

# Cancer Association of South Africa (CANSA)

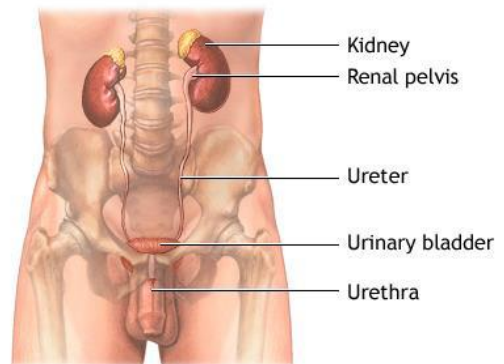


## Fact Sheet on Bladder Cancer

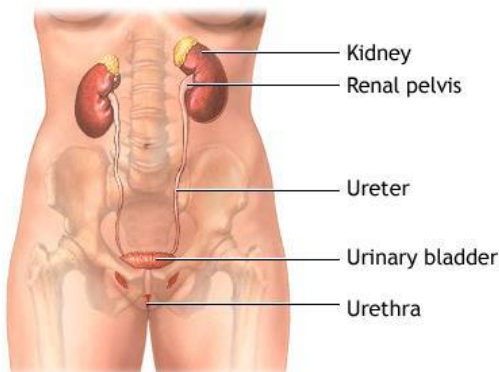
### Introduction

The urinary bladder is the organ that collects urine excreted by the kidneys before disposal by means of urination. It is a hollow muscular, and distensible (elastic) organ. The bladder is situated on the pelvic floor. Urine enters the bladder via the ureters and exits via the urethra.

[Picture Credit: Male Urinary Tract]



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[Picture Credit: Female Urinary Tract]

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### Bladder Cancer

Bladder cancer is cancer that forms in tissues of the bladder. Most bladder cancers are transitional cell carcinomas (cancer that begins in cells that normally make up the inner lining of the bladder). Other types include squamous cell carcinoma (cancer that begins in thin, flat cells) and adenocarcinoma (cancer that begins in cells that make and release mucus and other fluids).

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Researched and Authored by Prof Michael C Herbst

[D Litt et Phil (Health Studies); D N Ed; M Art et Scien; B A Cur; Dip Occupational Health; Dip Genetic Counselling; Dip Audiometry and Noise Measurement; Diagnostic Radiographer]

Reviewed by

Approved by Ms Elize Joubert, Chief Executive Officer [BA Social Work (cum laude); MA Social Work]

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## Incidence of Bladder Cancer in South Africa

According to the National Cancer Registry (2014) the following number of bladder cancer cases was histologically diagnosed in South Africa during 2014:

Group - Males 2014	Actual No of Cases	Estimated Lifetime Risk	Percentage of All Cancers
All males	942	1:152	2,56%
Asian males	44	1:93	4,70%
Black males	164	1:597	1,48%
Coloured males	143	1:76	3,41%
White males	591	1:60	2,87%

Group - Females 2014	Actual No of Cases	Estimated Lifetime Risk	Percentage of All Cancers
All females	337	1:654	0,89%
Asian females	14	1:480	1,19%
Black females	121	1:1 283	0,75%
Coloured females	42	1:470	1,03%
White females	160	1:256	0,97%

The frequency of histologically diagnosed cases of bladder cancer in South Africa for 2014 was as follows (National Cancer Registry, 2014):

Group - Males 2014	0 – 19 Years	20 – 29 Years	30 – 39 Years	40 – 49 Years	50 – 59 Years	60 – 69 Years	70 – 79 Years	80+ Years
All males	4	2	15	59	152	282	288	131
Asian males	0	0	1	1	7	18	15	1
Black males	3	0	5	21	37	50	24	14
Coloured males	1	1	4	9	30	42	36	18
White males	0	1	5	26	75	169	208	964

Group - Females 2014	0 – 19 Years	20 – 29 Years	30 – 39 Years	40 – 49 Years	50 – 59 Years	60 – 69 Years	70 – 79 Years	80+ Years
All females	2	1	18	43	56	84	77	51
Asian females	0	0	0	1	7	2	3	1
Black females	1	1	13	21	26	32	10	11
Coloured females	0	0	1	3	7	11	15	5
White females	1	0	3	18	16	39	49	33

N.B. In the event that the totals in any of the above tables do not tally, this may be the result of uncertainties as to the age, race or sex of the individual. The totals for 'all males' and 'all females', however, always reflect the correct totals.

## Risk Factors for Bladder Cancer

The following are risk factors for bladder cancer:

- Use of tobacco products
- Obesity
- Increasing age
- Being white
- Being a male
- Exposure to certain chemicals

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- Previous cancer treatment
- Chronic bladder inflammation
- Schistosomiasis (Bilharzia)
- Personal or family history of cancer
- Bladder birth defects
- Inherited gene mutations
- Low fluid consumption

### **Signs and Symptoms of Bladder Cancer**

People with bladder cancer may experience the following symptoms or signs:

- blood in urine (haematuria) — urine may appear dark yellow, bright red or cola coloured.
- frequent urination
- urgent need to urinate
- bladder spasm
- painful urination (dysuria)
- inability to urinate
- reduced bladder capacity
- back pain
- pelvic pain

Symptoms of advanced bladder cancer may include:

- pain
- unexplained appetite loss
- weight loss

### **Diagnosis of Bladder Cancer**

Bladder cancers are usually found when a person goes to the doctor because of signs or symptoms they are having. If bladder cancer is suspected, tests will be needed to confirm the diagnosis.

