CANCER FACTS

Skin Cancer

Australia has one of the highest rates of skin cancer in the world.

The three main types of skin cancer are[1]:

- melanoma - the most dangerous form of skin cancer
- basal cell carcinoma (BCC)
- squamous cell carcinoma (SCC).

There are other types of skin cancers, such as Merkel Cell Carcinoma, however, the numbers of these types of skin cancers are relatively small compared to melanoma.

The main cause of all types of skin cancer is overexposure to ultraviolet (UV) radiation, which is predominantly produced by the sun.

Melanoma[1]

Melanoma can appear at any age and on any area of the body, not only those exposed to the sun. Often melanoma has no symptoms, however, the first sign is generally a change in an existing mole, or the appearance of a new spot. There may be a change in size, shape, colour, elevation, itching or bleeding of a spot. Other symptoms can include dark areas under nails or on membranes lining the mouth, vagina or anus. It is important to note that new moles and spots will appear and change during childhood, adolescence and during pregnancy and this is normal. However, adults who develop new spots, or who notice changes to existing spots, should have them examined by a doctor. Early detection is vital.

Although melanoma is a less common type of skin cancer, it is considered the most serious because it grows quickly and is more likely to spread to other parts of the body, such as the lymph nodes, lung, liver, brain and bones, especially if not found early. Statistics on melanoma are available through the population-based cancer registries across Australia.

Queensland[4,5]

- Australia has the highest age-standardised rate for melanoma in the world[2] with Queensland having the highest rates in Australia[3].
- 4177 Queenslanders were diagnosed with a melanoma of the skin in 2017 (the latest figures available), with 359 dying from the disease. Of the 4177 diagnosed with melanoma, 2493 were male and 1684 were female.
- In 2017, melanoma was the second leading form of cancer diagnosed in males and females, after prostate and breast cancer[6].
- The approximate lifetime risk of a Queensland male to be diagnosed with melanoma before the age of 85 is one in nine, and for females it is one in 17.
- On average, people diagnosed with melanoma were 94 per cent as likely to live for another five years compared to the general population (92 per cent for males and 96 per cent for females).

Trends in Queensland[4]

- Between 1997 and 2017, melanoma diagnosis rates in males have significantly increased by 0.8 per cent per year. This followed an increase in rates by 2.9 per cent each year between 1982 and 1996. For females, the melanoma diagnosis rates have increased by 1.4 per cent every year from 2006-2017. Prior to that, the rates were stable between 1997 and 2005. The rates, however, increased by 5.2 per cent per year from 1993-1996 and declined by 1.8 per cent per year from 1987-1992. The diagnosis rate was increasing by 4.6 per cent each year between 1982 and 1986.
- Melanoma death rates among males decreased by 5.3 per cent per year between 2012 and 2017. This followed a 1.5 per cent per year increase between 1982 and 2011. For females, the melanoma death rates significantly decreased by 5.7 per cent annually between 2012 and 2017. The rates were stable between 1982 and 2011.

Australia[3]

- Melanoma is the fourth most common type of cancer diagnosed in Australia (second most common among males, after prostate cancer and the third most common cancer diagnosed in females, after breast and colorectal cancer[6].
- Approximately 14,485 Australians were diagnosed with melanoma in 2016 and around 1429 Australians died from melanoma in 2018.
- Even though the age standardised diagnosis rate for melanoma has been steadily increasing over time, the mortality rates have remained steady.
- On average, people diagnosed with melanoma were 92 per cent as likely to live for another five years compared to the general population (90 per cent for males and 94 per cent for females).

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Keratinocyte cancers (BCC and SCC)

Squamous Cell Carcinomas (SCC)[12] arise from the cells above the basal layer of the epidermis. They grow more rapidly than BCCs and may become larger over a number of months. SCCs usually appear as a flat, scaly area that gradually thickens. Bleeding and ulceration may occur and the area could feel tender. SCCs predominantly occur on parts of the body most often exposed to the sun, such as the head, neck, hands, forearms and lower limbs. These cancers may spread to other parts of the body if not treated.

