with pelvic muscle exercises and electrical stimulation to relieve stress incontinence and urge incontinence.

- **Timed Voiding or Bladder Training** - Two techniques that help you to train your bladder to hold urine better. In timed voiding (urinating), you fill in a chart of when you urinate and when you leak urine. From the patterns that appear in your chart, you can plan to empty your bladder before you would otherwise leak. Bladder training---biofeedback and muscle conditioning---can change your bladder's schedule for storing and emptying urine. These techniques are effective for urge incontinence and overflow incontinence.
- **Weight Loss** - Extra weight can cause bladder control problems. If you are overweight, talk with your health care provider about a diet and exercise program to help you lose weight.
- **Dietary Changes** - Certain foods and drinks can cause incontinence, such as caffeine (in coffee, soda, chocolate), tea, and alcohol. You can often reduce incontinence by restricting these liquids in your diet.
- **Medicines** - Medications can reduce many types of leakage. They can also help tighten or strengthen pelvic floor muscles and muscles around the urethra. Some drugs can also calm overactive bladder muscles. Some drugs, especially hormones such as estrogen, are believed to cause muscles involved in urination to function normally.

Be aware that some drugs can produce harmful side effects if used for long periods of time. In particular, estrogen therapy can increase a person's risk for cancers of the breast and *endometrium* (lining of the uterus). Talk to your provider about the risks and benefits of medications.

- **Implants** - Substances are injected (through a needle) into tissues around the urethra. The implant adds bulk and helps the urethra to stay closed. This treatment reduces stress incontinence. *Collagen* (a natural fibrous tissue from cows) and fat from a person's body have been used. This procedure takes about 30 minutes and can be done in a provider's office using local anesthesia.

The success rate of implants varies. Injections must be repeated after a time because the body slowly gets rid of the substances. Before getting a collagen injection, you need to have a skin test to make sure you are not allergic to this substance.

- **Surgery** - This treatment is primarily used only after other treatments have been tried. Different types of surgery can be done, depending on what kind of incontinence problem you have. Some surgeries raise, or lift, the bladder up to a more normal position. Other surgeries use implants to help the bladder function better.
- **Catheterization** - A *catheter* is a small tube that you can learn to insert yourself through the urethra into the bladder to drain urine. Catheters can be used once in while or all the time. If used all the time, the tube connects to a bag that you

can attach to your leg. If you use a long-term (or *indwelling*) catheter, you need to watch for signs of urinary tract infection.

- **Pessary** - A *pessary* is a stiff ring that is inserted by a health care provider into the vagina, where it presses against the wall of the vagina and the nearby urethra. The pressure helps to hold up the bladder and reduce stress leakage. If you use a pessary, watch for signs of vaginal and urinary tract infections. Visit your provider right away if you think you have an infection. Have your provider check the pessary on a regular basis.
- **Urethral Inserts** - A urethral insert is a small device that you place inside the urethra, a technique that you can learn to do yourself. You remove the device when you go to the bathroom and then put it back into your urethra until you need to urinate again.
- **Urine Seals** - Urine seals are small foam pads that you place over the urethra opening. The pad seals itself against your body, keeping you from leaking. You remove and throw it away after urinating. You then place a new seal over the urethra.
- **Dryness Aids** - Absorbent pads or diapers help many women, but they do not cure bladder control problems. They can also cause low self-esteem (how you feel about yourself) and irritate the skin. Some women use urinals (pans) beside their beds when they sleep if they suffer from urge incontinence.

For More Information:

For more information about urinary incontinence, contact the National Women's Health Information Center at (800) 994-9662 or TDD at 1-888-220-5446. Visit NWHIC's web site at www.womenshealth.gov. Other organizations that you can contact are listed below.

National Kidney and Urologic Diseases Information Clearinghouse

Phone Number(s): (800) 891-5390

Internet Address: <http://www.niddk.nih.gov/health/kidney/nkudic.htm>

American Foundation for Urologic Disease

Phone Number(s): (800) 242-2383

Internet Address: <http://www.afud.org>

Simon Foundation for Continence

Phone Number(s): (800) 237-4666

Internet Address: <http://www.simonfoundation.org>

National Association for Continence

Phone Number(s): (800) 252-3337

Internet Address: <http://www.nafc.org/>

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