

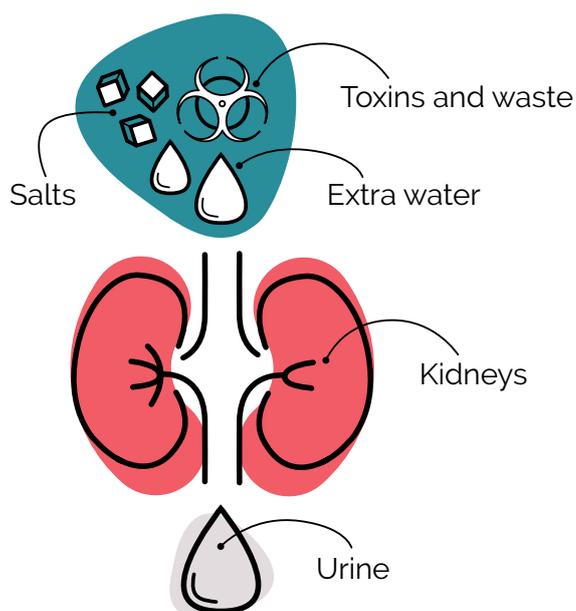
Kidney cancer

What are kidneys?

The kidneys are organs of the urinary system – the part of the body that makes urine (wee). Most people are born with two kidneys. Each kidney is about the size of a fist and located under the rib cage on either side of your spine (backbone). The kidney filters the blood and removes extra fluid and waste products.

Kidneys also play an important role in:

- controlling blood pressure
- managing red blood cells
- maintaining strong and healthy bones.



What is kidney cancer?

Cancer is a disease of the cells. The body is made up of trillions of building blocks called cells. Cells are constantly growing and dividing, making new cells to replace old or damaged ones. If cells do not grow and divide into their normal pattern, they can form a lump known as a tumour.

Kidney cancer starts in the cells of the kidneys. Early or **localised kidney cancer** is a cancer that has formed in the kidney but has not spread from the kidney. Localised cancer usually affects only one kidney and rarely is in both kidneys.

Metastatic or advanced kidney cancer is a cancer that has spread (metastasised) from the kidney to somewhere else in the body, such as the lymph nodes, liver, lungs, and bones.

Risk factors for kidney cancer

The exact cause of kidney cancer is not known, but certain factors are known to increase your risk of developing kidney cancer. These risk factors include:



Age



Male sex



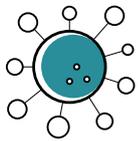
Smoking
/vaping



Obesity



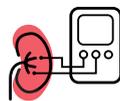
High blood
pressure



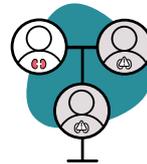
Hepatitis C
infection



Certain
medicines and
toxic substances



Long-term
dialysis and
acquired cystic
disease



Family history of
kidney cancer



Inherited
or genetic
conditions

Symptoms of kidney cancer

Most people with kidney cancer have no symptoms, or signs of being sick. Doctors often discover kidney cancer during a scan or X-ray that was ordered for a different health concern. If symptoms occur, some signs include:

- **blood in the urine or changes in urine colour to dark, rusty or brown**
- **pain in the lower back on one side which is not due to injury**
- **pain or lump in the stomach area or side**
- **weight loss**
- **constant tiredness**
- **newly developed high blood pressure**
- **fever or night sweats which are not linked with any other conditions.**

Not everyone with kidney cancer has symptoms,

and not all symptoms mean that you have kidney cancer. Some of these symptoms can be caused by other illnesses, like a urine infection. Always talk to your doctor if you experience these symptoms.

Many people who get kidney cancer do not have any risk factors, and many people who have known risk factors do not develop kidney cancer.

Types of kidney cancer

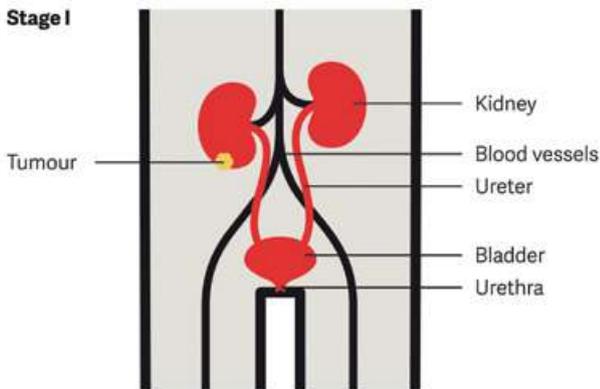
Your doctor will use different tests to diagnose and get more information about what type of kidney cancer you have. The tests can be divided into blood and urine tests, imaging, tissue biopsy and cystoscopy. The tests you have will depend on your situation.

