



# Understanding Skin Cancer

A guide for people with cancer,  
their families and friends

Cancer  
information

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**13 11 20**



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First published March 2002. This edition February 2016.

© Cancer Council Australia 2016. ISBN 978 1 925136 78 4

*Understanding Skin Cancer* is reviewed approximately every two years. Check the publication date above to ensure this copy is up to date.

Editor: Cath Grove. Designer: Paula Marchant. Printer: SOS Print + Media Group.

### Acknowledgements

This edition has been developed by Cancer Council NSW on behalf of all other state and territory Cancer Councils as part of a National Publications Working Group initiative.

We thank the reviewers of this booklet: Prof H Peter Soyer, Chair in Dermatology, Director, Dermatology Research Centre, The University of Queensland School of Medicine, Head, South-West Cluster, Deputy Head, School of Medicine, Director, Dermatology Department, Princess Alexandra Hospital, QLD; Christine Archer, Melanoma and Skin Cancer Specialist Nurse, Canberra Region Cancer Centre, ACT; Irena Brozek, Research and Development Officer, Cancer Programs, Cancer Council NSW; A/Prof T Michael Hughes, Surgical Oncologist, Associate Professor of Surgery, Sydney Adventist Hospital Clinical School, The University of Sydney, NSW; Dr Simon Lee, Head of Surgery, The Skin Hospital, Dermatologist, Sydney Skin, NSW; A/Prof Jonathan Stretch, Plastic Surgeon, Melanoma Institute Australia; Mark Strickland, SunSmart Manager, Cancer Council Western Australia, WA; Dr Tony Tonks, Plastic and Reconstructive Surgeon, Canberra Plastic Surgery, ACT; Leslie Tortora, Cancer Information and Support Service, Cancer Council Victoria, VIC; Dr April Wong, Poche Fellow, Melanoma Institute Australia; Robert Wood, Consumer. Thanks also to Sydney Melanoma Diagnostic Centre for providing the dysplastic naevus photograph on page 13, and to Prof H Peter Soyer for providing the other photographs on page 13.

### Note to reader

Always consult your doctor about matters that affect your health. This booklet is intended as a general introduction to the topic and should not be seen as a substitute for medical, legal or financial advice. You should obtain independent advice relevant to your specific situation from appropriate professionals, and you may wish to discuss issues raised in this book with them.

All care is taken to ensure that the information in this booklet is accurate at the time of publication. Please note that information on cancer, including the diagnosis, treatment and prevention of cancer, is constantly being updated and revised by medical professionals and the research community. 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 booklet.

### Cancer Council

Cancer Council is Australia's peak non-government cancer control organisation. Through the eight state and territory Cancer Councils, we provide a broad range of programs and services to help improve the quality of life of people living with cancer, their families and friends. Cancer Councils also invest heavily in research and prevention. To make a donation and help us beat cancer, visit [cancer.org.au](http://cancer.org.au) or call your local Cancer Council.



### Cancer Council Australia

Level 14, 477 Pitt Street, Sydney NSW 2000

**Telephone** 02 8063 4100 **Facsimile** 02 8063 4101

**Email** [info@cancer.org.au](mailto:info@cancer.org.au) **Website** [cancer.org.au](http://cancer.org.au)

ABN 91 130 793 725

# Introduction

This booklet has been prepared to help you understand more about the two most common types of skin cancer: basal cell carcinoma (BCC) and squamous cell carcinoma (SCC).

Many people feel shocked and upset when told they have skin cancer. We hope this booklet will help you, your family and friends understand how skin cancer is diagnosed and treated. We also include information about support services.

We cannot give advice about the best treatment for you. You need to discuss this with your doctors. However, we hope this information will answer some of your questions and help you think about other questions to ask your treatment team.

This booklet does not need to be read from cover to cover – just read the parts that are useful to you. Some medical terms that may be unfamiliar are explained in the glossary.

## How this booklet was developed

This information was developed with help from a range of health professionals and people affected by skin cancer. It is based on clinical practice guidelines for BCC and SCC.<sup>1</sup>

If you or your family have any questions, call Cancer Council **13 11 20**. We can send you more information and connect you with support services in your area. Turn to the last page of this book for more details.



**Cancer  
Council  
13 11 20**

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# What is cancer?

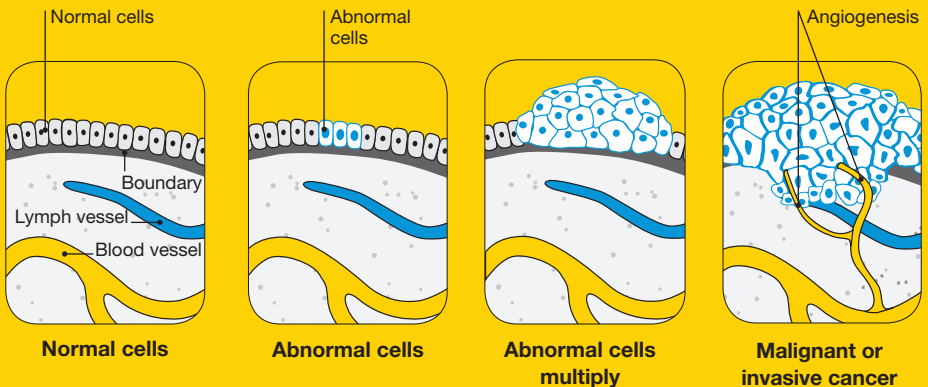
Cancer is a disease of the cells, which are the body's basic building blocks. The body constantly makes new cells to help us grow, replace worn-out tissue and heal injuries. Normally, cells multiply and die in an orderly way.

Sometimes cells don't grow, divide and die in the usual way. This may cause blood or lymph fluid in the body to become abnormal, or form a lump called a tumour. A tumour can be benign or malignant.

**Benign tumour** – Cells are confined to one area and are not able to spread to other parts of the body. This is not cancer.

**Malignant tumour** – This is made up of cancerous cells, which have the ability to spread by travelling through the bloodstream or lymphatic system (lymph fluid).

## How cancer starts



The cancer that first develops in a tissue or organ is called the primary cancer. A malignant tumour is usually named after the organ or type of cell affected.

A malignant tumour that has not spread to other parts of the body is called localised cancer. A tumour may invade deeper into surrounding tissue and can grow its own blood vessels (angiogenesis).

