



Canadian
Cancer
Society

Bladder Cancer

Understanding your diagnosis



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When you first hear that you have cancer, you may feel alone and afraid. You may be overwhelmed by the large amount of information you have to take in and the decisions you need to make.

“ *All I could hear was ‘cancer.’ I heard my doctor say something like, ‘We’re going to try and get the surgery done as soon as possible.’ I didn’t hear one word after that.* ”

The information in this brochure can help you and your family take the first steps in learning about bladder cancer. A better understanding may give you a feeling of control and help you work with your healthcare team to choose the best care for you.

For more information

You can find more in-depth information about kidney cancer on cancer.ca. Or call us at 1-888-939-3333 to learn more about cancer, diagnosis, treatment, support and services near you.

Check out our video series on common cancer topics. These short, simple videos cover subjects like *What is cancer?* and *Coping when you’re first diagnosed*.

Find the series at cancer.ca/cancerbasics.

What is cancer?

Cancer is a disease that starts in our cells. Our bodies are made up of trillions of cells grouped together to form tissues and organs such as muscles, bones, the lungs and the liver. Genes inside each cell tell it when to grow, work, divide and die. Normally, our cells follow these instructions and we stay healthy.

But sometimes the cells grow and divide out of control. After a while, a group of abnormal cells forms a lump (called a tumour).

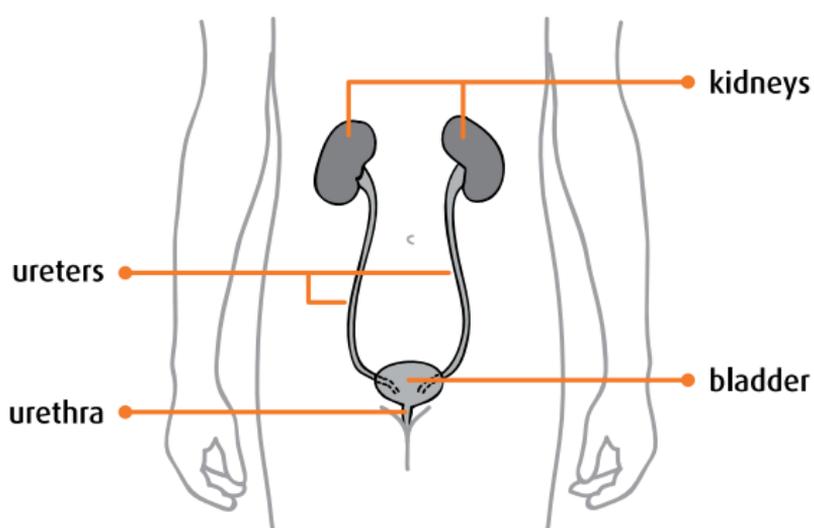
Tumours can be either non-cancerous (benign) or cancerous (malignant). Non-cancerous tumour cells stay in one place in the body and are not usually life-threatening. Cancerous tumour cells can grow into nearby tissues and spread to other parts of the body. It's important to find and treat cancerous tumours as early as possible. In most cases, finding cancer early increases the chances of successful treatment.

Cancers are named after the part of the body where they start. If cancer spreads to other parts of the body (called metastasis), the cancer still has the same name. For example, cancer that starts in the bladder but spreads to the lungs is called bladder cancer with lung metastases.

What is bladder cancer?

Bladder cancer starts in the cells of the bladder. The bladder is a hollow organ in the pelvis that stores urine (pee), which is your body's liquid waste. Urine is made by the kidneys and travels to the bladder along 2 long tubes called ureters. When the bladder is full of urine, muscles in the bladder wall tighten and push the urine out of the bladder through the urethra where it leaves the body. The wall of the bladder is stretchy so it gets bigger as it fills with urine and gets smaller as it empties.

Location of the Bladder



Diagnosing bladder cancer

Your doctor may suspect you have bladder cancer after hearing about your symptoms, taking your medical history and doing a physical exam.

Symptoms: The most common sign of bladder cancer is blood in the urine (called hematuria). This may change the colour of the urine to orange, pink or red.