The results of your tests give information about:

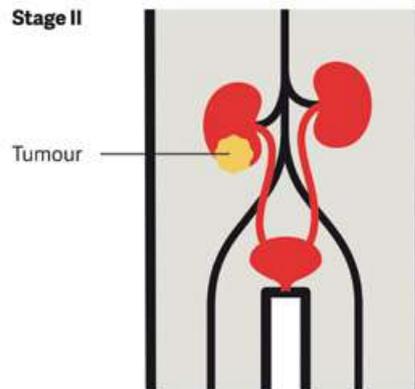
- **the exact subtype of kidney cancer:** how the cancer cells look under a microscope and other features
- **the grade of kidney cancer:** how abnormal the cells are and how fast they may grow
- **the stage of kidney cancer:** how large the cancer is and how far it has spread.

Renal cell carcinoma is the most common type of kidney cancer affecting the tissue cells of the kidney. **Urothelial carcinoma** is a less common type of kidney cancer affecting the lining of the tubes of the kidney.

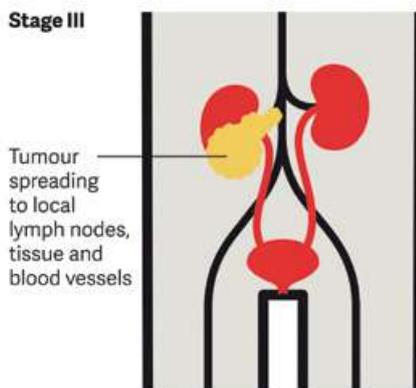
Stages of kidney cancer



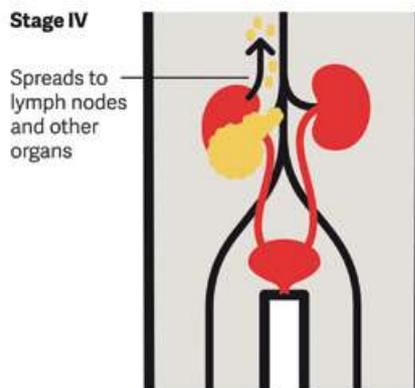
Stage I is localised to the kidney. The tumour size is less than 7cm.



Stage II is localised to the kidney and is larger than 7cm.



Stage III is locally advanced cancer. This means the tumour has spread to areas around the kidney.



Stage IV is advanced kidney cancer that has spread to other areas of the body like the liver, lungs, or bones.

Treatment of kidney cancer

A healthcare team works together to treat your kidney cancer. Your healthcare team may include:

- doctors like medical oncologists to prescribe treatments for cancer and your general practitioner to manage your overall health
- nurses that teach you about kidney cancer and give you medicines
- social workers that provide emotional support
- occupational therapists to help you participate in daily life
- dieticians to advise on healthy eating.

Once you have been diagnosed with kidney cancer, your doctors will discuss your treatment options and the expected results with you. Your treatment options will depend on your general health and the stage of your kidney cancer. Localised kidney cancer is commonly treated with surgery. Advanced kidney cancer treatments include surgery, medicines, and/or radiation therapy.

If you have a small tumour or the risks of surgery are high, your doctor may recommend active surveillance. **Active surveillance** involves close monitoring of the tumour with regular scans and visits to the doctor.

Surgery

A nephrectomy is a surgery to remove part of the kidney, a partial nephrectomy, or the whole kidney, a radical nephrectomy. The goal of surgery is to remove the tumour from the affected parts of the kidney. Surgery is the most common treatment for kidney cancer and is often able to cure Stage I kidney cancer.

Medications

Your doctor may recommend medicines with or without radiation or surgery to treat advanced kidney cancer. Types of medicines used in kidney cancer include:

- Targeted therapy is treatment with medicines that block certain proteins that help cancer cells grow or form new blood vessels.
- Immunotherapy medicines treat cancer by turning on your immune system to attack cancer cells.

Medicines work to slow down the growth of kidney cancer or reduce its size. Be aware of the common side-effects of cancer medications like fatigue, diarrhoea, nausea, and skin reactions. Ask your doctor or pharmacist about the risks and benefits of medicines used in kidney cancer.

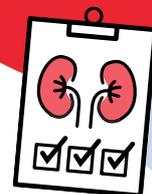
Radiotherapy

Radiotherapy uses high energy X-rays to kill cancer cells. Kidney cancer radiation helps to control symptoms such as bleeding from the kidney or pain if cancer is in the bones. High doses of specialized forms of radiotherapy can help to slow down cancer spread (metastases) and tumour progression.