If cancerous cells grow and form another tumour at a new site, it is called a secondary cancer or metastasis. A metastasis keeps the name of the original cancer. For example, skin cancer that has spread to the lymph nodes is called metastatic skin cancer, even though the person may be experiencing symptoms caused by problems in the lymph nodes. While it's possible for squamous cell carcinoma to spread, basal cell carcinoma rarely spreads.

## How cancer spreads

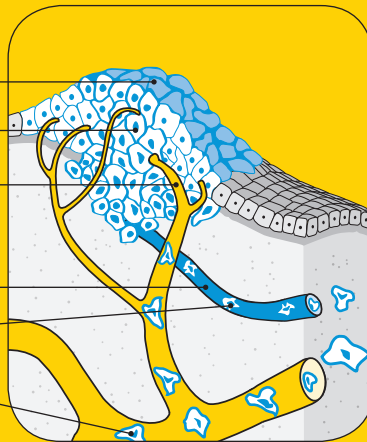
Primary cancer

Local invasion

Angiogenesis –  
tumours grow their  
own blood vessels

Lymph vessel

Metastasis –  
cells invade other  
parts of the body via  
blood vessels and  
lymph vessels





# The skin

The skin is the largest organ of the body and it has many purposes, including protecting the body, regulating temperature and controlling fluid loss.

Skin, like all other body tissues, is made up of cells. The two main layers of the skin are the epidermis and dermis. Below these is a layer of fatty tissue.

## Epidermis

This is the top, outer layer of the skin. It has four main cell types:

- keratinocytes (make up about 95% of the epidermis) – basal cells and squamous cells are types of keratinocytes
- melanocytes
- Langerhans cells
- Merkel cells.

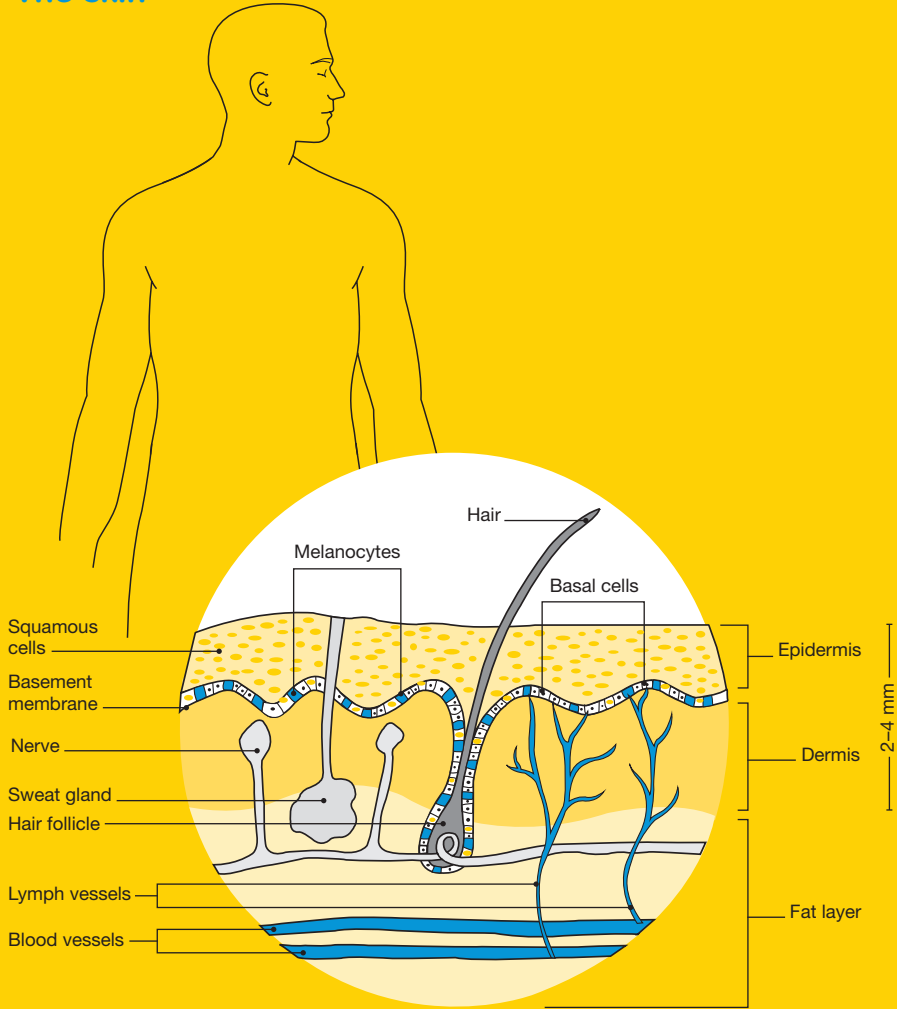
The three main types of skin cancer – basal cell carcinoma, squamous cell carcinoma and melanoma – begin in particular cells of the epidermis:

**Basal cells** – These tall cells make up the lower layer of the epidermis. They multiply constantly, and the older cells move up within the epidermis and flatten out to form squamous cells.

**Squamous cells** – These are flat cells that are packed tightly together to make up the top and thickest layer of the epidermis. Squamous cells are formed from old basal cells and they constantly shed as new cells are made.



# The skin



**Melanocytes** – These cells produce a dark pigment called melanin, the substance that gives skin its colour. When skin is exposed to the sun, melanocytes make extra melanin to protect it from getting burnt. This is what causes skin to tan. Melanoma starts in melanocytes. Melanocytes are also in non-cancerous (benign) spots on the skin called moles or naevi (see page 12).

## **Dermis**

This layer of the skin sits underneath the epidermis. The dermis contains the roots of hairs (follicles), sweat glands, blood and lymph vessels, and nerves that are held in place by collagen, a protein that gives skin its elasticity and strength.

Skin cancer spreads by moving into the dermis via the basement membrane (see illustration, previous page), allowing cancer cells to reach blood or lymph vessels and move around the body.

### **Information about melanoma**

This booklet is about the two most common types of skin cancer – basal cell carcinoma and squamous cell carcinoma. For information about melanoma, call Cancer Council **13 11 20** and ask for a free copy of *Understanding Melanoma*, or download a digital version from your local Cancer Council website.



# Key questions

## Q: What is skin cancer?

**A:** Skin cancer is the uncontrolled growth of abnormal cells in the skin.

## Q: What types are there?

**A:** The three main types of skin cancer are basal cell carcinoma (BCC), squamous cell carcinoma (SCC) and melanoma. BCC and SCC are also called keratinocytic or non-melanoma skin cancers. Rare types of skin cancer include Merkel cell carcinoma and angiosarcoma, but they are treated differently from BCC and SCC. Call Cancer Council 13 11 20 for information about rarer skin cancers.