- blood in the urine
- changes in bladder habits or irritating symptoms such as:
  - having to urinate more often than usual
  - feeling pain or burning during urination
  - feeling as if one needs to go right away, even when the bladder is not full
- medical history and physical exam
- urine culture
- urine tumour marker test
- biopsy
- intravenous pyelogram
- retrograde
- computed tomography (CT) scan
- magnetic resonance imaging (MRI) scan - Like CT scans but MRI scans use radio waves and strong magnets instead of x-rays
- ultrasound - uses sound waves to create pictures of internal organs

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## Types of Bladder Cancer

Types of bladder cancer include:

Transitional cell bladder cancer

- Non muscle invasive (superficial) bladder cancer
- Invasive bladder
- Squamous cell bladder cancer
- Adenocarcinoma of the bladder
- Small cell cancer of the bladder - it is very rare

## Reducing the Risk for Bladder Cancer

Bladder cancer cannot be prevented altogether, but one can reduce the risk for getting it:

- Do not smoke
- avoid exposure to industrial chemicals
- drink water throughout the day
- limit the intake of smoked or cured meats
- limit the intake of other processed foods

## Staging of Bladder Cancer

The TNM staging system is used.

TNM is an abbreviation for tumour (**T**), node (**N**), and metastasis (**M**). Doctors look at these three factors to determine the stage of cancer:

- How large is the primary tumour and how deeply has it invaded the tissue? (**Tumour, T**)
- Has the tumour spread to the lymph nodes? (**Node, N**)
- Has the cancer spread (metastasised) to other parts of the body? (**Metastasis, M**)

## Where Bladder Cancer Spreads to

Should bladder cancer spread to other parts of the body, it would most probably spread as indicated below:

Cancer Type:	Main Sites of Metastasis (Spread)
Bladder	Bone, liver, lung
Breast	Bone, brain, liver, lung
Colon	Liver, lung
Colorectal	Liver, lung, peritoneum (lining of abdomen)
Kidney	Adrenal gland, bone, brain, liver, lung
Lung	Adrenal gland, bone, brain, liver, other lung
Melanoma	Bone, brain, liver, lung, skin, muscle
Ovary	Liver, lung, peritoneum (lining of abdomen)
Pancreas	Liver lung, peritoneum (lining of abdomen)
Prostate	Adrenal gland, bone, liver, lung
Stomach	Liver, lung, peritoneum (lining of abdomen), ovaries
Thyroid	Bone, liver, lung
Uterus	Bone, liver, lung, peritoneum (lining of abdomen), vagina
Non-melanoma skin cancer	Very rare: lymph nodes, lung, bone (if in head/neck region)

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## Treatment of Bladder Cancer

The following comprises standard treatment for bladder cancer:

- Surgery - one of the following types of surgery may be done:
  - Transurethral resection (TUR) with fulguration
  - Radical cystectomy (surgical removal of the bladder)
  - Segmental cystectomy (surgical removal of part of the bladder)
  - Urinary diversion - surgery to make a new way for the body to store and pass urine
- Radiation therapy
- Chemotherapy
- Biologic therapy
- Photodynamic therapy
- Immunotherapy

## About Clinical Trials

Clinical trials are research studies that involve people. They are conducted under controlled conditions. Only about 10% of all drugs started in human clinical trials become an approved drug.

Clinical trials include:

- Trials to test effectiveness of new treatments
- Trials to test new ways of using current treatments
- Tests new interventions that may lower the risk of developing certain types of cancers
- Tests to find new ways of screening for cancer

The **South African National Clinical Trials Register** provides the public with updated information on clinical trials on human participants being conducted in South Africa. The Register provides information on the purpose of the clinical trial; who can participate, where the trial is located, and contact details.

For additional information, please visit: [www.sanctr.gov.za/](http://www.sanctr.gov.za/)

## Medical Disclaimer

This Fact Sheet is intended to provide general information only and, as such, should not be considered as a substitute for advice, medically or otherwise, covering any specific situation. Users should seek appropriate advice before taking or refraining from taking any action in reliance on any information contained in this Fact Sheet. So far as permissible by law, the Cancer Association of South Africa (CANSA) does not accept any liability to any person (or his/her dependants/estate/heirs) relating to the use of any information contained in this Fact Sheet.

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### Cancer Research Institute

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### Cancer Treatment Centers of America

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### European Association of Urology

[http://www.uroweb.org/fileadmin/user\\_upload/Guidelines/06%20Bladder%20Cancer.pdf](http://www.uroweb.org/fileadmin/user_upload/Guidelines/06%20Bladder%20Cancer.pdf)

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### Male Urinary Tract

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**Renal & Urology News**

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**TNM Classification Help**

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