

Understanding Cervical Cancer

A guide for people affected by cancer

This fact sheet has been prepared to help you understand more about cervical cancer. It is common to feel shocked and upset when told you have cancer. We hope this fact sheet will help you, your family and friends understand how cervical cancer is diagnosed and treated.

About the cervix

The cervix is part of the female reproductive system, which also includes the ovaries, fallopian tubes, uterus (womb), vagina (birth canal) and vulva (external genitals).

The cervix, sometimes called the neck of the uterus, connects the uterus to the vagina. It helps keep the vagina healthy, lets menstrual blood flow out (your period), and makes mucus that can help sperm reach an egg. During pregnancy, it stays closed, opening when it's time for the baby to be born.

The cervix has 2 types of cells:

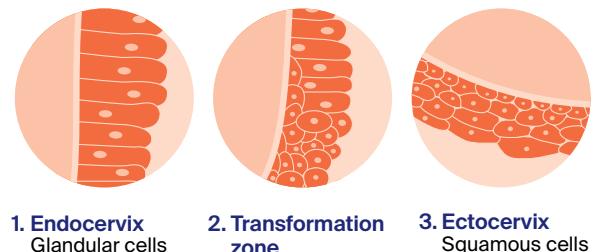
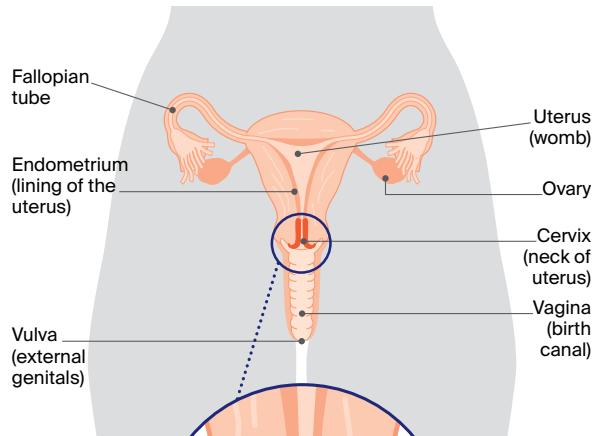
- **squamous cells** – flat, thin cells that cover the outer surface of the cervix (ectocervix)
- **glandular cells** – column-shaped cells that cover the inner surface of the cervix (cervical canal or endocervix).

The area where the squamous cells and glandular cells meet is known as the transformation zone.

What is cervical cancer?

Cervical cancer begins when abnormal cells in the lining of the cervix grow uncontrollably. Cancer often starts in the transformation zone (see illustration above right). It may then spread to tissues around the cervix, such as the vagina, parametrium (tissue surrounding the cervix) or to other parts of the body, such as the lymph nodes, lungs or liver.

The female reproductive system



What types are there?

There are 2 types of cervical cancer that make up most of all cervical cancers. These are:

- **squamous cell carcinoma (SCC)** – the most common type (about 60% of cases), starts in the squamous cells of the cervix
- **adenocarcinoma** – starts in the glandular cells of the cervix (almost 30% of cases).

A small number of cervical cancers (less than 1 in 20) feature both squamous cells and glandular cells. These cancers are known as adenosquamous carcinomas or mixed carcinomas.

There are other rarer types of cancer that can start in the cervix. These include small cell cervical carcinoma, cervical clear cell adenocarcinoma and cervical sarcoma.

How common is cervical cancer?

Anyone with a cervix can get cervical cancer – women, transgender men and people with an intersex variation. Each year in Australia, fewer than 1000 people are diagnosed with cervical cancer.¹

Cervical cancer is most commonly diagnosed in people over the age of 30. More than half of all cervical cancer cases are diagnosed in those aged 30–49 years, but it can occur at any age.

Cervical cancer has become much less common in Australia since the National Cervical Screening Program started in 1991. The program uses screening tests to look for early changes to the cells in the cervix that are not cancer but, if left untreated, may turn into cancer.

A national human papillomavirus (HPV) vaccination program was introduced in 2007, and this is expected to continue to reduce the number of new cervical cancer cases (see page 3).

What are the symptoms?

Cervical cancer often has no symptoms. If there are symptoms, these can include:

- vaginal bleeding between periods, during or after sexual intercourse, or after menopause
- pelvic pain
- pain during sexual intercourse
- a change to your usual vaginal discharge (e.g. there may be more discharge, or it may have a strong or unusual smell or colour).