Basal Cell Carcinomas (BCC)[12] are the most common but least dangerous form of skin cancer, and the most easily treated. They are a malignant tumour formed in the basal cell layer of the skin. They usually appear as a pearly lump or a scaly, dry area that is pale or bright pink in colour and shiny. They may bleed and become inflamed, and dead tissue may ulcerate. Some heal and then break down again. BCCs occur mainly in exposed areas such as the head, neck and upper body.

Keratinocyte or non-melanoma skin cancers (BCC and SCC) are common in Australia. However, due to how they are treated, it is very difficult to estimate the numbers diagnosed. Keratinocyte cancers are not reported by any population-based cancer registry in Australia.

Queensland

- Secondary analysis of recently published Australian data suggests that around 63,625 people (unpublished data) were treated for keratinocyte or non-melanoma skin cancers in Queensland in 2018[7].
- Based on the number of services including treatment for multiple lesions, it is estimated 362,809 keratinocytes were treated in Queensland in 2015[8].
- Many people are diagnosed with multiple keratinocyte cancers, which may partly explain the much higher number of treatments compared to the number of people treated.

Australia

- An estimated 320,972 people (unpublished data) with keratinocytes were treated in 2018[7], corresponding to around 879 keratinocyte cancers every day.
- Deaths from keratinocyte cancers are relatively low. There were 665 (451 males, 214 females) deaths from keratinocyte cancers reported in 2018[3].
- There were about 109,060 hospital separations due to keratinocyte cancers in Australia during 2014-2015[9].
- The number of Australians diagnosed with both melanoma and keratinocyte cancers is increasing except for those aged <40 years[9].

Detection and symptoms[1]

The sooner a skin cancer is identified and treated, the better your chance of avoiding surgery or, in the case of a serious melanoma or other skin cancer, potential disfigurement or even death. It is a good idea to talk to your doctor about your level of risk and for advice on early detection.

Become familiar with the look of your skin, so you pick up any changes that might suggest a skin cancer. Skin cancers don't all look the same, but there are signs to look out for, including:

- a spot that looks and feels different from other spots on your skin
- a sore that doesn't heal within a few weeks
- a spot that has changed in size, shape, colour or texture
- a sore that is itchy or bleeds.

Risk factors[10]

Anyone can develop skin cancer, but it's more common in older people. The risk is also higher in people who have:

- fair or freckled skin, especially if it burns easily and doesn't tan
- red or fair hair and light coloured eyes (blue or green)
- had short, intense periods of exposure to UV radiation, e.g. on weekends or holidays or when 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 medications after an organ transplant (immunosuppressants) or by ongoing blood conditions such as chronic leukaemia

Skin Cancer

Risk factors continued

- lots of moles on their body or moles with an irregular shape and uneven colour (dysplastic naevi)
- a previous skin cancer or a family history of skin cancer
- certain conditions such as sunspots.

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

It is important that Queenslanders become familiar with their skin and talk to a doctor immediately about any changes.

Reducing cancer risk[1,10,13]

The main cause of all types of skin cancer is overexposure to ultraviolet (UV) radiation, which is produced by the sun, but can also come from artificial sources, such as the lights used in solariums. Solariums are now banned in Australia for commercial use because research shows that people who use solariums have a high risk of developing skin cancer.

UV radiation cannot be seen or felt, and it is not related to temperature. It can cause sunburn, premature skin ageing and damage to skin cells which can lead to skin cancer[1, 10,11].

Sun protection is required whenever the UV index is three or above. In Queensland, the UV index is typically three or higher throughout the entire year, even in cooler weather, so Queenslanders should protect their skin from the sun all year round.

Cancer Council Queensland recommends the use of a combination of sun protection measures:

- **Slip on protective clothing** that covers as much skin as possible, for example, shirts with long sleeves and high necks/collars. Clothes that are dark in colour and fabrics with a close weave provide the most protection. If used for swimming, wear clothing that is made from materials such as lycra, which stays sun protective when wet.
- **Slop on SPF30+ or higher broad-spectrum, water-resistant sunscreen**. This should be applied liberally 20 minutes before going out in the sun and reapplied every two hours, or more frequently if swimming, sweating or towel drying.
- **Slap on a hat** with a broad-brim or in a legionnaire or bucket style, as they provide the best protection for the face, neck and ears. Hats should be of a dark colour under the brim to minimise reflection and a close fabric weave.
- **Seek shade** provided by trees, built structures or temporary shade structures wherever possible, or bring your own pop-up tent or umbrella.
- **Slide on sunglasses** that are a close-fitting, wrap-around style that meet the Australian Standard AS1067 in category 2 or higher, and where possible, those with a marked Eye Protection Factor (EPF) of 9 or above. Wearing appropriate sunglasses minimises the risk of eye damage from ultraviolet radiation, including cataracts and cancer of the eye.

