## Incontinence

What is incontinence?

Broadly speaking, the medical term incontinence refers to any involuntary release of bodily fluids, but many people associate it strongly with the inability to control urine flow. There are actually several different forms of incontinence -fecal, urinary and in some cases seminal. Physicians would be most likely to define a patient's condition as 'fecal incontinence' or 'urinary stress incontinence'. Some may actually have a condition called 'mixed incontinence' -- a combination of both fecal and urinary difficulties.

Urinary incontinence occurs when the sphincter muscles at the base of the bladder fail to hold back the flow of urine. In healthy people, these sphincter muscles remain rigid until the urge to urinate becomes too strong to ignore. The bladder receives and stores urine from the kidneys until it reaches a certain capacity, generally around eight fluid ounces. At this point, healthy people should feel the first signal to urinate. The bladder can continue to store urine until around 16 fluid ounces, when urination becomes a necessity.

Under normal circumstances, this signal to urinate is followed by a compression of the bladder wall muscles and a relaxation of the sphincter muscles. The urine flows into the urethra and eventually out of the body. People suffering from urinary incontinence, however, may not be able to void (empty) all of their urine in one sitting, leaving some in the bladder itself. This may signal the sphincter muscles to relax involuntarily, causing a urinary leak. This continuous cycle of voiding a partially-empty bladder is called urge incontinence. Urge incontinence is very common among women who are pregnant or have difficulty reaching the bathroom in time. Elderly people also tend to develop urge incontinence as a result of the aging process or surgical procedures. Men without prostate glands may also experience a form of urge incontinence.

The other common form of incontinence is called stress incontinence. Anyone who has experienced involuntary leaks of urine after laughing or coughing has experienced stress incontinence. Pregnancy can also trigger a bout of stress incontinence as the uterus and other organs press down on the bladder. Many sufferers of stress incontinence wear protective garments to minimize the effects of accidents.

Incontinence is often just one symptom of a much larger medical condition. Urinary tract infections can cause temporary urge incontinence, as can the removal of catheters following surgery. Physicians can prescribe medication for overactive bladders which attempt to control the contractions of the bladder muscles. Bouts of incontinence, either fecal or urinary, should be reported to a family physician as soon as possible, as they could be an indication of a much more serious disease.

Bladder leakage can be unsettling, but there is much that can be done to treat and manage the condition. One of the first steps you should take if suffering from incontinence is to speak with your doctor, as he or she can help devise a treatment plan to improve your quality of life. However, many people are afraid to bring up the topic with their doctor. But should do-so. What causes urinary incontinence?

The bladder stores urine produced by the kidneys until time to empty the bladder. It is a muscular organ that expands as it fills with urine. Urine stays in the bladder until nerves from the bladder send a message to the brain, telling it that your bladder is full. The brain sends a message back to the bladder to release the urine. Muscles create a valve that opens or closes to release or hold urine. Sometimes surgery in the pelvic area, such as prostate, uterine or colon surgery, injures the nerves to the bladder. If this occurs, the signals to the bladder may not be sent or may signal the bladder to contract at the wrong times.

The muscles supporting the bladder are called pelvic floor muscles. Because they surround the urethra tube, they help the bladder close tightly, holding urine. These muscles may stretch and weaken and be unable to close completely, allowing urine to leak.

Four conditions lead to incontinence:

"The valve closing the bladder is too loose "The valve closing the bladder is too tight "The bladder is too relaxed "The bladder is too active

Factors that can contribute to urinary incontinence are: "Pregnancy "Childbirth "Menopause "Smoking "Diabetes "Parkinson's disease "Obesity "Chronic constipation "Lifting or exercising

"Pelvic surgery or radiation

"Enlarged prostate gland "Some medications, such as diuretics, sedatives, antidepression medicines and chemotherapy

What are the symptoms of urinary incontinence? Different types of urinary incontinence have different symptoms. Some people have more than one type of urinary incontinence.

Stress incontinence: Survivors with stress incontinence experience leaking urine with laughing, coughing, sneezing, lifting, exercising or standing up. The valve and the pelvic floor muscles for controlling urine cannot close tightly enough to prevent leakage.

Urge incontinence: Survivors with urge incontinence experience the need to urinate frequently and have to get to a restroom quickly to prevent leaking urine. The urge may be uncomfortable or even painful. The bladder is overactive and responds by signaling the need to urinate even though little urine is in the bladder.

