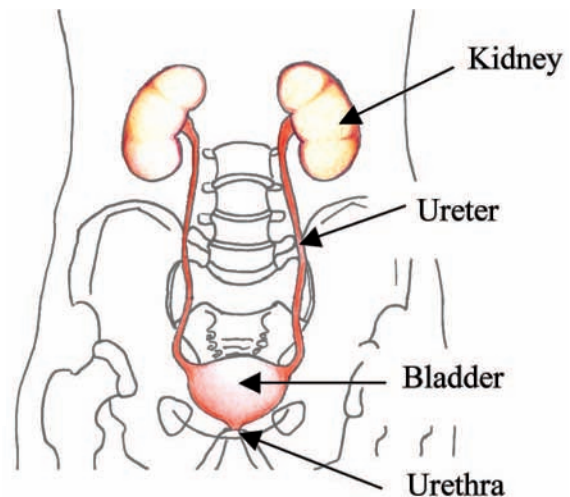


Neurogenic Bladder following Treatment for Childhood Cancer

Certain types of cancer and certain cancer treatments can cause damage to the urinary bladder. The information in this Health Link will help you to recognize the signs and symptoms of a neurogenic bladder.

What is the urinary bladder?

The **urinary bladder** is a hollow organ that stores urine. It is located behind the pubic bone. The **kidneys** filter the blood and make urine, which enters the bladder through two tubes called "**ureters**". Urine leaves the bladder through another tube, the **urethra**. In women, the urethra is a short tube that opens just in front of the vagina. In men, it is longer, and passes through the prostate gland and then the penis.



What is a neurogenic bladder?

A neurogenic bladder is **abnormal function of the bladder** caused by damage to the nerves that control the bladder's ability to fill, store and empty urine. Abnormal bladder function can cause the bladder to be underactive (not emptying completely) or overactive (emptying too frequently or quickly). People with neurogenic bladders also have a higher risk of urinary tract infections (UTIs) and kidney damage.

What are the symptoms of a neurogenic bladder?

There may be a **sudden urge to urinate** or the **need to urinate frequently**. There may also be dribbling during urination, straining in order to urinate, or the inability to urinate.

Who is at risk of a neurogenic bladder?

People who have had **tumors involving the bladder, prostate, pelvis, or spine** are at risk of developing neurogenic bladder. Also, people who had **surgery or radiation** in these areas may be at risk.

How is a neurogenic bladder diagnosed?

If a neurogenic bladder is suspected, an evaluation should be done by a **urologist**. A urologist is a physician who specializes in disorders of the urinary tract. The urologist

will order tests to determine how well the bladder is able to store and empty urine, such as a voiding cystourethrogram (VCUG) or bladder cystometry.

What can I do if I have a neurogenic bladder?

Treatment of neurogenic bladder is based on your individual needs. Medications may be useful for an overactive bladder or for a bladder that fails to store urine properly. Surgery to enlarge the size of the bladder may be needed if the medications are not successful.

Removal of urine by insertion of a small, clean tube in the urethra several times a day (intermittent catheterization) may be necessary if you cannot completely empty your bladder. This helps prevent high pressure in the bladder that interferes with flow of urine from the ureters and kidneys.

When should I call my healthcare provider?

Call your healthcare provider if you are **awakened more than usual during the night to urinate, if leakage of urine occurs**, any time **fever or pain** is present, or if **blood is seen in the urine**.

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Additional health information for childhood cancer survivors is available at
www.survivorshipguidelines.org

Note: Throughout this *Health Links* series, the term "childhood cancer" is used to designate pediatric cancers that may occur during childhood, adolescence, or young adulthood. *Health Links* are designed to provide health information for survivors of pediatric cancer, regardless of whether the cancer occurred during childhood, adolescence, or young adulthood.

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