Melanoma

What is melanoma?

Melanoma is a form of cancer that develops in pigment cells called melanocytes. Melanocytes protect the skin from ultraviolet (UV) radiation (that is, sunlight) through the production of melanin. Melanoma almost always develops in the skin but can arise in other parts of the body (mostly the eyes), even in parts that are rarely exposed to the sun. This fact sheet is about melanoma of the skin.

Melanoma is the most serious form of skin cancer and can grow very quickly if left untreated. Melanoma can spread to the lower part of the skin (dermis) and enter the lymphatic system or bloodstream. From there, the cancer can spread to other parts of the body including the lungs, liver, brain and bone (Melanoma Institute Australia 2015).

Quick facts

Melanoma was the 17th leading cause of premature death in Australia in 2010–2012.

More than 2 in 3 premature deaths due to melanoma in 2012 were among males (69%).

The premature death rate due to melanoma fluctuated over the 3 decades from 1982 to 2012 but decreased by 10% between these 2 time points.

Premature mortality refers to deaths that occur at a younger age than a selected age. For this analysis, deaths among people under 75 are considered premature.

Who dies prematurely from melanoma?

In 2012, there were 821 premature deaths due to melanoma in Australia. More than two-thirds (69%) of these deaths were among males (Figure 1).

Most premature deaths due to melanoma were in the oldest age group (70–74 years) for both sexes (152 male deaths and 53 female deaths). There were very few deaths (5) among young people aged 15–24 and no deaths among infants and children aged 0–14.

Melanoma was the 12th leading cause of death for 25–44 year olds.

What population-level approaches target premature deaths due to melanoma?

Cumulative UV exposure, particularly with intense episodes of UV that leads to sunburn (especially during childhood), puts people at risk of developing skin cancer. Public health campaigns conducted in Australia for skin cancer prevention stress the importance of wearing protective clothing; wearing and reapplying high-SPF sunscreen; wearing a wide-brimmed hat; seeking shade; and wearing sunglasses at times and in seasons when ambient UV levels are high (Cancer Council Australia 2015).

If detected early, melanoma can be effectively treated. Awareness of melanoma detection is therefore crucial.

Various campaigns (for example, the SunSmart campaign) aim to teach people how to identify melanoma and encourage concerned individuals to contact a health professional (Cancer Council Australia 2015). ‘The dark side of tanning’ (Cancer Institute New South Wales 2015) campaign, and use of the tagline ‘You Know What To Do, Do It’, target young people and promote people’s ability to protect themselves from this cancer.

Major approaches targeting melanoma aim to educate people about the importance of sun protection but also
to teach people to use the ‘ABCDE’ of melanoma detection, including checking spots for:

- **Asymmetry**: one half of the spot/lesion is not a mirror image of the other
- **Border**: a spot with an irregular edge
- **Colour**: spot has a number of colours through it
- **Diameter**: a spot is over 6mm
- **Evolving**: a spot is changing and growing over time (Cancer Council Australia 2015).

Research has shown that solarium use before the age of 35 increases the risk of developing melanoma by 59%. In recognition of the risk that UV exposure from tanning units places on melanoma development, solarium bans are now in place in all states and territories except Western Australia, where the ban will begin in 2016 (Cancer Council New South Wales 2014).

Further factors which place an individual at high risk of developing skin cancer include having fair skin, blue or green eyes, blond hair or red hair or lots of moles or freckles. Screening for melanoma is encouraged for individuals at high risk and can be performed through annual checks by a dermatologist (Cancer Council Australia 2015).

While melanoma is largely considered to be preventable, it is important to note that melanoma can occur anywhere on the skin, including areas that receive little or no sun exposure, such as on the soles of the feet or inside the mouth.

Premature deaths due to melanoma are classified as ‘potentially avoidable in the context of the present health system’ according to nationally agreed definitions (AIHW 2015). The definition includes deaths from conditions that are potentially preventable through individualised care and/or treatable through existing primary or hospital care.

### How have premature death rates due to melanoma changed over time?

The age-standardised rate of premature deaths due to melanoma fluctuated between 1950 and 2012 but generally increased. Overall, the age-standardised rate increased from 1.3 deaths per 100,000 population in 1950 to 3.5 per 100,000 in 2012.

Males experienced greater rates of premature mortality than females. The gap (or rate difference) between males and females widened from 0.8 per 100,000 population in 1950 to 2.8 per 100,000 in 2012 (Figure 2).

### What has influenced trends in premature deaths due to melanoma?

Survival from melanoma is high if caught early while the cancer is localised, but decreases if the melanoma has spread regionally (Tracey et al. 2007). Therefore, as well as prevention, many campaigns in Australia target early detection of melanoma (Cancer Council Australia 2015).

Public attitudes previously favoured tanned skin, however there have been signs of an attitude shift. Between 2003–04 and 2013–14, the proportion of adolescents who ‘liked to get a tan’ decreased from 60% to 38%. This shift was more prominent among young males and may be associated with the plateauing of mortality trends from around the early 1990s and with the decrease in melanoma mortality rates in people under the age of 50 (Cancer Council Australia 2014).

Chemotherapy, radiotherapy, immunotherapy and targeted molecular therapy are used to treat melanoma and are likely to have contributed to increased survival from this cancer (Melanoma Institute Australia 2015).

Increased melanoma incidence, particularly in older men, may have partly contributed to the increase in mortality (Australian Cancer Network Melanoma Guidelines Revision Working Party 2008).

### Where can I find out more?


### Suggested citation


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