While these symptoms can happen for other reasons, see your general practitioner (GP) if you are worried or the symptoms are ongoing.



Australia is predicted to eliminate cervical cancer by 2035. This is largely due to the national human papillomavirus (HPV) vaccination program (see page 3). HPV causes almost all cases of cervical cancer. Cervical cancer will be considered eliminated in Australia when there are fewer than 4 new cases per 100,000 people a year.

What are the risk factors?

Almost all cases of cervical cancer are caused by an infection with HPV. This virus can affect the surface of different areas of the body, such as the cervix, vagina, vulva, throat and skin.

There are more than 100 different types of HPV, including over 40 types that can infect the genitals and 14 that are known to cause cervical cancer. About 4 out of 5 people will become infected with at least one type of genital HPV at some point in their lifetime. Most people will not know they have HPV because it often doesn't cause symptoms and usually clears quickly.

Genital HPV is usually spread during close contact with genital skin during sexual activity. This includes penetrative sex, oral sex and other forms of sexual activity (e.g. using sex toys). Using condoms or dental dams can offer some protection against HPV.

The cervical screening test is used to detect cancer-causing types of HPV, as well as any precancerous cell changes caused by the virus. There is also a vaccine that protects people from some types of HPV (see page 3).

Other risk factors include:

- **smoking and passive smoking** – chemicals in tobacco can damage the cells of the cervix, making it harder for the body to clear the HPV infection
- **using oral contraceptives (the pill) for a long time** – some research has suggested that taking the pill for 5 years or more slightly increases the risk of developing cervical cancer in people with HPV
- **having a weakened immune system** – this includes people who have had an organ transplant as well as those with human immunodeficiency virus (HIV).

What is a cervical screening test?

The cervical screening test has replaced the Pap test. It finds cancer-causing types of HPV in cell samples taken from the cervix. For the self-collection method (see below), cells can be collected from the vagina.

The National Cervical Screening Program recommends that women and people with a cervix start cervical screening at age 25 and then have a test every 5 years until the age of 70–74. All women and people with a cervix need regular screening.

There are 2 ways to collect cells for a cervical screening test. They are:

- **health care provider collected** – Your doctor or nurse will collect a sample of cells from your cervix.
- **self-collected** – This method enables you to collect your own sample. A health care provider will give you a self-collection swab and explain how to collect your own cell sample. This method is only available to people who do not have any signs or symptoms of cancer. If HPV is detected in a self-collected sample, a follow-up test with your doctor may be required.

The test results are used to predict your level of risk for significant cervical changes. If the results show:

- **higher risk** – you will be referred for a colposcopy
- **intermediate risk** – you will be monitored with a follow-up cervical screening test in 12 months
- **low risk (no HPV detected)** – you will be due for your next cervical screening test in 5 years.

For more information, call Cancer Council 13 11 20, or visit cervicalscreening.org.au.

National HPV vaccination program

This vaccination can prevent infection with HPV. The most common HPV vaccine used in Australia protects against 7 high-risk types of HPV known to cause about 90% of cervical cancers. The vaccine also offers some protection against less common cancers linked with HPV, including vaginal, vulvar, anal and some head and neck cancers.

Free vaccines are provided at school for all children aged 12–13, under the national HPV vaccination

Diagnosis

If your cervical screening results suggest that you have a higher risk of developing cervical cancer, you will usually have more tests. These tests are likely to include some of the following:

Colposcopy – This looks closely at the cervix and vagina to see if there are any abnormal or changed cells. An instrument called a colposcope (a microscope with a light) is placed near your genital area but does not enter your body. An instrument called a speculum will be inserted into the vagina to spread the walls apart so the vagina and cervix can be seen more clearly.

Biopsy – If your doctor sees abnormal or changed cells during a colposcopy, they will usually take a small tissue sample (biopsy) from the cervix. The tissue sample will be sent to a laboratory to be examined under a microscope by a doctor called a pathologist. This can show if there are cancerous or precancerous cells.

Cone biopsy – This is done when a larger area of tissue needs to be removed or when early-stage cancer is suspected. A cone biopsy is usually done as day surgery in hospital under general anaesthetic. A surgical knife (scalpel) is used to remove a cone-shaped piece of tissue from the cervix. As with a biopsy (see above), the sample will be sent to a laboratory for testing.

