



SKIN CANCER (MELANOMA)

Exposure to ultraviolet (UV) light from the sun is the main cause of skin cancers in New Zealand. People who work outdoors, such as farmers and construction workers, have a high risk of getting skin cancers. Even on cloudy days, the solar ultraviolet radiation level (UV light) may be sufficient to be harmful.

Skin Cancers

Skin cancers take different forms:



Figure 1: Melanoma¹

Melanoma is the least common but most dangerous form of skin cancer, and can be fatal. They are more likely to occur on the back for men; and on the legs for women. However, melanomas can occur on parts of the skin not exposed to the sun, even on the soles of the feet.



Figure 2: Basal Cell Carcinoma¹

Basal cell carcinoma (BCC) is the most common but least dangerous skin cancer. They tend to develop in people aged 40 or over who have spent years in the sun. Nodular BCC is the most common type to be found on the face and neck.



Figure 3: Squamous Cell Carcinoma¹

Squamous cell carcinoma (SCC) is less common but more dangerous than BCC. It affects the skin's squamous cells, the flat cells that make up the outside layers of the skin. They are found mostly on the face, including the lips, hands, forearms and lower legs.



Figure 4: Solar Keratosis (close-up)²

Solar keratoses (sun spots, actinic keratoses) are an indicator of solar ultraviolet radiation exposure. They usually look like rough scaly spots on sun-damaged skin, but they can take other forms and shapes. Although they are not cancerous, the risk of contracting SCC with a pre-existing solar keratosis increases.

Melanoma statistics

- New Zealand has one of the highest rates of melanoma in the world.
- It is the fourth most commonly registered cancer in New Zealand.
- In 2005, there were 269 deaths from melanoma (156 males, 113 females)³.

Who is likely to get skin cancer, particularly melanoma?

Melanoma is more common among fair-skinned people compared with dark-skinned people, because people with dark skin produce more melanin (helping skin give its colour). Melanin helps protect the skin by absorbing UV light.

The people most at risk are those:

- who are or were exposed to the sun, particularly as a child
- with fair skin
- with a family history of melanoma
- who have had melanoma in the past
- with unusual moles or freckles that have an irregular shape and are multi-coloured
- with large numbers of moles (e.g. over 100)
- who have been severely sunburned in the past.

Warning signs

In its early stages, a melanoma usually looks like a normal freckle but, unlike a normal freckle, it grows and changes – often quickly.

1. Figures 1, 2 and 3 provided by MoleMap. 2. Figure 4 provided by the New Zealand Dermatological Society Incorporated.
3. New Zealand Health Information Service. Cancer: New Registrations and Deaths 2005. Wellington: Ministry of Health, 2009.

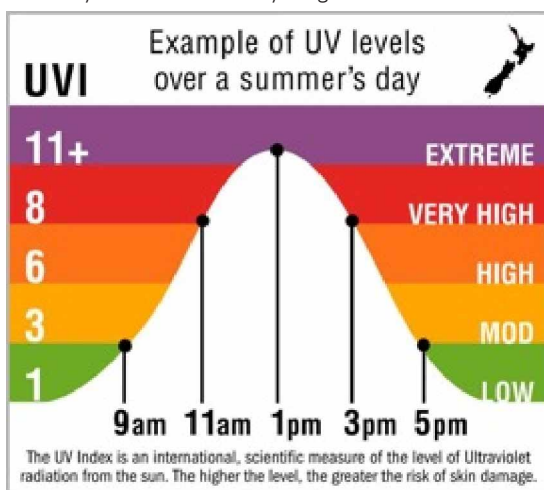
Know your ABCs of Melanoma Detection!

Moles and freckles can be checked against the A-B-C-D-E of Melanoma detection:

A	Asymmetry: the shape of one half does not match the other
B	Border Irregularity: the edges are ragged, uneven, blurred or irregular in outline; the pigment may spread into the surrounding skin
C	Colour Variation: the colour is uneven, and may include colours like: black, brown, and tan
D	Diameter larger than 6mm: the size changes and increases
E	Evolving: getting larger, or changing

Why is UV light harmful?

