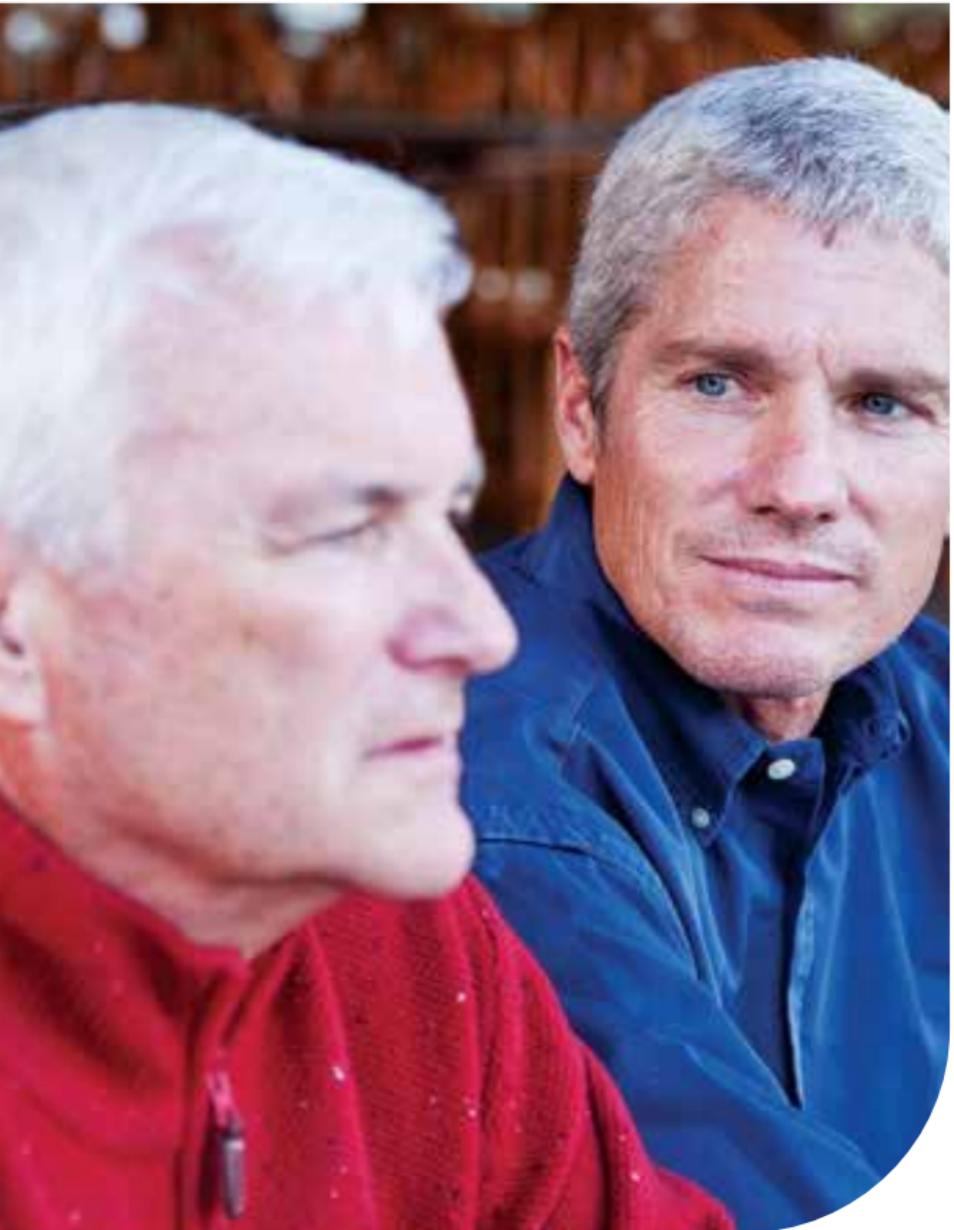




Canadian  
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# Kidney Cancer

*Understanding your diagnosis*



1 888 939-3333 | [cancer.ca](https://cancer.ca)

# Kidney Cancer

## *Understanding your diagnosis*

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 start your treatment 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 kidney 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](http://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](http://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).

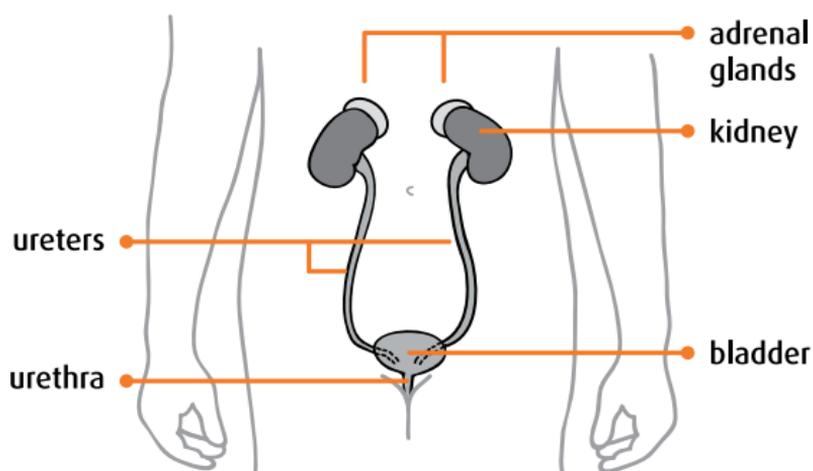
Non-cancerous tumour cells stay in one place in the body and are not usually life-threatening. Cancerous tumour cells can grow into nearby tissues and spread to other parts of the body. It's important to find and treat cancerous tumours as early as possible. In most cases, finding cancer early increases 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 kidney but spreads to the lungs is called kidney cancer with lung metastases.