Imaging scans – These can create pictures of the inside of your body and provide different types of information. You may have one or more imaging scans to check if the cancer has spread to other

program. People who were not vaccinated at school can receive it for free from their health care provider or pharmacy until the age of 25. People aged 26 and over who have not been vaccinated can ask their doctor if they may benefit from having the vaccine.

Even if you've had the HPV vaccine, you still need regular screening tests. The vaccine doesn't protect against all types of HPV. For information, visit hpvvaccine.org.au.

parts of your body. These scans may include an MRI, PET-CT scan or chest x-ray. To find out more about these scans, visit your local Cancer Council website or call Cancer Council 13 11 20.

Examination under anaesthetic – To check whether the cancer has spread, the doctor may give you a general anaesthetic to examine your cervix, vagina, uterus, bladder and rectum. This is done in hospital and you can usually go home on the same day.

“I had period-like pain for a few days after the cone biopsy but a hot water bottle and mild pain medicines helped a lot.” JULIE

Staging cervical cancer

Staging describes the size of the cancer and how far it has spread. Knowing the stage helps doctors recommend the best treatment for you.

| | | |
|----------------|--------------------------------------|--|
| stage 1 | early or localised cancer | Cancer is found only in the cervix. |
| stage 2 | locally advanced cancer | Cancer has spread outside the cervix to the upper two-thirds of the vagina or other tissue next to the cervix. |
| stage 3 | locally advanced cancer | Cancer has spread to the lower third of the vagina and/or the tissue on the side of the pelvis (pelvic wall). The cancer may also have spread to lymph nodes in the pelvis or abdomen, or caused a kidney to stop working. |
| stage 4 | metastatic or advanced cancer | Cancer has spread to the bladder or rectum (stage 4A) or beyond the pelvis to the lungs, liver or bones (stage 4B). |

Treatment

The treatment you have will depend on the stage of the cancer; your age and general health; and whether you would like to have children in the future. You may have more than one treatment, and treatments may be given in different orders and combinations.

Surgery

For some people, surgery may be the only treatment needed. Surgery is usually recommended when the tumour is in the cervix only. The type of surgery you have will depend on how far within the cervix the cancer has spread (see next page).

Side effects of surgery

These can include:

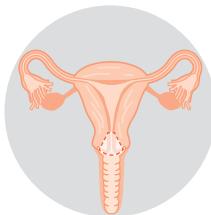
Problems with the bladder – Surgery can affect some of the nerves to the bladder. You may feel that you’re not able to empty your bladder completely or that you’re emptying your bladder very slowly. These problems usually improve with time. You may also leak some urine after surgery (urinary incontinence).

Lymphoedema – Sometimes removing lymph nodes in the pelvic area can stop or slow the natural flow of lymphatic fluid from the legs. This may cause lymphoedema – a build-up of fluid in the soft tissues under the skin – in the legs or genital area. Lymphoedema may appear during treatment or months or years later. For more information, see our *Understanding Lymphoedema* fact sheet.

Menopause – If your ovaries are removed before you’ve gone through menopause, it will cause sudden menopause. This means your periods will stop immediately, and you won’t be able to become pregnant. If you’re finding it difficult to manage menopause symptoms, talk to your doctor about whether menopausal hormone therapy (MHT) might be right for you.

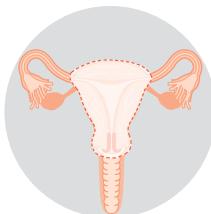
Internal scar tissue (adhesions) – Scar tissue in the pelvis may stick together. Sometimes, these adhesions, particularly those affecting the bowel or bladder, may cause pain or discomfort in the abdomen (belly). Rarely, adhesions may need to be treated with surgery.

Types of surgery



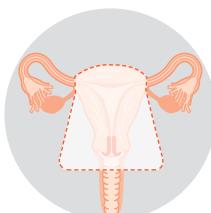
Cone biopsy

Removes a cone-shaped piece of tissue around the cancer, including a margin of healthy tissue. A cone biopsy is used to treat very early cervical cancers.



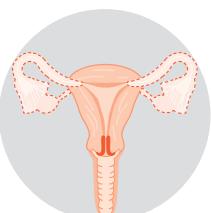
Total hysterectomy

Removes the uterus and cervix. It's used for early cervical cancer. The fallopian tubes are often removed too. If you haven't gone through menopause, you may be able to keep your ovaries.