Other symptoms of bladder cancer include:

- a need to urinate often
- a strong need to urinate
- burning or pain during urination
- difficulty urinating or having a weak stream of urine
- pain in the lower back or pelvis

You may feel frustrated that it's taking a long time to make a diagnosis, but other health problems can also cause these symptoms.

To find out for sure if you have bladder cancer, your doctor will do one or more of the following tests. These tests may also be used to help plan treatment.

Urinalysis: A urinalysis checks a sample of your urine for small amounts of blood that you can't see, bacteria and other germs and abnormal cells.

Cystoscopy: A cystoscopy uses a thin tube with a light and lens on the end (called a cystoscope) to look inside the bladder and urethra for any tumours or abnormal areas. It is usually done when there is blood or abnormal cells in the urine.

Biopsy: A biopsy is usually needed to make a definite diagnosis of cancer. Cells are taken from the body and checked under a microscope. If the cells are cancerous, they will be studied to see how fast they are growing. Small tumours and tissue samples from the bladder are usually removed during a cystoscopy. There are different ways to do a biopsy.

The most common type of biopsy used to diagnose bladder cancer is a transurethral resection of bladder tumour (TURBT). It is surgery that removes the tumour and some muscle from the bladder wall near it.

Blood tests: Blood is taken to see if the blood cells are normal. Blood tests can also show how well your kidneys and other organs are working and may suggest whether you have cancer and if it has spread.

Imaging tests: The healthcare team uses x-rays, ultrasounds, CT scans, MRIs or bone scans to look at your tissues, organs and bones in more detail. They can see the size of the tumour

and if it has spread. These tests are usually painless, so you don't need a local anesthetic (freezing).

You may have a special imaging test called an IVP (intravenous pyelogram). It makes images of the kidneys, ureters, bladder and urethra. A dye is given through a needle into a vein and collects in the urine. X-rays are taken as the urine (with the dye) moves through the body.

Further testing: Your doctor may order other tests to diagnose the cancer, see if it has spread or help plan your treatment.

Will I be OK?

Most people with cancer want to know what to expect.

A prognosis is your doctor's best estimate of how cancer will affect you and how it will respond to treatment. It looks at many aspects of the cancer and your situation including:

- how deep the cancer has grown into the wall of the bladder and whether the cancer has spread
- how the cancer cells look and act compared to normal cells
- the size and number of tumours
- your age, sex and overall health

Even with all this information, it can still be very hard for your doctor to say exactly what will happen. Each person's situation is different.

Your doctor is the only person who can give a prognosis. Ask your doctor about what can affect your prognosis and what it means for you.

Staging and grading

Once a diagnosis of cancer has been made, the cancer is given a stage and grade. This information helps you and your healthcare team choose the best treatment for you.

Staging is a way to describe or classify the cancer. Staging of bladder cancer describes how far the tumour has grown into the wall of the bladder and any tissues around it. Staging also describes whether cancer cells are found in any lymph nodes and if the cancer has spread to other parts of the body.

Usually each stage is given a number from 0 to 4. Generally, the higher the number, the more the cancer has spread.

A **grade** is given based on how the cancer cells look and act compared with normal cells. To find out the grade of a tumour, a biopsy sample is looked at under a microscope.

Bladder cancer tumours are given a grade from 1 to 3. The lower the number, the lower the grade.

Low grade means that the cancer cells look and act much like normal cells. They tend to grow slowly and are less likely to spread.

High grade means that the cancer cells look and act less normal, or more abnormal. They tend to grow more quickly and are more likely to spread. They are also more likely to come back after treatment.

Treatments for bladder cancer

Your healthcare team considers your general health and the type, stage and grade of the cancer to recommend the best treatments for you. You'll work together with your healthcare team to make the final treatment choices. Talk to them if you have questions or concerns.

For bladder cancer, you might have one or more of the following treatments.

Surgery: Surgery is the main treatment for most bladder cancers. It may be done before or after other treatments. The type of surgery done for bladder cancer depends on the stage of the cancer.