1. Cancer Council. Skin Cancer: http://www.cancer.org.au/preventing-cancer/sun-protection/about-skin-cancer.html
2. Cancer today, data visualisation tools for exploring the global cancer burden in 2018. World Health Organisation (WHO)
3. Cancer data in Australia (web report), Australian Institute of Health and Welfare (AIHW), Last updated 02 Jun 2020 https://www.aihw.gov.au/reports/cancer/cancer-data-in-australia/contents/summary.
4. Queensland Cancer Statistics On-Line, 2020. Viertel Cancer Research Centre, Cancer Council Queensland (qcsol.cancerqld.org.au). Based on data released by the Queensland Cancer Register (1982-2017; released July 2020).
5. Queensland Cancer Register, 2020. Unpublished data (1982-2017).
6. Excluding keratinocyte or non- melanoma skin cancers such as Basal cell carcinoma (BCC) and Squamous cell carcinoma (SCC)
7. Pandeya N, Olsen CM and Whiteman DC, The incidence and multiplicity rates of keratinocyte cancers in Australia. Med J Aust 2017; 207 (8): 339-343. || doi: 10.5694/mja17.00284 (https://www.mja.com.au/journal/2017/207/8/incidence-and-multiplicity-rates-keratinocyte-cancers-australia)
8. Fransen M, Karahalios A, Sharma N, English DR, Giles GG, Sinclair RD; Non-melanoma skin cancer in Australia. Med J Aust 2012; 197: 565-568. doi: 10.5694/mja12.10654. (https://www.mja.com.au/journal/2012/197/10/non-melanoma-skin-cancer-australia)
9. Australian Institute of Health & Welfare 2017. Cancer in Australia 2017. Cancer series no 101, Cat. No. CAN 100. Canberra: AIHW (https://www.aihw.gov.au/getmedia/3da1f3c2-30f0-4475-8aed-1f19f8e16d48/20066-cancer-2017.pdf.aspx?inline=true)
10. Cancer Council. UV radiation: http://wiki.cancer.org.au/skincancerstats/UV_radiation. In: Cancer Council Australia. Skin Cancer Statistics and Issues. Sydney: Last modified October 2016 [cited 2017 Mar 28].
11. Cancer Council. Skin Cancer Stats & Issues – Risk factors/epidemiology. http://wiki.cancer.org.au/skincancerstats/Risk_factors/epidemiology
12. Cancer Council Queensland. Skin Cancer – Information and symptoms of skin cancer. https://cancerqld.org.au/cancer-information/types-of-cancer/skin-cancer/
13. Cancer Council Queensland. Sun Protection. https://cancerqld.org.au/cancer-prevention/understanding-risk/sun-protection/#UV

Cancer Council Queensland

Information and support

Cancer Council 13 11 20

Being diagnosed with cancer or supporting a loved one can leave you with many questions. We want to help you find the answers. Call Cancer Council's 13 11 20 Information and Support line to talk with one of the team.

Our team can provide you with cancer information, emotional and practical support. We can also refer you to Cancer Council Queensland's support programs and services.

This confidential service is available Monday to Friday 9am-5pm (excluding public holidays).

Cancer Connect

Cancer Connect is a confidential telephone-based peer support service that connects you, your carer or loved ones with a peer support volunteer who has had a similar cancer experience. You can be matched with a Cancer Connect volunteer based on cancer diagnosis, treatment, family or work issues.

Cancer Counselling Service

Living with a cancer diagnosis, or supporting someone along the way, is rarely easy. Talking things through with a counsellor or psychologist can help you manage your cancer related concerns.

Our Cancer Counselling Service is available for anyone distressed by cancer at any stage. We deliver counselling via telephone and video, with face to face appointments available in some regional offices. Our team includes nurse counsellors and psychologists trained and experienced in helping people affected by cancer.

Further information and support

13 11 20 Email Webchat

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21073