Radical hysterectomy

Removes the uterus, cervix and top of the vagina. It's the usual surgery for cervical cancers. Fallopian tubes are often removed too. You may keep your ovaries if you haven't gone through menopause.



Bilateral salpingo-ophorectomy

Removes both fallopian tubes and ovaries. This may be done during a hysterectomy if there's a risk the cancer has spread, or if you've been through menopause.

Lymph node surgery

Lymph nodes in the pelvis or groin may be removed to check for the spread of cancer. This is called a lymphadenectomy (lymph node dissection).

How the surgery is done

Surgery is done under a general anaesthetic. Research has shown that outcomes are generally better with open surgery (laparotomy). This means that the surgery is performed through a cut in the abdomen. Keyhole surgery (laparoscopy or robotic surgery) may be used for selected cases, usually early cervical cancer.

Radiation therapy

Also known as radiotherapy, this treatment uses targeted radiation, such as x-ray beams, to damage or kill cancer cells. Radiation therapy is often used with chemotherapy (see page 6) as the main treatment for cervical cancer. This is called chemoradiation.

Radiation therapy may also be given after surgery to help destroy any remaining cancer cells and lower the risk of the cancer coming back. This is called adjuvant therapy.

If scans show that the cancer has spread to nearby lymph nodes or tissues around the cervix, chemoradiation is usually recommended as the main treatment. In these cases, surgery to remove the uterus or cervix is often not needed.

There are 2 main ways of delivering radiation therapy: externally or internally. It is common to have both types to treat cervical cancer.

External beam radiation therapy (EBRT)

In EBRT, a machine precisely directs radiation beams from outside the body to the affected areas of the pelvis. You will lie on a treatment table under the radiation machine. Each treatment session takes around 10–15 minutes and is painless.

EBRT for cervical cancer is usually given daily, Monday to Friday, over 4–6 weeks. The exact number of treatment sessions you have will depend on the type and size of the cancer, and whether it has spread to the lymph nodes.

Internal radiation therapy (brachytherapy)

Brachytherapy delivers radiation directly to the cancer from inside your body, usually through the vagina. It allows a higher radiation dose to be delivered to the cancer, while reducing the amount of radiation to nearby organs (e.g. bowel, bladder).

It's usually given after external radiation (EBRT). The most common type is high-dose-rate (HDR) brachytherapy, with only a few sessions. You may have treatment as a day patient or stay overnight in hospital. A general or spinal anaesthetic is usually given. A device called an applicator is placed into the cervix through the vagina to deliver the radiation. Treatment usually takes about 10–20 minutes.

After brachytherapy, you may feel some discomfort in the vaginal region or have a small amount of bleeding. Pain medicines can help. Brachytherapy for cervical cancer is not provided at all hospitals, so you may have to travel for treatment.

Side effects of radiation therapy

The side effects you have will vary depending on the dose of radiation and the length of the treatment.

One of the main side effects can be changes to the vagina (see next page). Other side effects include:

Fatigue – Tiredness usually builds up slowly during the treatment, particularly near the end. It may last for some time after treatment ends.

Bladder and bowel changes – You may pass urine more often or with more urgency, or feel a burning sensation. Try to drink plenty of water to dilute your urine. Bowel movements may be more frequent, urgent or loose (diarrhoea), or you may pass more wind than normal.

Skin redness, soreness and swelling – Radiation therapy may make the skin in the treatment area dry and itchy. Occasionally, your skin may look red and peel, like sunburn. The treatment team will recommend creams to use to ease any itching and make you more comfortable.

Hair loss – When radiation therapy is aimed at your pelvic area, you may lose your pubic hair. This hair may grow back after the treatment ends, but it will usually be thinner.

Vaginal discharge – Radiation therapy may cause or increase vaginal discharge. Let your treatment team know if it smells different or has blood in it.

Menopause – If your ovaries have not been removed, radiation therapy can stop the ovaries producing hormones, which leads to early menopause. Your periods will stop, you will no longer be able to become pregnant, and you may have menopause symptoms. You can talk to your doctor about whether you can take menopausal hormone therapy (MHT).

Most side effects of radiation therapy will be short-term and appear during or soon after treatment. Side effects can take several weeks to get better and some may continue for longer. Sometimes, side effects may not show up until months or years after treatment. These are called late effects.