Excessive exposure to ultraviolet (UV) light from the sun causes sunburn, eye damage and most forms of skin cancer. The UV Index provides a measurement of how strong the UV light is at a particular place on a particular day. The higher the number, the stronger the UV light's intensity is, which means that you are more likely to get sunburned.



When the UV Index is 3 or higher, protection from the sun is needed. This happens almost daily from September to March. It can also happen in winter, especially at high altitudes and in snow.

Assess exposure to UV light

An assessment should be made of the solar ultraviolet radiation to which people are likely to be exposed. This should include identifying tasks with the time of the day they are carried out and the period of time involved. The greatest risk occurs during the summer daylight savings months, between 10:00am and 4:00pm.

Other factors that may influence exposure to ultraviolet light should also be identified. These can include the shade provided by the working environment, reflective surfaces such as water, snow or bright building surfaces.

Levels of protection

To protect yourself against melanoma, follow these guidelines when working in the sun:

- Seek shade during the middle part of the day and early afternoon (10:00am – 4:00pm)
- Use clothing such as hats, long-sleeved shirts and pants to protect your skin
- Use a sunscreen or sunblock (SPF 30 or greater) on any skin which is not protected with clothing
- Take special care on windy and cloudy days. Although you remain cool, you can still burn
- Wear sunglasses to protect your eyes from the sun.

What does "SPF" mean?

SPF (Sun Protection Factor) indicates how effective a sunscreen is. The higher the SPF number, the more protection the sunscreen provides against UV light.

What's the difference between sunblock and sunscreen?

Sunblock and sunscreen have similar properties, and both are important in caring for the skin. However, sunblock is opaque (you can't see through it) and has stronger protection factors than sunscreen. It usually does not need several applications per day.

Most sunscreens are more transparent than sunblock, and the ingredients in the sunscreen tend to break down at a faster rate when exposed to sunlight, compared with sunblock. This means that sunscreen should be applied several times a day.

Health monitoring

Check your skin every few months, in particular, those areas that are most often exposed to the sun, i.e. face, lips, ears, neck, shoulders, arms and hands. Early diagnosis and treatment is the key. Over 90% of cases can be cured if the disease is caught early.

Carry out your self-assessment by standing undressed in front of a mirror and carefully looking at all your skin. If appropriate, have someone else assist you. Remember to check the soles of your feet, between your toes and the palms of your hands.

If you spot something suspicious, make an appointment to see your doctor, quickly.

4. Sourced from SunSmart.



There are a variety of organisations in New Zealand that can conduct mole checks and mole mapping for you.

Don't put it off. If it is melanoma or another form of skin cancer it won't go away on its own. Any delay could be dangerous. If diagnosed in the early stages, the treatment of melanoma is almost always successful.

Consult your doctor if you detect a spot which looks different from the other spots around it, or a spot that has changed colour, shape or size in the last few months.

Further information:

Further information is available at:

- Melanoma Information Sheet from the Cancer Society of New Zealand: http://www.cancernz.org.nz/assets/files/docs/info/InformationSheets/IS_MelanomaDec07.pdf
- Sun Smart Workplaces: resources for sun protection and outdoor work, from the Cancer Society of New Zealand: <http://www.cancernz.org.nz/reducing-your-cancer-risk/sunsmart/sunsmart-workplaces>
- *Guidance Notes for the Protection of Workers from Solar Ultraviolet Radiation*, available from the Department of Labour.
- *Guidelines for the Management of Work in Extremes of Temperature*, available from the Department of Labour.

References:

- New Zealand Dermatological Society Incorporated: www.dermnetnz.org
- Molemap: www.molemap.co.nz
- Health Sponsorship Council: www.sunsmart.org.nz
- New Zealand Health Information Service: <http://www.nzhis.govt.nz>