### Basal cell carcinoma

This starts in the lower layer of the epidermis and accounts for about 70% of keratinocytic skin cancers. BCC:

- commonly develops on areas of the body that receive high sun exposure, such as the head, face, neck, shoulders, back, lower arms and lower legs, but it can start anywhere on the body
- may appear as a pearl-coloured lump or as a slightly scaly area that is shiny and pale or bright pink in colour, although some BCCs have a darker colour
- may bleed and become inflamed. Some BCCs heal then become inflamed again, often in a three-month cycle.

BCC often has no symptoms and it does not usually hurt when it is knocked against something, but it may itch. It tends to grow slowly and rarely spreads to other parts of the body.

The earlier a BCC is found, the easier it is to treat. Left untreated, it can grow deeper into the skin and damage nearby tissue, making treatment more difficult and increasing the chance of it recurring (coming back).

Having one BCC increases the risk of getting another. It is possible to have more than one BCC at the same time on different parts of the body.

## **Squamous cell carcinoma (SCC)**

This starts in the upper layer of the epidermis and accounts for about 30% of keratinocytic skin cancers. SCC:

- usually appears on parts of the body most often exposed to the sun, such as the head, neck, hands, forearms and lower legs, but it can start anywhere on the body
- may bleed and become inflamed and be tender to touch
- often appears as a thickened red, scaly or crusted spot or rapidly growing lump
- may look like a sore that hasn't healed.

SCC tends to grow quickly over several weeks or months. It may spread to other parts of the body if left untreated, although this is uncommon. SCC on the lips and ears is more likely to spread and should be examined by a doctor as soon as possible.



Bowen disease (also called squamous cell carcinoma in situ) is an early form of skin cancer that begins in the epidermis, the top layer of the skin. It looks like a red, scaly patch and can develop into squamous cell carcinoma if left untreated.

## Melanoma

Australia has the highest incidence of melanoma in the world. Although it is not as common as BCC and SCC, melanoma is considered the most serious type of skin cancer because it is more likely to spread to other parts of the body, such as the lungs, liver, brain and bones. Melanoma:

- can often appear as a new or existing spot on the body that changes in size, shape or colour over several weeks or months
- often has an irregular edge and a flat or raised surface
- may be more than one colour (brown, black, blue, red, white, light grey or pink).

The earlier melanoma is diagnosed, the more successful treatment is likely to be. Left untreated, melanoma may spread deeper into the skin, where it can be carried to other parts of the body via lymph vessels or blood vessels.

For more information, refer to Cancer Council's booklet *Understanding Melanoma* or visit the Melanoma Institute Australia website at [melanoma.org.au](http://melanoma.org.au).

## Q: What about other skin spots?

**A:** Not all spots that appear on the skin are cancerous. However, moles, freckles and sunspots (solar or actinic keratoses, see page 14) are warning signs that the skin has had too much sun exposure, increasing the risk of skin cancer.

### Moles (naevi)

A mole (naevus) is a normal growth on the skin that develops when the pigment-producing cells of the skin (melanocytes) grow in groups. Moles can be brown, black or skin-coloured and are usually round or oval.

Moles are very common. Some people have many moles on their body – this can run in families. Overexposure to the sun, especially in childhood, can also cause moles.

### Dysplastic naevi

Moles with an irregular shape and uneven colour are called dysplastic naevi. People with many dysplastic naevi have a greater risk of developing melanoma.

Ask your doctor how to examine your skin regularly for any changes and read *How to check your skin* on page 17.



It is possible to get sunburnt on cloudy and overcast days. Use sun protection measures when the ultraviolet (UV) Index is 3 or higher. Read more about the UV Index on page 16.

## Non-cancerous skin spots



**Dysplastic naevus** – mole with an irregular shape and uneven colour



**Sunspot (solar or actinic keratosis)** – red, flat, scaly spot that feels rough

## Keratinocytic skin cancers



**Basal cell carcinoma** – pearl-coloured nodule or lump



**Squamous cell carcinoma** – thickened scaly nodule or lump

## Melanoma



**Superficial melanoma** – brownish spot with an asymmetrical shape and colour



**Nodular melanoma** – black nodule or lump that has grown quickly

## Sunspots (solar or actinic keratoses)

Red, flat, scaly spots on the skin that feel rough are called sunspots (solar or actinic keratoses). They usually occur in people over 40 on areas of skin frequently exposed to the sun, such as the head, neck, hands, forearms and legs. Rarely, sunspots develop into SCC.

## Q: How common is skin cancer?

**A:** Australia has one of the highest rates of skin cancer in the world. About two in three Australians will be diagnosed with some form of skin cancer before the age of 70.<sup>2</sup> Skin cancer is the most common cancer diagnosed in Australia.

Almost 770,000 new cases of BCC and SCC are treated each year. BCC can develop in young people, but it is most common in people over 40. SCC occurs mostly in people over 50.

More than 12,000 cases of melanoma are diagnosed each year, with the highest incidence in people over 40, especially men. It is the most commonly diagnosed cancer in people aged 15–29.<sup>3</sup>

## Q: Who is at risk?

**A:** Anyone can develop skin cancer. However, the risk is higher in people who have:

- fair skin, especially if it burns easily, is prone to freckles and doesn't tan
- red or fair hair and light-coloured eyes



- experienced short, intense periods of exposure to ultraviolet (UV) radiation, e.g. on holidays or playing sport, especially if it caused sunburn
- actively tanned or used solariums
- worked outdoors
- a weakened immune system, which could be caused by taking certain medicines after an organ transplant or being HIV-positive
- numerous moles on their body
- dysplastic naevi (see page 12)
- a personal or family history of skin cancer.

People with olive or very dark skin naturally have more protection against UV radiation because their skin produces more melanin than fair-skinned people. However, they can still develop skin cancer.

Slip, slop, slap, seek and slide to protect your skin from overexposure to the sun and sun damage. See page 33 for more information.



## Q: What causes skin cancer?

**A:** The main cause of skin cancer is overexposure to UV radiation. This is produced by the sun, but it can also come from other sources, such as solariums (sun beds). While these are now banned in Australia, people who used a solarium before age 35 have an almost 60% greater risk of melanoma.

Most parts of Australia have high levels of UV radiation all year round. UV radiation cannot be seen or felt and it is not related to temperature, but it can cause:

- sunburn
- premature skin ageing
- damage to skin cells, which leads to skin cancer.