A TURBT removes tumours from the bladder during a cystoscopy. It is used to treat early stages of bladder cancer that haven't grown into the muscle layer of the bladder wall. After a TURBT, you may have to urinate often or notice blood in your urine. These problems usually go away on their own.

A cystectomy removes all or part of the bladder. It is done for bladder cancer that has grown into the muscle layer of the bladder wall. A radical cystectomy is done most often to remove the whole bladder along with surrounding fat, organs and lymph nodes.

If the whole bladder is removed, the surgeon makes a new way to hold urine and pass it out of the body. This surgery is called a urinary diversion. There are different types of urinary diversions. Your doctor will discuss which type is best for you.

After surgery, you may have some pain and get urinary tract infections. These side effects are usually temporary and can be treated.

Immunotherapy: Immunotherapy helps to strengthen or restore the immune system's ability to find and destroy cancer cells.

An immunotherapy drug may be placed directly in the bladder (called intravesical immunotherapy) to treat early stages of bladder cancer. The immunotherapy drug most commonly used is bacillus Calmette-Guérin (BCG).

To treat advanced or metastatic bladder cancer, immunotherapy may be given through a needle into a vein. It uses an immunotherapy drug called an immune checkpoint inhibitor.

Side effects of immunotherapy will depend on the type of drug and how it's given.

Immunotherapy may cause diarrhea or flu-like symptoms such as fever, chills and fatigue.

Chemotherapy: Chemotherapy uses anticancer drugs to destroy cancer cells. For early stages of bladder cancer, chemotherapy drugs may be placed directly into the bladder (intravesical chemotherapy). This treatment may cause an irritated or burning feeling in the bladder.

Or chemotherapy may be given through a needle into a vein to reach cancer cells throughout the body (called systemic chemotherapy). It damages cancer cells, but also damages some normal cells. Although normal cells usually recover over time, you may experience side effects from systemic

chemotherapy, like nausea and vomiting, loss of appetite, fatigue, hair loss or an increased risk of infection.

Radiation therapy: In external radiation therapy, a large machine is used to carefully aim a beam of radiation at the area with cancer. The radiation damages cells that are in the path of the beam – both cancer cells and normal cells.

External radiation therapy may be combined with chemotherapy (called chemoradiation) to treat bladder cancer. The treatments can be given after a TURBT so the bladder doesn't have to be removed.

The side effects of radiation therapy depend on what part of the body receives the radiation. You may feel more tired than usual, have some diarrhea or bladder problems, or notice changes to the skin (it may be red or tender) where the treatment was given.

For more information on treatment, you may want to read our booklets *Chemotherapy and Other Drug Therapies* and *Radiation Therapy*.

Clinical trials: Clinical trials test new ways to treat cancer, such as new drugs, types of treatments or combinations of treatments. They provide information about the safety and effectiveness of new approaches to see if they should become widely available. Ask your doctor if any clinical trials are available as a treatment option for you.

Our brochure *Clinical Trials* has more information, including how to find a clinical trial.

Complementary therapies: Complementary therapies – for example, massage therapy or acupuncture – are used *together with* conventional cancer treatments that are widely used in Canada. Complementary therapies are often used to help ease tension, stress and other side effects of treatment. They don't treat the cancer itself.

If you're thinking about using a complementary therapy, learn as much as you can about the therapy and talk to your healthcare team. It's possible that the therapy might affect other treatments or test results.

Alternative therapies are used *instead of* conventional cancer treatments. Alternative therapies haven't been tested enough for safety or effectiveness. Using only alternative treatments for cancer may have serious health effects. Talk to your healthcare team before you try an alternative therapy.

Side effects of treatments

Some cancer treatments cause side effects, such as fatigue, hair loss or nausea. Because treatments affect everyone differently, it's hard to predict which side effects you may have.

Side effects can often be well managed and even prevented. If you're worried about side effects, tell your healthcare team about your concerns and ask questions. They can tell you which side effects you should report as soon as you can and which ones can wait until your next visit.

If you notice any side effects that you didn't expect, talk to a member of your healthcare team as soon as possible. They'll help you get the care and information you need.