Kidneys Adapt!

When one kidney is removed, your remaining kidney can provide 75% of normal kidney function, rather than the expected 50%. Most people can live normally with just one functioning kidney.



Palliative care

Palliative care allows you to feel as good as you can throughout your cancer journey. Your quality of life is the priority. Palliative care includes:

- management of cancer symptoms
- dealing with side-effects of medicines
- emotional and social support
- support for physical needs
- and extensive support to both you and your family during the dying process.

You may still receive cancer treatment, such as radiation therapy or medicines, with palliative care. The goal is to shrink the size of the tumour or decrease side-effects, rather than cure the cancer.

Taking care of yourself

A kidney cancer diagnosis is a shock, and you may feel scared, sad, mad, or unsure of the future. These are normal feelings. Actively managing your condition is important and can have positive effects on your emotional and physical well-being. Ways to improve your health and wellbeing with a cancer diagnosis include:



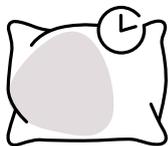
Stop smoking or vaping



Eat a healthy diet with vegetables, wholegrains, fruit, and protein.



Get physical activity and adjust based on your ability.



Prioritise sleep aiming for 7-9 hours per night.



Avoid processed foods and drinks high in fat, salt, and sugar.



Drink water when you are thirsty.

If you are struggling with coping, talk to someone you trust or a healthcare professional. Find a support group to connect with other kidney cancer patients. Help is available!



Cancer Council offers reliable cancer information and support to anyone affected by cancer, including patients, carers, families, friends, and healthcare professionals. They can connect you with others who have been through a similar experience and link you to practical, emotional and financial support in your area.

Free call: 13 11 20
[cancer.org.au](https://www.cancer.org.au)



Things to remember:

- ✓ **Kidney cancer may or may not have symptoms. Alert your doctor if you notice blood in your urine or pain in your abdomen.**
- ✓ **Your doctor chooses a treatment based on the type, grade and stage of cancer. Surgery, or nephrectomy, is the most common treatment for kidney cancer.**
- ✓ **Starting palliative care early can improve quality of life. There is support for kidney cancer patients**

What does that word mean?

Cystoscopy – A test using a special telescope to look into the bladder.

Dialysis – A treatment for kidney failure that removes waste products and excess fluid from your blood by filtering your blood through a special membrane. There are two types of dialysis: haemodialysis and peritoneal dialysis.

Inherited – Passed to you by your parents. This can include personality traits, physical appearance, and some health conditions.

Biopsy – A small piece of tissue is removed for testing and examination under a microscope.

Immune system – A collection of special cells and chemicals that fight infection-causing agents such as bacteria and viruses.

Lymph nodes – A small round gland that makes up part of the lymphatic system. They contain white blood cells that remove bacteria, cancer cells and foreign particles from the body.

Metastasis – The spread of cancer cells from the primary cancer to other parts of the body to become secondary cancers or metastasis

Nephrectomy – Surgical removal of one or both kidneys

Oncologist – A doctor who uses drugs to treat cancer and will help to manage your overall health. Also called a medical oncologist.

Palliative care – Treatments and support that improve the quality of life of patients and their families facing the problems associated with life-threatening illness.

Radiation – Energy waves or particles (X-rays, gamma rays, UV rays). This energy is harmful to cells.

Tumour – An abnormal growth of tissue on or in the body. A tumour may be benign or malignant. Other words that may be used include growth, neoplasm, lump, mass, or shadow.

 **Kidney Health**
Australia

Free Kidney Helpline 1800 454 363
kidney.org.au

If you have a hearing or speech impairment, contact the National Relay Service on 1800 555 677 or relayservice.com.au. Have them connect you to the Free Kidney Helpline - 1800 454 363 



**WANT TO
LEARN MORE?**

Kidney Health 4 Life is a health and wellbeing program equipping people, and those that care for them, with the knowledge and resources to take more active management of their kidney health or kidney disease.



**Join Kidney Health 4 Life
by scanning the QR code**

This is intended as a general introduction to this topic and is not meant to substitute for your doctor's or health professional's advice. All care is taken to ensure that the information is relevant to the reader and applicable to each state in Australia. It should be noted that Kidney Health Australia recognises that each person's experience is individual and that variations do occur in treatment and management due to personal circumstances, the health professional and the state one lives in. Should you require further information always consult your doctor or health professional.

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