► See our *Understanding Radiation Therapy* booklet.

Chemotherapy

Chemotherapy uses drugs to kill cancer cells or slow their growth while causing the least possible damage to healthy cells. It may be given:

- in combination with radiation therapy (chemoradiation) as the main treatment for cervical cancer (see previous page)
- on its own or combined with other drug therapies (see below and next page).

In most cases, drugs are usually given through a vein (intravenously) during day visits to a hospital or clinic. Chemotherapy is usually given as a period of treatment followed by a break. This is called a cycle.

The number of cycles you have depends on the type of cervical cancer and any other treatments you may be having. If you have chemotherapy without radiation therapy, you are likely to have up to 6 cycles (with a cycle every 3–4 weeks), though it may continue for longer.

Side effects of chemotherapy

The possible side effects depend on the drugs given, how often you have treatment, your general health, and whether you have chemotherapy alone or chemoradiation.

You may have nausea or vomiting; feel very tired (fatigue); or lose hair from your body or head. Temporary or permanent menopause may also occur.

Chemotherapy can reduce the number of blood cells in your body, so you will have regular blood tests during treatment to monitor this. Depending on the type of blood cells affected, you may feel very tired and be more likely to get infections. If your temperature rises to 38°C or above, go to the nearest hospital emergency department immediately.

Most side effects of chemotherapy are temporary. Your doctor can help you to prevent or reduce them.

► See our *Understanding Chemotherapy* booklet.

Other drug therapies

Targeted therapy and immunotherapy are other types of drug therapies. They can sometimes be used to treat cervical cancer.

Targeted therapy

This is a drug treatment that attacks specific features of cancer cells to stop the cancer growing and spreading. It may be used to treat advanced cervical cancer that has spread to other parts of the body or has come back.

It is usually given with chemotherapy every 3 weeks through a drip into a vein (infusion). The total number of infusions you receive will depend on how you respond to the drug.

Side effects of targeted therapy – The most common side effects include high blood pressure, feeling tired and loss of appetite. Less common side effects include bleeding, blood clots and problems with wound healing.

Immunotherapy

Immunotherapy is a type of drug treatment that helps the body's own immune system to fight cancer. It may be offered to certain people with cervical cancer that has not responded to treatment, has spread or has come back. It is usually given at the same time as chemotherapy.

Side effects of immunotherapy – This treatment can have a range of side effects. Common side effects can include fatigue, diarrhoea, itching and joint pain.

► See our *Understanding Targeted Therapy* and *Understanding Immunotherapy* fact sheets.

Vaginal changes from treatment

Treatment for cervical cancer often causes vaginal side effects. Surgery may shorten the vagina, and radiation therapy can narrow the vagina, causing thinning of the walls and dryness.

Scar tissue from treatment can leave the vagina shorter and narrower. This is called vaginal stenosis. It can make sexual penetration difficult and painful and also make vaginal examinations uncomfortable.

Your doctor or nurse may suggest you use a vaginal dilator to help keep the walls of the vagina open and supple. Dilators are tube-shaped devices made from plastic or silicone, designed to gently

Sex and desire after treatment

How you might feel



It's common to feel shocked or upset about having cancer in such an intimate part of your body. Changes to how your body looks and feels, along with treatment-related hormone changes, can affect your confidence and interest in sex. You might also feel embarrassed or unsure about asking for help. These feelings are natural. See our *Emotions and Cancer* booklet.

Being intimate



Give yourself time. Touching, hugging and kissing can help you feel close without expecting sex. You might try oral sex, mutual masturbation, or sex toys. Use water- or silicone-based lubricants to make penetration more comfortable. If you have vaginal dryness, talk to your doctor about hormone creams or vaginal moisturisers. See our *Sex, Intimacy and Cancer* booklet.

Talk to someone



It can help to share how you're feeling about the diagnosis and treatment side effects, and how it may be impacting your relationships and sex life. Talking with a professional such as a counsellor, sex therapist or psychologist can help. Ask your doctor for a referral. You can also call Cancer Council 13 11 20 for more information.

stretch the vagina. Some people find using a dilator challenging. Your doctor, nurse or physiotherapist can provide practical advice on how to use them.

► See our *Sex, Intimacy and Cancer* booklet.