Living with cancer

Many sources of help are available for people with cancer and their caregivers.

Our booklet *Coping When You Have Cancer* has more detailed information.

Your healthcare team: If you need practical help or emotional support, members of your healthcare team may be able to suggest services in your community or refer you to cancer centre staff or mental health professionals.

Family and friends: People closest to you can be very supportive. Accept offers of help. When someone says, "Let me know how I can help," tell them what they can do. Maybe they can run errands, cook a meal or drive you to your doctor's office.

People who've had a similar experience: Talking with and learning from others who've had similar experiences can be helpful. Consider visiting a support group or talking with a cancer survivor in person, over the telephone or online. Try more than one option to see which one works best for you.

Yourself: Look after yourself by finding relaxing, enjoyable activities that refresh you mentally, spiritually or physically. Take some time to find ways to cope. You may also want to talk to a counsellor for more help.

Talking to someone who's been there?

If you would like to talk to someone who's had a similar cancer experience, you can connect by phone with a trained volunteer who will listen, provide hope and suggest ideas for coping – all from the shared perspective of someone who's been there.

Register for this free program at match.cancer.ca or call us at 1-888-939-3333.

Want to connect with people online?

If you'd like to join our online community, visit CancerConnection.ca. You can read news, join discussion groups, get support and help others at the same time. You'll find caring, supportive people there.

After treatment

Follow-up care helps you and your healthcare team follow your progress and your recovery from treatment. At first, you may see one of the specialists from your healthcare team for follow-up care. Later, you may see your family doctor.

The schedule of follow-up visits is different for each person. You might see your doctor more often in the first year after treatment and less often after that. You should tell your doctor as soon as you can about new symptoms or symptoms that don't go away. Don't wait for your next scheduled visit.

The end of cancer treatment may bring mixed emotions. You may be glad the treatments are over and look forward to returning to your normal activities. But you could feel anxious as well. If you're worried about your treatment ending, talk to your healthcare team. They can help you through this transition period.

Self-esteem, body image and sexuality: It's natural to worry about the effects of bladder cancer and its treatment on your self-esteem, body image and sexuality. You may be worried about how your body looks after treatment or about having sex with a partner. It may help to talk about these feelings with someone you trust. Your doctor can also refer you to specialists and counsellors who can help you with the emotional side effects of bladder cancer treatment.

What causes bladder cancer?

There is no single cause of bladder cancer, but some things increase the chance of developing it. These are called risk factors. Some people can develop cancer without any risk factors, while others have some of these factors but do not get cancer.

Smoking is the most common risk factor for bladder cancer in Canada. People who smoke tobacco or have smoked in the past are much more likely to develop bladder cancer than people who have never smoked.

Other risk factors for bladder cancer include:

- arsenic – sometimes found at high levels in drinking water or in certain types of mining
- working with certain chemicals such as those used in painting, rubber manufacturing and the textile and dye industry
- treatment with cyclophosphamide, a chemotherapy drug
- radiation therapy to the abdomen or pelvis
- long-term bladder irritation
- having had cancer in any part of the urinary tract
- being born with an abnormal bladder

Canadian Cancer Society

We're here for you.

When you have questions about treatment, diagnosis, care or services, we will help you find answers.

Call our toll-free number 1 888 939-3333.



Ask a trained cancer information specialist your questions about cancer. Call us or email info@cis.cancer.ca.



Connect with people online to join discussions, get support and help others. Visit CancerConnection.ca.



Browse Canada's most trusted online source of information on all types of cancer. Visit cancer.ca.

Our services are free and confidential. Many are available in other languages through interpreters.

Tell us what you think

Email cancerinfo@cancer.ca and tell us how we can make this publication better.



What we do

The Canadian Cancer Society fights cancer by:

- doing everything we can to prevent cancer
- funding research to outsmart cancer
- empowering, informing and supporting Canadians living with cancer
- advocating for public policies to improve the health of Canadians
- rallying Canadians to get involved in the fight against cancer

Contact us for up-to-date information about cancer and our services or to make a donation.



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