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Stress urinary incontinence

Stress incontinence occurs when your bladder leaks urine during physical activity or exertion. It may happen when you cough, lift something heavy, change positions, or exercise.

Causes

Most adults can hold over 2 cups (480 milliliters) of urine in their bladder. Stress incontinence occurs when the muscles that control your ability to hold urine get weak or do not work.

- The bladder and urethra are supported by the pelvic floor muscles. Urine flows from your bladder through your urethra to the outside.
- The sphincter is a muscle around the opening of the bladder. It squeezes to prevent urine from leaking through the urethra.

When either set of muscles become weak, urine can pass when pressure is placed on your bladder. You may notice it when you:

- Cough
- Sneeze
- Laugh
- Exercise
- Lift heavy objects

Weakened muscles may be caused by:

- Childbirth
- Injury to the urethra area
- Some medicines
- Surgery in the pelvic area or the prostate (in men)
- Unknown causes

Stress incontinence is the most common type in women. Some things increase your risk, such as:

- You have had more than one pregnancy and vaginal delivery.
- You have pelvic prolapse. This is when your bladder, urethra, or rectum slide into the vagina. Delivering a baby can cause nerve or tissue damage in the pelvic area. This can lead to pelvic prolapse months or years after delivery.

Symptoms

The main symptom of stress incontinence is leaking urine when you:

- Are physically active
- Cough
- Exercise

- Have sexual intercourse
- Sneeze
- Stand

Exams and Tests

Your health care provider will perform a physical exam. This will include:

- Genital exam in men
- Pelvic exam in women
- Rectal exam

Tests may include:

- Cystoscopy to look inside the bladder.
- Pad weight test: You exercise while wearing a sanitary pad. Then the pad is weighed to find out how much urine you lost.
- Voiding diary: You track your urinary habits, leakage and fluid intake.
- Pelvic or [abdominal ultrasound](#).
- Post-void residual (PVR) to measure the amount of urine left after you urinate.
- [Urinalysis](#) to check for urinary tract infection.
- Urinary stress test: You stand with a full bladder and then cough.
- Urodynamic studies to measure pressure and urine flow.
- X-rays with contrast dye to look at your kidneys and bladder.

Treatment

Treatment depends on how your symptoms affect your life.

There are 4 types of treatment for stress incontinence:

- Behavior changes
- Medicine
- Pelvic floor muscle training
- Surgery

BEHAVIOR CHANGES

Making these changes may help:

- Drink less fluid (if you drink more than normal amounts of fluid).
- DO NOT hold it. Urinate when you first feel the urge. This may help reduce the amount of urine that leaks.
- Avoid jumping or running.
- Take fiber to avoid constipation, which can make urinary incontinence worse.
- Quit smoking. This can reduce coughing and bladder irritation. Smoking also increases your risk for bladder cancer.
- Avoid alcohol and caffeinated drinks such as coffee. They can cause the urge to urinate.
- Lose excess weight.
- Avoid foods and drinks that may irritate your bladder. These include spicy foods, carbonated drinks, and citrus.
- If you have diabetes, keep your blood sugar under good control.

PELVIC FLOOR MUSCLE TRAINING

There are different ways to strengthen the muscles in your pelvic floor.

- **Biofeedback:** This method can help you learn to identify and control your pelvic floor muscles.
- **Kegel exercises:** These exercises can help keep the muscle around your urethra strong and working well. This may help keep you from leaking urine.
- **Vaginal cones:** You place the cone into the vagina. Then you try to squeeze your pelvic floor muscles to hold the cone in place. You can wear the cone for up to 15 minutes at a time, two times a day. You may notice improvement in your symptoms in 4 to 6 weeks.
- **Pelvic floor physical therapy:** Physical therapists specially trained in the area can fully evaluate the problem and help with exercises and therapies.

MEDICINES

Medicines tend to work better if you have mild to moderate incontinence. Your provider may prescribe one or more medicine. (These medicines do not always work with stress urinary incontinence.)

- **Anticholinergic medicines** help relax the muscles of the bladder. They include oxybutynin (Oxytrol, Ditropan), tolterodine (Detrol), darifenacin (Enblex), trospium (Sanctura), and solifenacin (Vesicare).
- **Antimuscarinic drugs** block bladder contractions.
- **Beta agonist** such as mirabegron (Mrybetriq): Enhances bladder relaxation.
- **Estrogen therapy** may help improve symptoms in women who have gone through menopause. It is applied as a cream or inserted into your vagina as a tablet or ring.
- **Imipramine**, an antidepressant, helps relax bladder muscles.

SURGERIES

If other treatments do not work, your provider may recommend surgery. Surgery may help if you have severe incontinence. Most providers suggest surgery only after trying other treatments.

- **Anterior vaginal repair** helps restore weak and sagging vaginal walls. This is used when the bladder bulges into the vagina (prolapse).
- **Artificial urinary sphincter:** This is a device used to keep urine from leaking. It is used mainly in men.
- **Bulking injections** make the area around the urethra thicker. This helps control leakage. The procedure may need to be repeated after a few months or years.
- **Male sling** is a mesh tape used to put pressure on the urethra. It is easier to do than placing an artificial urinary sphincter.
- **Retropubic suspensions** lift the bladder and urethra.
- **Tension-free vaginal tape** supports the bladder and urethra.
- **Vaginal sling procedures** use a sling to support the urethra.

If you have trouble completely emptying your bladder, you may need to use a catheter. This is a very small tube you place in your urethra to drain urine from your bladder.

Outlook (Prognosis)

Getting better takes time, so try to be patient. Symptoms most often get better with nonsurgical treatments. However, they will not cure stress incontinence. Surgery can cure some people of stress incontinence.

Treatment does not work as well if you have:

- Conditions that prevent healing or make surgery more difficult
- Other genital or urinary problems
- Past surgery that did not work

Possible Complications

Physical complications are rare and most often mild. They can include:

- Wearing away of materials placed during surgery, such as a sling or artificial sphincter
- [Fistulas](#) or [abscesses](#)
- Irritation of the vagina lips (vulva)
- Pain during intercourse
- Skin sores in people who can't get out of the bed or chair
- Unpleasant odors
- Urinary tract infections
- [Vaginal discharge](#)

The condition may get in the way of social activities, careers, and relationships. It also may make you feel embarrassed or bad about yourself.

When to Contact a Medical Professional

Call your provider if you have symptoms of stress incontinence and they bother you.

Prevention

Doing Kegel exercises may help prevent symptoms. Women who are pregnant may want to do Kegels during and after pregnancy to help prevent incontinence.

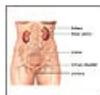
Alternative Names

Incontinence - stress; Bladder incontinence stress; Pelvic prolapse - stress incontinence; Stress incontinence; Leakage of urine - stress incontinence; Urinary leakage - stress incontinence; Pelvic floor - stress incontinence

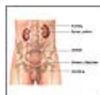
Patient Instructions

- [Indwelling catheter care](#)
- [Kegel exercises - self-care](#)
- [Self catheterization - female](#)
- [Sterile technique](#)
- [Urinary catheters - what to ask your doctor](#)
- [Urinary incontinence products - self-care](#)
- [Urinary incontinence surgery - female - discharge](#)
- [Urinary incontinence - what to ask your doctor](#)
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- [When you have urinary incontinence](#)

Images



[Female urinary tract](#)



[Male urinary tract](#)



Anterior vaginal wall repair



Stress incontinence



Stress incontinence



Bladder and urethral repair - series

References

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