## The UV Index and SunSmart UV Alert

The UV Index shows the intensity of the sun's UV radiation. An index of 3 or above indicates that UV levels are high enough to cause skin damage.

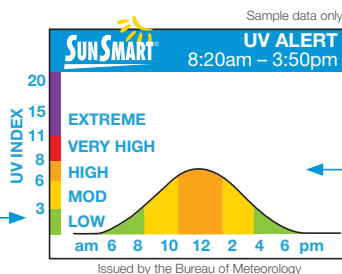
The daily SunSmart UV Alert shows sun protection times

and forecasts the maximum UV Index for many locations in Australia. You can check the UV Alert on the weather page of most daily newspapers, at your local Cancer Council website, or by using the free SunSmart app for iPhone, iPad and Android devices.

### How to read the UV Alert

UV Index ranges

- Low (0–2)
- Moderate (3–5)
- High (6–7)
- Very High (8–10)
- Extreme (11+)



This shows when you need to be SunSmart on this day.

The maximum UV Index level on this day is forecast to be 7, which is high.



# Diagnosis

## Recognising a skin cancer

Normal, healthy spots on the skin usually have a smooth edge and an even colour. Skin cancers don't all look the same, but there are signs to look out for, including:

- a spot that is different from other spots on the skin
- a spot that has changed in size, shape, colour or texture
- a sore that doesn't heal
- a spot that bleeds.

There is no screening program for skin cancer, so it's important to get to know your skin. Checking yourself every three months, or as recommended by your general practitioner (GP), will help you notice any new or changing spots.

### How to check your skin

In a room with good light, undress completely and use a full-length mirror to check your whole body. If you are on your own, use a handheld mirror to check areas that are difficult to see.

Pay particular attention to your face, neck, shoulders, arms, back of your hands, back, legs, the bottom of your feet and between your toes.

If you notice anything new or different on your skin, make an appointment with your GP or dermatologist straightaway. Skin cancers that are found and treated early need less invasive treatment and have a better outcome (prognosis).

Visit [sunsmart.com.au/skin-cancer/checking-for-skin-cancer](https://www.sunsmart.com.au/skin-cancer/checking-for-skin-cancer) for more information about checking your skin.

## Skin biopsy

If you notice any changes to your skin, your doctor will examine you, paying particular attention to any spots you have identified as changed or suspicious. If the doctor thinks you may have a skin cancer, they will usually take a tissue sample (biopsy) to confirm the diagnosis. A biopsy is a quick and simple procedure and is usually performed in the doctor's office.

You will be given a local anaesthetic to numb the area, and the doctor will take a small piece of tissue from the spot or cut it out completely in a procedure called an excision. Often they will use stitches to close the wound and help it heal.

The tissue that is cut out will be sent to a laboratory, where a pathologist will examine it under a microscope. The results will be available in about a week.

If all the cancer is removed during the biopsy, this will probably be the only treatment you need.



### Smartphone apps

A number of smartphone apps allow you to photograph your skin at regular intervals and compare photos to check for changes. While these apps may be useful tools to remind you to check your skin, they should not be relied on to identify skin cancer. If you notice a spot that causes you concern, make an appointment with your GP or dermatologist straightaway.

## Prognosis

Prognosis means the expected outcome of a disease. Your treating doctor is the best person to talk to about your prognosis. Most keratinocytic skin cancers are successfully treated if found early.

## Staging

Staging is a way to describe the size of the skin cancer and whether it has spread. BCCs rarely spread and usually only need staging if they are very large. SCCs may require staging as they are able to spread, although this is uncommon.

Usually a biopsy is the only information a doctor needs to determine the stage of a skin cancer. The doctor may also feel your lymph nodes to check for swelling, which can be a sign that the cancer has spread.

## Which health professionals will I see?

If you have a suspicious spot on your skin, there are a number of health professionals you may see.

### General practitioner (GP)

Your GP knows your medical history and can examine your skin, including areas that are not exposed to the sun.

GPs can treat skin cancers using some types of surgery (see page 26) and by prescribing topical treatments (pages 28–29). They may refer you to a dermatologist or surgeon if necessary.

## Dermatologist

A dermatologist is a specialist doctor who is trained in preventing, diagnosing and treating skin diseases, including skin cancer.

You need a referral from a GP to see a dermatologist – without a referral, you will have to pay the full cost of the consultation and will not receive a refund from Medicare.

When you make the appointment, ask the receptionist about the cost of each procedure and how much will be refunded by Medicare, and check if there is a waiting list. If there is a spot on your skin of particular concern, your treatment should not be delayed. In this situation, your GP can request an earlier appointment.

Many public hospitals in large cities have dermatology outpatient clinics where care can be provided for free. Your GP can refer you.

In areas where there may not be a dermatologist, you may be able to see a visiting dermatologist or a general surgeon.

## Surgeon

Some skin cancers are treated by a general surgeon, surgical oncologist or plastic surgeon:

- **general surgeon** – can manage most skin cancers and perform reconstructive techniques, such as skin flaps and grafts
- **surgical oncologist** – can manage complex skin cancers, including those that have spread to the lymph nodes
- **plastic surgeon** – is trained in complex reconstructive techniques for areas that are difficult to treat, such as the nose.

## Skin cancer clinics

Skin cancer clinics offer a variety of services and fee arrangements. They are usually operated by GPs who have an interest in skin cancer, although some are run by specially trained dermatologists.

Clinics may not necessarily offer a higher level of skill than your GP. In deciding whether to attend a skin clinic, it is important to find out about the services offered and the expertise of the staff.

## Choosing a skin clinic

There are four main points to consider when choosing a skin clinic:

- the qualifications and experience of the medical staff, including whether they are members of a professional association relevant to treating skin cancer
- what you will have to pay – some clinics bulk-bill for the initial consultation but require up-front payment for further appointments or surgery (which may not be refundable by Medicare); others require up-front payment for all appointments
- the diagnostic and treatment services offered
- the information and follow-up provided.

Cancer Council does not operate or recommend any specific skin cancer clinics, and does not recommend specific specialists.