Mixed incontinence: Survivors with mixed incontinence experience a combination of stress and urge symptoms. This is common.

Overflow incontinence: Survivors with overflow incontinence experience some obstruction to the urine flow until the bladder overfills and small amounts of urine leak. This may occur if the prostate is enlarged and squeezes the urethra or if the bladder valve does not open properly. Usually the bladder does not empty completely so there is the feeling of having to urinate every few minutes.

Which cancer survivors are at risk for incontinence?

Most of the studies on cancer survivors that include urinary incontinence have generally focused on those with prostate cancer. Yet, many different cancers and/or treatments can affect urinary incontinence.

Types of cancer that put a survivor at risk for urinary incontinence include:

"Cancers in the pelvis such as prostate, cervix, rectum, urethra and bladder

"Tumors of the brain, spinal cord or those affecting the nerves to the bladder or pelvic muscles

"Lung or esophageal cancer (because of chronic cough) "Breast cancer (because of the drying affects of hormonal changes on the vaginal and urethral tissues, affecting the urethra's ability to make a tight closure and prevent urine leaks)

Types of cancer treatments that put a survivor at risk for urinary incontinence:

"Surgical changes to the bladder outlet, such as removing the prostate

"Side effects such as nausea and vomiting (contributing to stress incontinence)

"Bladder irritation (resulting in urinary frequency and urgency)

"Changes to the nerves or blood vessels responsible for urinary control

"Chemotherapy can contribute to nausea and vomiting, nerve damage and ovarian failure with loss of hormones "Hormonal therapies can cause dryness to vaginal and urethral tissues

"Radiation to the pelvis for bladder, prostate, cervical or rectal cancer can cause bladder irritation and an overactive bladder (urge incontinence)

"Bone marrow transplant with high dose chemotherapy can have side effects of vomiting and bladder cystitis. Cancer survivors may also be affected by urinary incontinence if they have difficulty reaching the bathroom without assistance. Cancer or your treatment may affect your ability to walk without assistance and in a timely manner. You may need assistance because of weakness, pain or medications. Cancer or your treatment may also affect your mental ability to respond to the need to urinate.

Can urinary incontinence be cured?

Urinary incontinence can be cured. Many successful options for treating urinary incontinence exist. Options include behavioral therapy, medications and surgery. Behavioral therapies can also be used along with surgical management and/or drug therapy for incontinence.

Behavioral therapy

Behavioral therapy treatment options affect a behavior or activity that needs changing such as emptying your bladder on a schedule, delaying the urge to go to the bathroom, strengthening your pelvic floor muscles or modifying your diet or fluids.

The advantages of behavioral therapy are:

"Improvement of several symptoms

"No side effects

"It is the least expensive method of treating urinary incontinence

"It is usually recommended as the first method to try "About 80 percent of those with incontinence improve their symptoms with behavioral treatments. You play a major role in your treatment.

Surgeries

Surgeries for urinary incontinence can be done to:

"Lift the bladder

"Tighten the valve

"Implant an artificial valve that goes around the urethra

"Inject collagen to stiffen the area around the urethra and bladder valve so it closes better

"Implant a small electrical device for nerve impulse and therapy to the bladder

"These surgeries are performed by urologists and gynecologists and help reduce stress incontinence symptoms.

Medications

Medications for urge incontinence decrease how much the bladder muscles contract. They help with urgency and frequency, but may have side effects such as dry mouth or constipation and are not suitable for survivors with glaucoma. Medications for stress incontinence are being researched and will soon be available.

How will a cancer survivor's life change if s/he experiences urinary incontinence?

Because urinary incontinence is a personal and private issue, many survivors are embarrassed and reluctant to seek treatment. If it affects your quality of life after cancer, talk with your health care team about treating or managing your incontinence.

Urinary incontinence can affect these aspects of your life: "Travel "Social activities "Recreational activities "Work activities "Sexual relationships

Cancer survivors have reported that dealing with their incontinence seems harder at times than dealing with cancer. Urinary incontinence affects your quality of life. Talk to your health care team about your symptoms. You are not alone. Many cancer survivors have been successfully treated for urinary incontinence. We must stress that you should speak with your doctor, as he or she can help devise a treatment plan to improve your quality of life.