## What is kidney cancer?

Kidney cancer starts in the cells of the kidney. The kidney is part of the urinary system. The 2 kidneys are on either side of the backbone, deep inside the upper part of the abdomen. An adrenal gland is attached to the top of each kidney. The kidneys make urine (pee) by filtering water and waste material from the blood. Urine passes from each kidney to the bladder through tubes called ureters. When the bladder is full, the urine passes out of the body through a tube called the urethra.

Location of the Kidneys



## Diagnosing kidney cancer

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

**Symptoms:** The most common signs and symptoms of kidney cancer include:

- blood in the urine (called hematuria)
- pain in the back and side of the abdomen
- a lump that can be felt in the abdomen
- swelling of the legs and ankles
- high blood pressure
- low red blood cell count (called anemia)
- fatigue
- night sweats
- weight loss
- loss of appetite
- fever
- for men, a swollen vein in the scrotum (called varicocele)

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 kidney cancer, your doctor will do one or more of the following tests. These tests may also be used to help plan treatment.

**Urine tests:** A urine sample is taken and checked for blood and other substances like electrolytes and hormones.

**Blood tests:** Blood is taken to see if the blood cells are normal. Blood tests can also show how well your organs are working and may suggest whether you have cancer and if it has spread. The blood sample may also be checked to measure substances like urea and creatinine. Higher levels may mean that the kidneys are not working well.

**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).

**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:

- the type of cancer and how the cells look and act compared to normal cells
- the size of the tumour and whether the cancer has spread
- your age 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 kidney cancer describes how far the tumour has grown into the wall of the kidney 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.

Usually, kidney cancer tumours are given a grade from 1 to 4. 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.

## Treatments for kidney 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 kidney cancer, you might have one or more of the following treatments.

**Surgery:** A decision to have surgery depends on the size of the tumour and where it is. During the operation, all or part of the tumour and some healthy tissue around the tumour are removed. Surgery is done under a general anesthetic (a drug that puts you into a deep sleep so you don't feel pain). You may stay in the hospital for several days or longer after the surgery.

After surgery, you may have some pain or nausea. These side effects are usually temporary and can be controlled.

**Targeted therapy:** Targeted therapy uses drugs to target specific molecules (such as proteins) on the surface of cancer cells. These molecules help send signals that tell cells to grow or divide. By targeting these molecules, the drugs stop the growth and spread of cancer cells while limiting harm to normal cells.

Because targeted therapy doesn't usually damage healthy cells, it tends to cause fewer and less severe side effects than other treatments. Flu-like symptoms and fatigue are common side effects of many targeted therapy drugs.

**Radiation therapy:** In external beam radiation therapy, a large machine is used to carefully aim a beam of radiation at the tumour. The radiation damages cells that are in the path of the beam - both cancer cells and normal cells. In brachytherapy (internal radiation therapy), radioactive material is placed directly into the tumour or close to it.

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* (including targeted therapy) and *Radiation Therapy*.

**Immunotherapy:** Immunotherapy helps strengthen or restore your immune system's ability to find and destroy cancer cells. Some immunotherapy drugs make the immune system work harder. Others help the immune system find cancer cells more easily. Immunotherapy may also be used to control side effects of cancer treatments.

**Active surveillance:** Active surveillance allows your healthcare team to watch the cancer closely rather than giving treatment right away. Treatment is given when you develop symptoms or the cancer changes.

**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](http://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](http://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.

**Quitting smoking:** Smoking tobacco increases the risk that kidney cancer will come back after it has been treated. Smoking is also the main risk factor for developing kidney cancer. If you smoke, get help to quit.

**Eating well:** After treatment for kidney cancer, you may need to make changes to your diet and your eating habits. Your doctor or dietitian can give you more information about how to keep a healthy diet.

**Self-esteem, body image and sexuality:** It's natural to worry about the effects of kidney 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 kidney cancer treatment.

## What causes kidney cancer?

There is no single cause of kidney 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 risk factors but do not get cancer.

Smoking tobacco is the main risk factor for kidney cancer. Others include:

- overweight and obesity
- high blood pressure
- certain inherited genetic conditions
- end-stage kidney disease and dialysis
- family history of kidney cancer
- contact with trichloroethylene (TCE) at work
- tall adult height

## 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](mailto:info@cis.cancer.ca).



**Connect** with people online to join discussions, get support and help others. Visit [CancerConnection.ca](http://CancerConnection.ca).



**Browse** Canada's most trusted online source of information on all types of cancer. Visit [cancer.ca](http://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](mailto: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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1 888 939-3333 | [cancer.ca](http://cancer.ca)

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This is general information developed by the Canadian Cancer Society. It is not intended to replace the advice of a qualified healthcare provider.

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