## Key points

- Although not all skin cancers look the same, signs include a spot that is different from other spots on the skin, a spot that has changed in size, shape, colour or texture or bleeds, or a sore that doesn't heal.
- Your GP can examine your skin and treat some skin cancers. They can also refer you to a specialist, such as a dermatologist or surgeon.
- Your doctor will do a biopsy to determine whether the spot is cancerous. A biopsy is when tissue is cut out and examined under a microscope. You may have stitches to close up the wound.
- The biopsy results will be ready in about a week. In some cases, a biopsy will be the only treatment.
- A dermatologist is a specialist doctor trained in preventing, diagnosing and treating skin diseases, including skin cancer. You will need a referral from your GP to see a dermatologist.
- You can make an appointment to see a dermatologist without a referral, but you will have to pay the full cost of the consultation and you will not get a refund from Medicare.
- General surgeons and surgical oncologists are trained to perform surgery to treat skin cancer. In some cases, a plastic surgeon may be the treating specialist.
- Some people go to a skin cancer clinic that is operated by a GP with an interest in skin cancer or, sometimes, by a dermatologist.
- When choosing a skin cancer clinic, consider the staff's qualifications and experience, the costs, and the services and information offered.





# Making treatment decisions

Skin cancers may be treated by GPs, dermatologists and surgeons. For information on these specialists, see pages 19–20.

- Before you see the doctor, it may help to write down any questions you'd like to ask – see the list of suggested questions on page 36.
- Many people like to take a relative or friend with them to the doctor to take part in the discussion, take notes or simply listen.
- Be guided by your doctor and weigh up the advantages and disadvantages of different treatments, including the impact of any side effects.
- If only one type of treatment is recommended, ask your doctor why you have not been offered other choices.
- If you have a partner, you may want to discuss the treatment options together. Talking to friends and family may also be helpful, or you can call Cancer Council 13 11 20.
- You have the right to accept or refuse any treatment offered by your doctors and other health professionals.

If you are having difficulty finding a dermatologist or surgeon, visit [cancer.org.au/about-cancer/find-a-specialist.html](https://www.cancer.org.au/about-cancer/find-a-specialist.html) and click on the 'Dermatology' or 'Plastic & Reconstructive Surgery' links.



## A second opinion

You may want to get a second opinion from another specialist to confirm or clarify your doctor's recommendations, or to reassure you that you have explored all of your options. Specialists are used to people doing this.

Your doctor can refer you to another specialist and send your initial results to that person. You can get a second opinion even if you have started treatment or still want to be treated by your first doctor. You might decide you would prefer to be treated by the doctor who provided the second opinion.

## Taking part in a clinical trial

Your doctor or nurse may suggest you take part in a clinical trial. Doctors run clinical trials to test new or modified treatments and ways of diagnosing disease to see if they are better than current methods. For example, if you join a randomised trial for a new treatment, you will be chosen at random to receive either the best existing treatment or the modified new treatment.

Over the years, trials have improved treatments and led to better outcomes for people diagnosed with cancer.

It may be helpful to talk to your specialist or clinical trials nurse, or to get a second opinion. If you decide to take part, you can withdraw at any time. For more information, call Cancer Council 13 11 20 for a free copy of *Understanding Clinical Trials and Research* or visit [australiancancertrials.gov.au](http://australiancancertrials.gov.au).

# Treatment

Skin cancer is treated in different ways. Treatment depends on:

- the type, size and location of the cancer
- your general health
- any medicines you are taking (these can affect the amount of bleeding and the healing time)
- whether the cancer has spread to other parts of your body (although this is uncommon for keratinocytic skin cancers).

For some people, a biopsy is the only treatment they need (see *Skin biopsy*, page 18).

Many of the treatments described in this chapter are for sunspots as well as skin cancers. It is uncommon for sunspots to develop into cancer, but many people have them removed for cosmetic reasons.

## Most common treatment options

Treatment	Type of skin spot
Surgery	BCC, SCC
Curettage and cautery	BCC, Bowen disease
Cryotherapy	Sunspots, superficial BCC
Topical treatments	BCC, Bowen disease, sunspots
Photodynamic therapy	Bowen disease, sunspots, superficial BCC
Radiotherapy	BCC, SCC

## Surgery

Surgery is the most common treatment for skin cancer. It is usually a quick and simple procedure that can be performed by a GP or a dermatologist. More complex cases may be treated by a surgeon.

The doctor uses a local anaesthetic to numb the affected area and cuts out the skin cancer and nearby normal-looking tissue (margin) before closing the wound with stitches. The margin is checked by a pathologist to make sure the cancer has been completely removed. The results will be available in about a week. If cancer cells are found in the margin, further surgery may be required.

### Skin flap and skin graft

For large skin cancers, a bigger area of skin needs to be removed. In these cases, a skin flap or skin graft may be used to cover the wound.

**Skin flap** – Loose skin or tissue is taken from an area close to the wound and placed over it using stitches.

**Skin graft** – A shaving or thin piece of skin from another part of the body is stitched over the wound.

These procedures are often done as day surgery in hospital under a local or general anaesthetic.

### Mohs' surgery

Mohs' surgery, or microscopically controlled excision, is usually done under local anaesthetic by a dermatologist to treat large skin cancers that have penetrated deep into the skin or come

back (recurred). It can also be used for cancers in areas that are difficult to treat, such as near the eye and on the nose, lips and ears.

The doctor removes the cancer little by little, checking each section of tissue under a microscope. They keep removing tissue until they see only healthy tissue under the microscope, and then close the wound with stitches or, sometimes, a skin flap or graft.

This procedure reduces the amount of healthy skin that is removed while making sure all the cancer has been taken out.

Mohs' surgery is not a common treatment because it is highly specialised surgery. It is only available at some private specialist practices and private hospitals. It costs more than other types of skin cancer surgery due to the time it takes and the equipment required.



## Curettage and cautery

Curettage and cautery is usually done by a dermatologist. You will be given a local anaesthetic and the doctor will scoop out the cancer using a small, sharp, spoon-shaped instrument called a curette. They will then apply low-level heat (cautery) to stop bleeding and destroy any remaining cancer, and cover the wound with a dressing.

The wound should heal within a few weeks, leaving a small, round, white scar.

## Cryotherapy

Cryotherapy, or cryosurgery, is a freezing technique to remove sunspots and some superficial BCCs.

The doctor, usually a dermatologist, sprays liquid nitrogen onto the sunspot or skin cancer and a small area of skin around it. This causes a burning or stinging sensation. The liquid nitrogen freezes and kills the abnormal skin cells and creates a wound, which will be sore and red for a few days and may weep or blister.

A crust will form on the wound and the dead tissue will fall off after 1–4 weeks, depending on the area treated. New, healthy skin cells will grow and a scar may develop.