Fertility issues

If your uterus is removed or you have radiation therapy to the uterus and cervix, you will not be able to conceive children or carry a pregnancy. Before treatment starts, ask your doctor or a fertility specialist about what options are available to you. Being told that your reproductive organs will be removed or will no longer work can be devastating.

Even if your family is complete or you did not want children, you may still feel a sense of loss and grief. These reactions are common. Speaking to a counsellor or gynaecological oncology nurse about your feelings can be helpful.

► See our *Fertility and Cancer* booklet.

Follow-up appointments

After treatment, you will need check-ups every 3–12 months for several years. These are to manage any long-term side effects and check that the cancer hasn't come back (recurred) or spread.

At check-ups, you may have a pelvic examination, follow-up HPV tests, blood tests, and imaging scans. Between visits, let your doctor know immediately if you have any symptoms.

What if cervical cancer returns?

While the risk of cervical cancer coming back is very low, it does return for some people. If the cancer does recur, you will usually be offered further treatment to treat the cancer or help control its growth. If you had radiation therapy the first time you had treatment, you may not be able to have further radiation therapy.

New drug treatments to treat a recurrence may be available through clinical trials. Ask your doctor whether a clinical trial may be an option for you.

Acknowledgements

This information was reviewed by: Dr Antonia Jones, Gynaecological Oncologist, Royal Women's Hospital and Mercy Hospital for Women, Melbourne, VIC; Angelyn Aligarbes, Consumer; A/Prof Emma Allanson, Gynaecological Oncologist and Head of Dept, Gynaecologic Oncology, King Edward Memorial Hospital for Women, WA; Gemma Busuttil, Radiation Therapist Specialist, Crown Princess Mary Cancer Centre, Westmead Hospital, NSW; Laura Carman, 13 11 20 Consultant, Cancer Council VIC; Danielle Carpenter, Gynaecology Nurse Consultant, Peter MacCallum Cancer Centre, VIC; A/Prof Pearly Khaw, Lead Radiation Oncologist – Gynae-Oncology, Peter MacCallum Cancer Centre, VIC; Georgina Richter, Gynae-Oncology Clinical Nurse Consultant, Royal Adelaide Hospital, SA; A/Prof Megan Smith, Research Fellow, Cancer Elimination Collaboration, University of Sydney, NSW; Sophia Wooldridge, Senior Clinical Psychologist, Hunter New England Centre for Gynaecological Cancer, John Hunter Hospital, NSW; Melissa Whalen, Consumer. We would also like to thank the health professionals and consumers who have worked on previous versions of this information.

This fact sheet is funded through the generosity of the people of Australia. To support Cancer Council, call your local Cancer Council or visit your local website.



Cancer Council acknowledges Traditional Custodians of Country throughout Australia and recognises the continuing connection to lands, waters and communities. We pay our respects to Aboriginal and Torres Strait Islander cultures and to Elders past and present.

Where to get help and information

Call Cancer Council 13 11 20 for more information about cervical cancer. Our experienced health professionals can listen to your concerns, put you in touch with services and send you our free booklets. You can also visit your local Cancer Council website.

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| ACT | actcancer.org |
| NSW | cancercouncil.com.au |
| NT | cancer.org.au/nt |
| QLD | cancerqld.org.au |
| SA | cancersa.org.au |
| TAS | cancer.org.au/tas |
| VIC | cancervic.org.au |
| WA | cancerwa.asn.au |
| Australia | cancer.org.au |

Other useful websites

You can find many useful resources online, but not all websites are reliable. These websites are good sources of support and information.

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|---------------------------------------|--|
| Australian Cervical Cancer Foundation | accf.org.au |
| Australasian Menopause Society | menopause.org.au |
| Cervical Screening | cervicalscreening.org.au |
| Continence Health Australia | continence.org.au |

Note to reader

Always consult your doctor about matters that affect your health. This fact sheet is intended as a general introduction and is not a substitute for professional medical, legal or financial advice. Information about cancer is constantly being updated and revised by the medical and research communities. While all care is taken to ensure accuracy at the time of publication, Cancer Council Australia and its members exclude all liability for any injury, loss or damage incurred by use of or reliance on the information provided in this fact sheet.

References

1. Australian Institute of Health and Welfare (AIHW), *Cancer data in Australia 2024*, viewed 8 July 2025, available from: aihw.gov.au/reports/cancer/cancer-data-in-australia.