

# LOST TEMPLE FITNESS

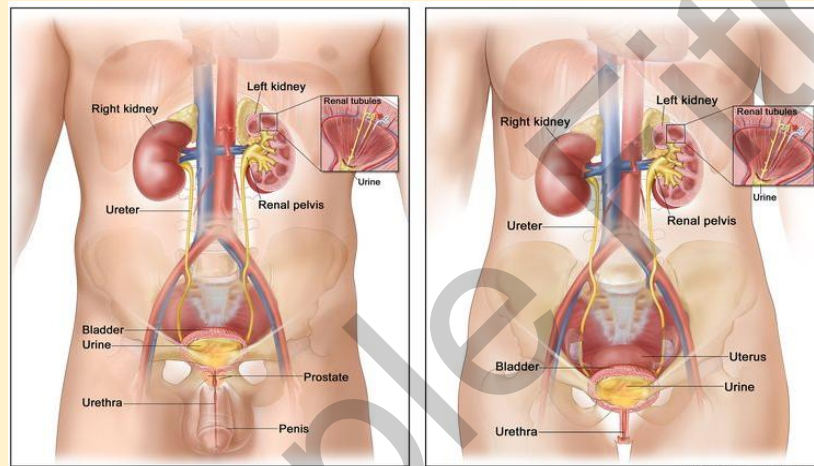
## BLADDER

Information and pictures from *National Cancer Institute* unless otherwise specified

### Description

Bladder cancer is a disease in which malignant (cancer) cells form in the tissues of the bladder.

*The bladder is a hollow organ in the lower part of the abdomen. It is shaped like a small balloon and has a muscular wall that allows it to get larger or smaller to store urine made by the kidneys. There are two kidneys, one on each side of the backbone, above the waist. Tiny tubules in the kidneys filter and clean the blood. They take out waste products and make urine. The urine passes from each kidney through a long tube called a ureter into the bladder. The bladder holds the urine until it passes through the urethra and leaves the body.*



There are three types of bladder cancer that begin in cells in the lining of the bladder. These cancers are named for the type of cells that become malignant (cancerous):

- **Transitional cell carcinoma:** Cancer that begins in cells in the innermost tissue layer of the bladder. These cells are able to stretch when the bladder is full and shrink when it is emptied. Most bladder cancers begin in the transitional cells. Transitional cell carcinoma can be low-grade or high-grade:
  - Low-grade transitional cell carcinoma often recurs (comes back) after treatment, but rarely spreads into the muscle layer of the bladder or to other parts of the body.
  - High-grade transitional cell carcinoma often recurs (comes back) after treatment and often spreads into the muscle layer of the bladder, to other parts of the body and to lymph nodes. Almost all deaths from bladder cancer are due to high-grade disease.
- **Squamous cell carcinoma:** Cancer that begins in squamous cells, which are thin, flat cells that may form in the bladder after long-term infection or irritation.
- **Adenocarcinoma:** Cancer that begins in glandular cells that are found in the lining of the bladder. This is a very rare type of bladder cancer.
- **Small cell carcinoma** and **Sarcoma** are rare types of bladder cancer.
- **Superficial bladder cancer:** Cancer that is in the lining of the bladder.
- **Invasive bladder cancer:** Cancer that has spread through the lining of the bladder and invades the muscle wall of the bladder or has spread to nearby organs and lymph nodes

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<p><b>Risk Factors</b></p>	<ul style="list-style-type: none"> <li>• Using tobacco, especially smoking cigarettes.</li> <li>• Having a family history of bladder cancer.</li> <li>• Having certain changes in the genes that are linked to bladder cancer.</li> <li>• Being exposed to paints, dyes, metals, or petroleum products in the workplace.</li> <li>• Past treatment with radiation therapy to the pelvis or with certain anticancer drugs, such as cyclophosphamide or ifosfamide.</li> <li>• Taking Aristolochia fangchi, a Chinese herb.</li> <li>• Drinking water from a well that has high levels of arsenic.</li> <li>• Drinking water that has been treated with chlorine.</li> <li>• Having a history of bladder infections, including bladder infections caused by Schistosoma haematobium.</li> <li>• Using urinary catheters for a long time.</li> </ul>
<p><b>Treatments</b></p>	<p><b>Radiation therapy</b>  <b>Chemotherapy</b>  <b>Immunotherapy</b></p> <p><b>Surgery</b></p> <ul style="list-style-type: none"> <li>• <b>Transurethral resection (TUR) with fulguration:</b> Surgery in which a cystoscope (a thin lighted tube) is inserted into the bladder through the urethra. A tool with a small wire loop on the end is then used to remove the cancer or to burn the tumor away with high-energy electricity. This is known as fulguration.</li> <li>• <b>Radical cystectomy:</b> Surgery to remove the bladder and any lymph nodes and nearby organs that contain cancer. This surgery may be done when the bladder cancer invades the muscle wall, or when superficial cancer involves a large part of the bladder. In men, the nearby organs that are removed are the prostate and the seminal vesicles. In women, the uterus, the ovaries, and part of the vagina are removed. Sometimes, when the cancer has spread outside the bladder and cannot be completely removed, surgery to remove only the bladder may be done to reduce urinary symptoms caused by the cancer. When the bladder must be removed, the surgeon creates another way for urine to leave the body.</li> <li>• <b>Partial cystectomy:</b> Surgery to remove part of the bladder. This surgery may be done for patients who have a low-grade tumor that has invaded the wall of the bladder but is limited to one area of the bladder. Because only a part of the bladder is removed, patients are able to urinate normally after recovering from this surgery. This is also called segmental cystectomy.</li> <li>• <b>Urinary diversion:</b> Surgery to make a new way for the body to store and pass urine.</li> </ul>
<p><b>Possible Side Effects</b></p>	<p><b>TUR:</b></p> <ul style="list-style-type: none"> <li>• Possible bleeding and pain when you urinate after surgery.</li> </ul> <p><b>Radical cystectomy</b></p> <ul style="list-style-type: none"> <li>• Women unable to get pregnant and may have early menopause</li> <li>• Men may be impotent</li> </ul> <p><b>Segmental cystectomy</b></p> <ul style="list-style-type: none"> <li>• Increased urination or unable to hold urine.</li> </ul>