Healing can take a few weeks, and the healed skin will probably look paler and whiter than the surrounding skin.

## Topical treatments

Some skin spots and cancers can be treated using creams, lotions or gels prescribed by a doctor that you apply yourself.

## Immunotherapy

Immunotherapy stimulates the body's immune system to destroy cancer cells.

Sunspots, superficial BCCs and Bowen disease can be treated using a cream called imiquimod. You apply it directly to the affected area once a day at night, usually five days a week for six weeks.

Imiquimod can cause scabbing and crusting, which may be uncomfortable. The treated skin may become red and inflamed and may be tender to touch.

Some people have a more serious reaction to imiquimod, but this is uncommon. Symptoms include pain or itching in the affected area, fever, achy joints, headache and a rash. If you experience any of these more serious side effects, stop using the cream and see your doctor immediately.

## **Chemotherapy**

A cream called 5-fluorouracil (5-FU) is used to treat superficial BCCs, sunspots and, sometimes, Bowen disease.

Your doctor (GP or dermatologist) will explain how to apply the cream and how often. Many people use it twice a day for four weeks.

The treated skin may become red, inflamed and tender, and often itchy or uncomfortable. These effects will usually settle within a few weeks after treatment has finished.

## **Ingenol mebutate**

This newer treatment for sunspots is a gel that you apply to the affected skin once a day for two or three days.

Side effects include: skin reddening, flaking or scaling; mild swelling; crusting or scabbing; and blisters. These effects should disappear within two weeks after treatment has finished.

## Photodynamic therapy

Photodynamic therapy (PDT) is the use of a light source and a cream to treat sunspots, superficial BCCs and Bowen disease. The doctor, usually a dermatologist, gently scrapes the area with a curette and applies a cream that is sensitive to light. After about three hours, they will shine a special light onto the area for 7–8 minutes and cover it with a bandage. For skin cancers, PDT usually needs to be repeated after two weeks. Side effects include redness and swelling, which usually ease after a few days.

Some people experience pain during PDT, particularly for treatment to the face. Your doctor may give you a local anaesthetic or use a cold water spray or pack or a cold air blower to help ease the pain.

## Radiotherapy

Radiotherapy uses x-rays to kill cancer cells. It is usually used on skin cancers in areas that are hard to treat with surgery, such as on the face, and on cancers that have grown deeply into the skin.

You will lie on a table while the radiotherapy machine is positioned around you. This can take 10–30 minutes, but the treatment itself will take only a few minutes. Radiotherapy is usually given five times a week for 4–8 weeks. Skin in the treatment area may become red and sore 2–3 weeks after treatment starts and may last for a few weeks after treatment has finished.

For more information, call Cancer Council 13 11 20 and ask for a free copy of *Understanding Radiotherapy*.





## Key points

- Surgery is the most common and successful treatment for skin cancer.
- During surgery, your doctor will carefully cut out the skin cancer. You will have stitches or the doctor will use skin from another part of your body (a flap or graft) to cover the wound.
- Mohs' surgery, also known as microscopically controlled excision, is a specialised procedure that is only available at some private clinics and private hospitals. The surgeon removes layers of cells and checks them under a microscope immediately. The aim is to remove the cancer cells and leave only healthy tissue.
- Curettage and cautery is when the doctor gently removes the cancer with a sharp tool called a curette. They then use low-level heat (cautery) to stop the bleeding and destroy any remaining cancer cells.
- Cryotherapy is used to treat sunspots and some skin cancers. The doctor will spray liquid nitrogen onto the skin to freeze and destroy the cancer cells.
- Some skin spots and cancers can be treated using creams, lotions and gels. This is called topical treatment and it includes immunotherapy, chemotherapy and ingenol mebutate.
- Photodynamic therapy is the use of a light source and a cream to treat sunspots and some skin cancers.
- Cancers that are hard to treat with surgery may require treatment with radiotherapy.



## After treatment

You will need to have regular check-ups after treatment for skin cancer. Your follow-up schedule will depend on the type of cancer and treatment. If your wound doesn't heal, or if you notice any other skin changes, see your doctor.

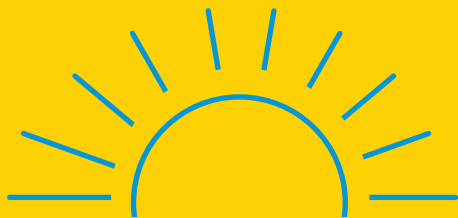
### Will I get other skin cancers?

Having skin cancer increases your risk of developing more skin cancers. Sun damage builds up over time and cannot be reversed. However, you can prevent further damage to your skin. Follow the steps on the opposite page, make sun protection a part of your lifestyle, and visit your doctor for regular check-ups.

### Sun exposure and vitamin D

UV radiation from the sun causes skin cancer, but it is also the best natural source of vitamin D, which is needed to develop and maintain strong and healthy bones. The amount of sunlight you need for vitamin D depends on several factors, including the UV level, your skin type and your lifestyle. UV levels vary across Australia, so the time you need to spend in the sun will be determined by your location, the season and time of day, cloud coverage and the environment.

Getting more sun than recommended does not increase your vitamin D levels, but it does increase your skin cancer risk. Short, incidental sun exposure, such as walking from the office to get lunch or hanging out the washing, is the best way to maintain adequate vitamin D levels.



## Protecting your skin

Use a combination of measures to protect your skin from the sun.

### Slip

Wear clothing that covers your neck, shoulders, arms, legs and torso. The best protection comes from closely woven fabrics. For clothes designed for sun protection, the higher the UPF (ultraviolet protection factor), the greater the protection.

### Slop

Apply a water-resistant sunscreen with SPF 30+ or higher at least 20 minutes before going outside, as it takes this long to sink into the skin. Reapply every two hours, after swimming and after any activity that causes you to sweat or rub the sunscreen off.

### Slap

Wear a broad-brimmed hat that protects your face, neck and ears.

### Seek

Use shade from trees, umbrellas, buildings or any type of canopy. Be aware that UV radiation is reflective and bounces off surfaces such as concrete, snow, water and sand, causing sun damage even when you think you're shaded.

### Slide

Wear sunglasses that meet the Australian and New Zealand standard AS/NZS 1067:2003 and have an EPF (eye protection factor) of 10. Wraparound styles are best.

See [sunsmart.com.au](https://www.sunsmart.com.au) for more information about protecting your skin.



