
Skin cancer - risk factors

Summary

- Australia has one of the highest rates of skin cancer in the world.
 - Regardless of their skin type, everyone is at risk of sun damage and skin cancer.
 - Everyone should become familiar with their skin.
 - If you notice anything unusual about your skin, including any change in shape, colour or size of a spot, or the development of a new spot, visit your doctor immediately.
 - Overexposure to the sun can cause skin damage which may lead to skin cancer.
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Anyone can develop skin cancer. The main cause is over-exposure to ultraviolet (UV) radiation from the sun or artificial sources such as solariums.

There are other factors that can increase or decrease your risk of developing skin cancer, including:

- skin type
- having many moles and freckles – particularly many atypically shaped moles
- having a personal or family history of skin cancer.

Australia has one of the highest rates of skin cancer in the world. At least two in three Australians develop some form of skin cancer before they reach the age of 70.

Each year, over 2,000 Australians die from skin cancer, yet skin cancer is one of the most preventable cancers. Every extra decade of high UV exposure further increases your risk of melanoma (the most dangerous form of skin cancer).

Ultraviolet (UV) radiation from the sun is important for vitamin D levels in the body, but too much UV can cause:

- sunburn
- premature ageing
- skin damage
- eye damage
- skin cancer.

When the UV index is 3 or above, use a combination of sun protection measures (broad-brimmed hat, covering clothing, sunscreen, sunglasses and shade) when outdoors.

Skin cancer in Victoria

Over the past 30 years, UV protection programs like the SunSmart program have educated Victorians about the importance of sun protection at every age.

Although the incidence of melanoma and non-melanoma skin cancer has increased since 2000, recent data from the Victorian Cancer Registry shows rates are stabilising or declining in all age groups under 60 years. Those who have grown up with the SunSmart program for a greater part of their life are benefiting the most with lower rates of melanoma.

Read more about [skin cancer](#).

UV exposure in Australia

Australia experiences some of the highest levels of UV radiation in the world, because we are close to the equator and have a lot of clear blue-sky days. The Earth's orbit also takes countries in the southern hemisphere (Australia included) closer to the sun in our summertime than countries in the northern hemisphere during their summer.

UV radiation and skin cancer

Skin cells in the top layer of skin (the epidermis) produce a pigment called melanin. Melanin gives skin its natural colour. When skin is exposed to UV radiation, more melanin is produced, causing the skin to darken. This is what we call a 'tan'. A tan is not a sign of good health, but of damaged skin cells in trauma.

Tanning can contribute to DNA damage, premature skin ageing and skin cancer. Every time skin is exposed to the sun or a **solarium**, the total lifetime dose of UV radiation is increased. Over time, this damage adds up, even when no sunburn is experienced.

All types of sunburn, whether serious or mild, can cause permanent and irreversible skin damage that can lead to the development of skin cancer later in life.

It is recommended that all people, regardless of skin type, use a combination of sun protection measures during the daily sun protection times. The sun protection times are issued whenever the UV level is forecast to be 3 or above, and sun protection is recommended.

Hereditary factors and skin cancer

Family history and hereditary factors (particularly within your immediate family), play an important part in the risk of developing skin cancer.

If one or both of your parents have had a skin cancer, you too could be at risk, especially as you are likely to have the same skin type as them.

When combined with UV exposure, traits such as:

- red or blonde hair
- light coloured eyes
- fair skin
- sun sensitive skin
- a tendency to freckle

are genetic risk factors for developing skin cancers.

Skin type and skin cancer

People with fair skin are at higher risk of developing skin cancer than people with very dark skin. If you have fair skin, be sure to teach your children about the importance of sun protection. Encourage them to develop good sun protection habits from an early age. This is the best way to help reduce their risk of skin damage and skin cancer in later life.

The melanin in very dark skin offers some protection against the damaging effects of UV radiation and the risk of skin cancer is lower. But when skin cancer is detected in people with naturally very dark skin, it is often found at a later, more dangerous stage when the risk of death is much higher.

No matter what their skin type, everyone should become familiar with their skin. **Check all of your skin**, not just sun-exposed areas. If you notice anything unusual, including any change in shape, colour or size of a spot, or the development of a new spot, visit your doctor immediately.

Moles and freckles and skin cancer

Most people have moles and freckles. But if you have lots of freckles or moles, you are at higher risk of skin cancer.

Have your doctor check out any unusual changes to your skin as soon as possible, including new spots and any

moles or freckles that:

- grow
- change shape
- change colour
- bleed, or
- ulcerate.

Age and skin cancer

Melanoma is more common in older adults than younger people. The average age of diagnosis is 61 years. But skin cancer can occur in young people too. Although early onset melanoma is rarer, melanoma is one of the most common cancers and the leading cause of cancer death for young Australians.

Every extra decade of high sun exposure further increases your risk of melanoma. It is thought that by limiting your UV exposure, whatever your age, you can decrease your risk of melanoma.

Reducing your skin cancer risk

You can take steps to reduce your risk of skin cancer from over-exposure to UV radiation and recreational sun exposure.

Use a combination of the five sun protection measures during the daily sun protection times to reduce your risk, including:

- **slip** – on sun-protective clothing. Make sure it covers as much skin as possible
- **slop** – on SPF30 (or higher) broad-spectrum, water resistant sunscreen. Apply 20 minutes before going outdoors and reapply every two hours
- **slap** – on a broad-brimmed hat that protects the face, head, neck and ears
- **seek** – shade
- **slide** – on wrap-around sunglasses. Make sure they meet Australian/New Zealand Standard AS/NZS 1067:2003.

UV levels are most intense during the middle of the day.

SunSmart and the Bureau of Meteorology issue daily sun protection times whenever UV index levels are 3 or above. This is available as a **free SunSmart app**, or online at SunSmart or the Bureau of Meteorology, in the weather section of newspapers, or as a **free website widget**.

Winter activities such as skiing or snowboarding also pose a high risk of skin damage and sunburn. UV radiation is more intense at high altitude than at sea level. This is because the air is clearer and there is less atmosphere to absorb harmful UV rays. Read more about **sun protection at the snow**.

Where to get help

- **Cancer Council** Tel: **13 11 20** for information and support
- **Resources in other languages**, Cancer Council Victoria, Tel: **13 14 50**
- Your **GP (doctor)**
- Your local community health centre

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