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<p><i>Cancer Support Community</i></p>	<p><b>Radiation therapy</b></p> <ul style="list-style-type: none"> <li>• Can cause nausea, vomiting, diarrhea, or urinary discomfort.</li> <li>• Can affect sexuality in both men and women.</li> <li>• Women may experience vaginal dryness.</li> <li>• Men may have difficulty with erections.</li> </ul> <p><b>Chemotherapy</b></p> <ul style="list-style-type: none"> <li>• Certain drugs used in the treatment of bladder cancer may cause kidney damage.</li> </ul>
<p><b>Recovery</b></p> <p><i>Information from CETI- Cancer Exercise Training Institute</i></p> <p><b>Please follow MD/surgeon protocol, as every situation is unique.</b></p>	<p><b>Transurethral resection of the bladder tumor (TURBT)</b></p> <ul style="list-style-type: none"> <li>➤ <b>Hospital Stay:</b> 1-2 days</li> <li>➤ <b>Full Recovery:</b> 1-2 weeks</li> <li>➤ <b>Restrictions:</b> No heavy lifting over 10 lbs. or strenuous exercise for at least 6 weeks.</li> <li>➤ <b>Exercise:</b> Walking and Kegel exercises</li> </ul> <p><b>Partial cystectomy:</b></p> <ul style="list-style-type: none"> <li>➤ <b>Hospital Stay:</b> Approximately 1 week</li> <li>➤ <b>Full Recovery:</b> 6 weeks, but no heavy lifting for 12 weeks.</li> <li>➤ <b>Restrictions:</b> No heavy lifting or excessive stair climbing for 12 weeks.</li> <li>➤ <b>Exercise:</b> Walking</li> </ul> <p><b>Radical cystectomy:</b></p> <ul style="list-style-type: none"> <li>➤ <b>Hospital Stay:</b> 8-9 days</li> <li>➤ <b>Full Recovery:</b> 6 weeks, but no heavy lifting for 12 weeks.</li> <li>➤ <b>Restrictions:</b> No heavy lifting or excessive stair climbing for 12 weeks</li> <li>➤ <b>Exercise:</b> Walking during recovery period for most patients – see MD protocol</li> </ul>
<p><b>References</b></p> <p><b>See Kegel Exercises below</b></p>	<p>Ahlering, Thomas MD – Kegel Exercises for Men - <a href="http://www.urology.uci.edu/prostate/kegel.html">http://www.urology.uci.edu/prostate/kegel.html</a></p> <p>Bladder Cancer - National Cancer Institute (Link to treatment) <a href="https://www.cancer.gov/types/bladder">https://www.cancer.gov/types/bladder</a></p> <p>Bladder Cancer Canada - Bladder cancer exercise sample (Kegel)- <a href="https://bladdercancer canada.org/wp-content/uploads/2018/06/Bladder-Cancer-Sample-Exercises.pdf">https://bladdercancer canada.org/wp-content/uploads/2018/06/Bladder-Cancer-Sample-Exercises.pdf</a></p> <p>Cancer Support Community – Bladder Cancer - <a href="https://www.cancersupportcommunity.org/learn-about-cancer-types/bladder-cancer/bladder-cancer-treatment-and-side-effect">https://www.cancersupportcommunity.org/learn-about-cancer-types/bladder-cancer/bladder-cancer-treatment-and-side-effect</a></p> <p>CETI- Cancer Exercise Training Institute: <a href="https://www.thecancerspecialist.com/">https://www.thecancerspecialist.com/</a></p> <p>Medline Plus – Kegel Exercises - <a href="https://medlineplus.gov/ency/patientinstructions/000141.htm">https://medlineplus.gov/ency/patientinstructions/000141.htm</a></p>