# Seeking support

## Cosmetic care

Skin cancer treatments such as surgery, curettage and cauterization, and cryotherapy often leave scars. In most cases, your doctor will do everything they can to make the scar less noticeable. Most scars will fade with time.

You may worry about how the scar looks, especially if it's on your face. Various cosmetics are available to help conceal scarring. Your hairstyle or clothing might also cover the scar. You may want to talk to a counsellor, friend or family member about how you are feeling after any changes to your appearance.

## Look Good Feel Better

Look Good Feel Better is a national program that helps people manage the appearance-related effects of cancer treatment. Workshops are run for men, women and teenagers. For information about services in your area, visit [lgfb.org.au](http://lgfb.org.au) or call 1800 650 960.

## Practical and financial help

Skin cancer may cause practical and financial difficulties, particularly for people who have to travel for treatment.

Financial assistance – through benefits, pensions and programs – may help pay for prescription medicines and transport costs to medical appointments. These services may be different in each state and territory. For information about services in your local area and whether you are eligible to receive them, call Cancer Council 13 11 20 or, if you are treated in hospital, ask the social worker.



# Useful websites

The internet has many useful resources, although not all websites are reliable. The websites listed below are good sources of support and information.

## Australian

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Cancer Council Australia.....	<b>cancer.org.au</b>
Cancer Australia.....	<b>canceraustralia.gov.au</b>
healthdirect Australia.....	<b>healthdirect.gov.au</b>
SunSmart.....	<b>sunsmart.com.au</b>
The Dark Side of Tanning.....	<b>darksideoftanning.com.au</b>
Skin & Cancer Foundation Inc.....	<b>skincancer.asn.au</b>
The Australasian College of Dermatologists.....	<b>dermcoll.edu.au</b>
Australian Society of Plastic Surgeons.....	<b>plasticsurgery.org.au</b>
Skin Cancer College Australasia	
Locate-a-Doctor service.....	<b>skincancercollege.org/locate-doctor</b>

## International

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American Cancer Society.....	<b>cancer.org</b>
Macmillan Cancer Support.....	<b>macmillan.org.uk</b>
Cancer Research UK.....	<b>cancerresearchuk.org</b>
National Cancer Institute.....	<b>cancer.gov</b>
Skin Cancer Foundation.....	<b>skincancer.org</b>



# Question checklist

You may find this checklist helpful when thinking about the questions you want to ask your doctor about your disease and treatment. If your doctor gives you answers that you don't understand, ask for clarification.

- What is this spot on my skin?
- Will I need a biopsy?
- What is my biopsy result? Do I have skin cancer?
- What type of skin cancer is it?
- Did the biopsy remove all of the skin cancer?
- Do I need further treatment? If so, what treatment do you recommend?
- Do I need to see a specialist?
- What will happen if I don't have treatment?
- How much will the treatment cost?
- Will there be any scarring after the skin cancer has been removed?
- Is this skin cancer likely to come back?
- How often should I get my skin checked?
- Where can I go for follow-up skin checks?
- Will I need any further tests after treatment is finished?



# Glossary

## **actinic keratosis**

See sunspot.

## **anaesthetic**

A drug that stops a person feeling pain during a medical procedure. A local anaesthetic numbs part of the body; a general anaesthetic causes a person to lose consciousness for a period of time.

## **angiogenesis**

The formation of new blood vessels. This enables tumours to develop their own blood supply, which helps them survive and grow.

## **basal cell**

A type of cell that makes up the epidermis of the skin.

## **basal cell carcinoma (BCC)**

A type of skin cancer that develops in the basal cells of the epidermis.

## **basement membrane**

The layer of tissue that sits between the epidermis and dermis of the skin.

## **benign**

Not cancerous or malignant.

## **biopsy**

The removal of a sample of tissue from the body for examination under a microscope to help diagnose a disease.

## **Bowen disease**

An early form of skin cancer that looks like a red, scaly patch on the skin. Also called squamous cell carcinoma in situ.

## **cautery**

A technique that uses heat to stop bleeding after curettage.

## **cells**

The basic building blocks of the body. A human is made of billions of cells that are adapted for different functions.

## **chemotherapy**

The use of drugs to kill cancer cells or slow their growth.

## **cryotherapy**

The process of freezing and destroying cancer cells. Also called cryosurgery.

## **curettage**

The surgical removal of skin cancer using a small, spoon-shaped instrument with a sharp edge called a curette.

## **dermatologist**

A doctor who specialises in the prevention, diagnosis and treatment of skin conditions, including skin cancer.

## **dermis**

The lower layer of the two main layers that make up the skin.

## **dysplastic naevus (plural: naevi)**

A mole with an irregular shape and uneven colour.

## **epidermis**

The top, outer layer of the two main layers that make up the skin.

## **general surgeon**

A specialist doctor trained in a variety of minor surgical procedures.

## **hair follicle**

The sac in which hair grows.

## **immunotherapy**

The prevention or treatment of disease

using substances that alter the immune system's response.

### **keratinocyte**

A cell that makes up most of the epidermis. Types include squamous cells and basal cells.

### **keratinocytic skin cancer**

Basal cell carcinoma (BCC) or squamous cell carcinoma (SCC).

### **Langerhans cell**

A type of cell that makes up the skin's epidermal layer.

### **lesion**

An area of abnormal tissue that may be benign, precancerous or malignant.

### **liquid nitrogen**

A substance that is applied to the skin to freeze and kill abnormal skin cells.

### **lymph nodes**

Small, bean-shaped glands that form part of the lymphatic system.

### **lymphatic system**

A network of tissues, capillaries, vessels, ducts and nodes that removes excess fluid from tissues throughout the body, absorbs fatty acids and produces immune cells.

### **malignant**

Cancer.

### **melanin**

Dark pigment produced in melanocytes that gives skin its colour.

### **melanocyte**

One of the three types of cells that make up the skin's epidermis. Melanocytes produce melanin.

### **melanoma**

Cancer of the melanocytes.

### **Merkel cell**

A type of cell that makes up the skin's epidermal layer.

### **metastasis**

A cancer that has spread from a primary cancer to another part of the body.

### **Mohs' surgery**

Specialised surgery to remove skin cancers one segment at a time until only healthy cells remain. Also called microscopically controlled excision.

### **mole**

See naevus.

### **naevus (plural: naevi)**

A small, dark spot on the skin that arises from skin cells called melanocytes. Also called a mole.

### **nodule**

A swelling or lump that may be cancerous or non-cancerous.

