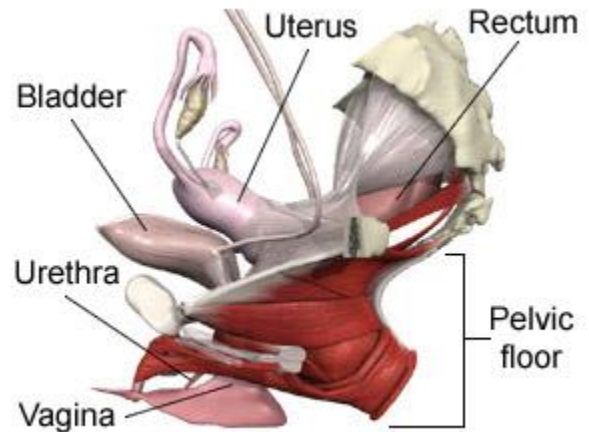


What is the Pelvic Floor?

The pelvic floor is a set of muscles that spread across the bottom of the pelvic cavity like a hammock. The pelvic floor has three openings that run through it, the urethra, the vagina, and the rectum. The functions of the pelvic floor include:

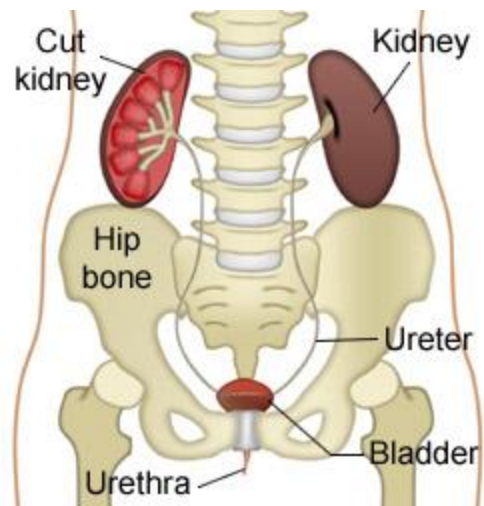
- To support the pelvic organs, specifically the uterus, the bladder, and the rectum
- To help provide sphincter control for the bladder and bowel
- To withstand increases in pressure that occur in the abdomen such as coughing, sneezing, laughing, straining, and lifting
- To enhance the sexual response



What is Stress Urinary Incontinence?

Stress urinary incontinence is the involuntary release of urine during laughter, coughing, lifting of objects or any movement that increases pressure on your bladder.

Urine is composed of water, electrolytes, and other waste material that has been filtered out of the blood in your kidneys. Urine is then transported via the ureters to your bladder, where it is stored. Once full, the muscles in the wall of your bladder contract forcing urine through the urethra and out of your body. Sphincter muscles and pelvic floor muscles keep the urethra closed to avoid leakage of urine. These muscles relax at the same time the bladder contracts in order to allow urine to exit your body.



Urinary system

Signs and symptoms of stress urinary incontinence include:

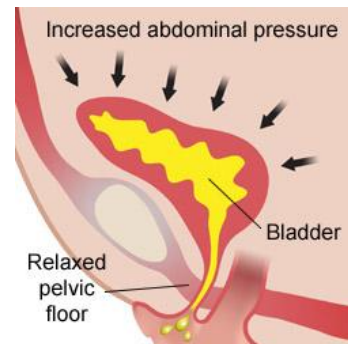
- Urine leakage caused by laughing, coughing, lifting of objects, or any movement that increases pressure on the bladder.

What Causes Stress Urinary Incontinence?

There are several causes for stress urinary incontinence, these include:

Hormonal changes

During the week before your menstrual cycle, estrogen levels fall, causing symptoms of stress urinary incontinence to worsen. Additionally, as a woman goes through menopause, estrogen levels also fall causing the pelvic floor muscles to weaken. This results in less muscular pressure around the urethra, making stress urinary incontinence more likely.



Pregnancy

If you are pregnant, you may experience stress urinary incontinence due to hormonal changes and the enlarging size of the uterus.

During pregnancy, estrogen levels are lower, leading to less muscular strength in the sphincter and pelvic floor muscles. Additionally, as the fetus grows extra weight is placed on your bladder.