### **pathologist**

A specialist doctor who interprets the results of tests (such as biopsies).

### **photodynamic therapy**

A type of cancer treatment using a cream that is activated by a light.

### **plastic surgeon**

A specialist doctor who has trained in complex aesthetic (appearance) and reconstructive techniques and surgery for more advanced skin cancer.

### **prognosis**

The predicted outcome of a person's disease.



### radiotherapy

The use of radiation, such as x-rays, gamma rays, electron beams or protons, to kill cancer cells or injure them so they cannot grow and multiply. Also called radiation therapy.

### skin flap

Nearby skin or fatty tissue that is pulled over the wound left by the removal of a skin cancer and stitched.

### skin graft

A shaving of skin from another part of the body that is stitched over the wound left by the removal of a skin cancer.

### solar keratosis

See sunspot.

### squamous cell

A type of cell that makes up the skin's epidermal layer.

### squamous cell carcinoma (SCC)

A type of skin cancer that begins in the squamous cells of the epidermis.

### sunspot

A red, scaly spot on the skin that is a sign of sun damage. Also called solar or actinic keratosis.

### superficial skin cancer

Cancer that only affects cells on the surface of the epidermis.

### surgical oncologist

A doctor who specialises in the surgical treatment of cancer.

### topical treatment

Treatment that is applied to an area of the skin as a cream, lotion or gel.

### tumour

A new or abnormal growth of tissue on or in the body. A tumour may be benign (not cancer) or malignant (cancer).

### ultraviolet (UV) radiation

The part of sunlight that causes sunburn and skin damage.

### UV Index

An internationally standard measure of the intensity of the sun's ultraviolet radiation.

### Can't find a word here?

For more cancer-related words, visit:

- [cancercouncil.com.au/words](http://cancercouncil.com.au/words)
- [cancervic.org.au/glossary](http://cancervic.org.au/glossary)
- [cancersa.org.au/glossary](http://cancersa.org.au/glossary)

## References

1. Australian Cancer Network Working Party to revise Management of Non Melanoma Skin Cancer Guidelines (2002), *Basal cell carcinoma, squamous cell carcinoma (and related lesions) – a guide to clinical management in Australia*, Cancer Council Australia and Australian Cancer Network, Sydney, 2008.
2. MP Staples et al., 'Non-melanoma skin cancer in Australia: the 2002 national survey and trends since 1985', *Medical Journal of Australia*, vol. 184, no. 1, 2006, pp. 6–10.
3. Australian Institute of Health and Welfare (AIHW), *Cancer in adolescents and young adults in Australia*, Cancer series no. 62, AIHW, Canberra, 2011.



# How you can help

At Cancer Council, we're dedicated to improving cancer control. As well as funding millions of dollars in cancer research every year, we advocate for the highest quality care for cancer patients and their families. We create cancer-smart communities by educating people about cancer, its prevention and early detection. We offer a range of practical and support services for people and families affected by cancer. All these programs would not be possible without community support, great and small.

**Join a Cancer Council event:** Join one of our community fundraising events such as Daffodil Day, Australia's Biggest Morning Tea, Relay For Life, Girls' Night In and Pink Ribbon Day, or hold your own fundraiser or become a volunteer.

**Make a donation:** Any gift, large or small, makes a meaningful contribution to our work in supporting people with cancer and their families now and in the future.

**Buy Cancer Council sun protection products:** Every purchase helps you prevent cancer and contribute financially to our goals.

**Help us speak out for a cancer-smart community:** We are a leading advocate for cancer prevention and improved patient services. You can help us speak out on important cancer issues and help us improve cancer awareness by living and promoting a cancer-smart lifestyle.

**Join a research study:** Cancer Council funds and carries out research investigating the causes, management, outcomes and impacts of different cancers. You may be able to join a study.

To find out more about how you, your family and friends can help, please call your local Cancer Council.



# Cancer Council 13 11 20

Being diagnosed with cancer can be overwhelming. At Cancer Council, we understand it isn't just about the treatment or prognosis. Having cancer affects the way you live, work and think. It can also affect our most important relationships.

When disruption and change happen in our lives, talking to someone who understands can make a big difference. Cancer Council has been providing information and support to people affected by cancer for over 50 years.

Calling 13 11 20 gives you access to trustworthy information that is relevant to you. Our cancer nurses are available to answer your questions and link you to services in your area, such as transport, accommodation and home help. We can also help with other matters, such as legal and financial advice.

If you are finding it hard to navigate through the health care system, or just need someone to listen to your immediate concerns, call 13 11 20 and find out how we can support you, your family and friends.

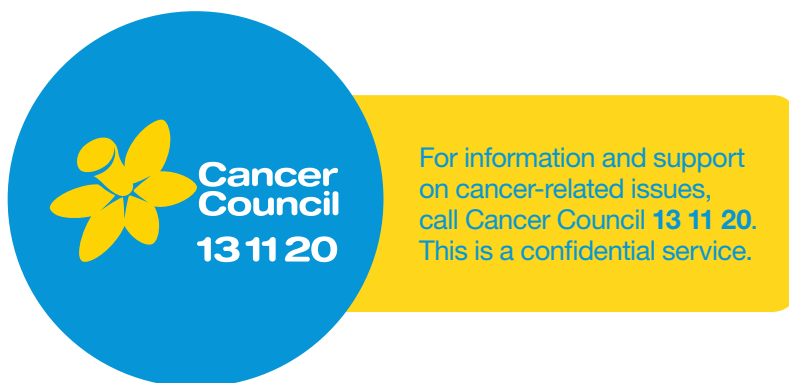
Cancer Council services and programs vary in each area.  
13 11 20 is charged at a local call rate throughout Australia (except from mobiles).



**If you need information in a language other than English, an interpreting service is available. Call 13 14 50.**



**If you are deaf, or have a hearing or speech impairment, contact us through the National Relay Service.**  
[www.relayservice.gov.au](http://www.relayservice.gov.au)



## Visit your local Cancer Council website

**Cancer Council ACT**  
actcancer.org

**Cancer Council NSW**  
cancercouncil.com.au

**Cancer Council NT**  
nt.cancer.org.au

**Cancer Council Queensland**  
cancerqld.org.au

**Cancer Council SA**  
cancersa.org.au

**Cancer Council Tasmania**  
cancertas.org.au

**Cancer Council Victoria**  
cancervic.org.au

**Cancer Council WA**  
cancerwa.asn.au

**Cancer Council Australia**  
cancer.org.au

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