Childbirth

Vaginal delivery can damage your pelvic floor muscles making urine leakage more likely. The supporting tissues of your bladder can also be damaged during vaginal delivery causing a cystocele, or prolapse of your bladder, symptoms of which include urinary incontinence. You may not know you have suffered damage to your pelvic floor until after you have gone through menopause, when the pelvic floor muscles are further weakened due to a fall in estrogen levels.

Hysterectomy and other surgery

The bladder and uterus are very close together and have common supporting ligaments and muscles. Surgery to, or removal of your uterus as in a hysterectomy, risks damage to the supporting structures of your bladder. If these supporting structures are damaged, a cystocele is likely to occur. Symptoms of a cystocele include urinary incontinence.

Illnesses

When you are ill and suffering from severe coughing, the pelvic floor muscles may fatigue and allow temporary stress incontinence due to an increase in abdominal pressure experienced while coughing.

Obesity

Obesity can increase the abdominal pressure on the bladder leading to urinary incontinence.

Bladder cancer or bladder stones

Symptoms of bladder cancer or bladder stones include urinary incontinence, urgency, frequency, and painful urination. Other symptoms include blood in the urine and pelvic pain.

Neurological damage

Any neurological disorder such as multiple sclerosis, Parkinson's disease or stroke can cause urinary incontinence by interfering with the nerve signals that control your bladder. Additionally, if the nerves that supply your bladder or pelvic floor muscles are damaged, urinary incontinence may also result.

How is Stress Urinary Incontinence treated?

Treatments of stress urinary incontinence are tailored to suit your individual problem. The following should be considered:

Pelvic floor muscle strengthening	Strengthening the supporting muscles of your bladder is very effective in helping stress urinary incontinence. Biofeedback, or the use of special computer equipment to measure muscle activity, can help improve muscle control. Electrical stimulation can also assist in strengthening the pelvic floor muscles.
Bladder training	Bladder training involves learning to delay the urge to urinate. You are instructed to breathe deeply, relax, and distract yourself with another activity when you feel the urge. The initial goal is to delay urination by 10 minutes, which is increased in intervals until trips to the toilet are reduced to once every 2 to 4 hours. Bladder training also may involve learning to completely empty the bladder, for which double voiding is a technique that is often used. This consists of urinating, waiting a minute and then urinating again.
Pessary	Pessaries can help when a cystocele or prolapsed bladder is the cause for urinary incontinence. A pessary is a device of various shapes and sizes that is placed in the vagina to support the bladder and keep it in place.
Urethral inserts	A urethral insert is a small tampon-like device that is placed in your urethra to avoid urine leakage. The device is removed in order to urinate. This is not used for everyday activity but may help individuals who leak urine during sports activities.
Injections	Bulking material such as collagen may be injected into the urethra to help it to close all the way, therefore decreasing stress urinary incontinence.
Surgery	For severe cystoceles, or bladder prolapses, surgery is needed in order to correct the position of the bladder and help with urinary incontinence. Other surgeries for incontinence involve repositioning your urethra and bladder neck.
Sacral nerve stimulation	If neurological damage is the cause of urinary incontinence, implantation of a small device that electrically stimulates the nerves controlling the bladder and pelvic floor can help.

To prevent urinary incontinence, you should consider the following:

- Routine performance of pelvic floor muscle strengthening exercises
- Cessation of smoking
- Avoidance or correction of obesity, or chronic cough
- Increased daily intake of fiber and fluid to prevent constipation, a risk factor for urinary incontinence
- Avoidance of bladder irritants such as alcohol and caffeine
- Staying physically active. Individuals who are physically active are less likely to develop urinary incontinence
- Discussing the possibilities and risks of estrogen replacement therapy with your physician

Coping with Stress Urinary Incontinence

Stress urinary incontinence can cause embarrassment, fear, anxiety, and social isolation. For these reasons, it is important to take steps to address the problem. Seeking treatment can not only help with the problem, but also can improve self-esteem and restore confidence.

These everyday practical tips can also help:

- Take a change of clothes and clean up supplies with you when you leave the house
- Use the restroom before you leave the house
- Locate the public restrooms before you need them so you can get to them quickly when needed
- Wear a pad or disposable undergarments
- If odor is a problem, use a powder or deodorant
- If skin becomes irritated consider using a barrier cream