

Position statement - Screening and early detection of skin cancer

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Position Statement Screening and early detection of skin cancer



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This position statement is endorsed by the Australasian College of Dermatologists

- Survival from melanoma is strongly associated with depth of invasion; deeper and thicker melanomas are more likely to metastasise and be more difficult to treat. Thus, early detection is important.
- Population-based screening, however, is not recommended for melanoma or other skin cancers, due to insufficient evidence that it reduces mortality.
- The majority of melanomas are detected by patients themselves, or their partners. However, melanomas detected by physicians tend to be thinner.
- Beyond adequate sun protection, competent, whole body skin examination and dermoscopy for suspicious lesions, no examination or technology has proven value for reducing the harm caused by skin cancer.

- In the absence of sufficient evidence for an associated reduction in mortality from melanomas or other skin cancers, Cancer Council Australia does not recommend population-based screening by a doctor for skin cancer.
- Cancer Council Australia encourages people to become familiar with their skin, including skin not normally exposed to the sun, and consult a doctor if they notice any change in shape, colour or size of a lesion, or the development of a new lesion.
- Cancer Council Australia recommends that people at high risk of developing skin cancer consult their doctor if they notice any changes and be checked at regular intervals as recommended by their doctor.
- Cancer Council Australia recommends employers, under work health and safety responsibilities, focus their attention on the introduction and maintenance of effective sun protective control measures, including education and the importance of early detection, over skin cancer screening programs.

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Background

In 2011 there were 1544 Australian deaths from melanoma and 543 deaths from non-melanoma skin cancers (NMSC) such as squamous cell carcinoma and basal cell carcinoma^[1]. NMSC is far less likely to be life-threatening than melanoma, with around 400 times the number of cases but only a third the number of deaths.

Survival from melanoma is strongly associated with depth of invasion; deeper and thicker melanomas are more likely to have metastasised and be more difficult to treat. In Australia, five-year survival for melanomas thicker than 4 mm is 55%, compared with almost 100% survival for melanomas 1 mm or less^[2]. Earlier diagnosis – i.e. the detection of thinner tumours – is therefore correlated to successful patient outcomes and longer-term survival^[3].

The aim of population-based screening programs is to reduce mortality through early detection. However, in the absence of sufficient evidence for an associated reduction in mortality from melanoma or other skin cancers, population-based screening for skin cancer is not recommended.

While screening is not recommended on a population basis, for people at high risk of developing skin cancer, there is evidence to suggest opportunistic screening by general practitioners may be beneficial for people at high risk.

Cancer Council Australia recommends that people get to know their skin, and to consult their doctor if they notice any changes.

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Population-based screening for skin cancer

While there is no organised screening program for skin cancer, screening is being conducted in a significant proportion of the population. Australian studies have demonstrated that anywhere from 10-50% of people participate in skin cancer screening, depending on the definition of skin screening^{[4][5][6][7][8][9]}.

Screening for melanoma and NMSC does not meet the World Health Organisation criteria for the implementation of population-based screening^[10]. There is currently insufficient evidence that screening for melanoma reduces mortality, and current diagnostic practices for melanoma are not appropriate for screening^{[11][12]}. Screening is unlikely to ever be recommended for NMSC, as long-term illness and death are rare occurrences in relation to incidence. See Principles of screening for more information.

According to current clinical practice guidelines, in the absence of substantive evidence as to its effectiveness in reducing mortality from melanoma, population-based skin screening cannot be recommended^[12]. RACGP do not recommend screening for melanoma or other skin cancers for those at average risk^[13]. See Early detection in high risk groups for recommendations concerning those at increased risk.

Early evidence from the American Academy of Dermatology skin cancer screening programs showed that melanomas diagnosed through screening were more likely to be thinner than those in population-based registries^[14]. Until recently however, no randomised controlled intervention had been conducted to see if whole-body skin examination is effective in reducing mortality from melanoma^[12]. In 2012, a German study reported that population-based screening for melanoma by whole-body examination performed by general physicians (who then referred suspicious lesions to a dermatologist) reduced melanoma mortality by 47%^[15].

However, more evidence of the mortality benefit of population-based skin cancer screening is required. A randomised trial of a population-based melanoma screening program in Australia involving whole-body clinical skin examinations performed by primary care physicians (with lesions referred to participants' own doctor) over a period of three years is currently underway^[16].

In the absence of sufficient evidence for an associated reduction in mortality from melanoma or other skin cancers, Cancer Council Australia does not recommend population-based screening by a doctor for skin cancer.

For more information, see the Melanoma screening section of the National Cancer Prevention Policy.

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Self versus clinical skin examination

The majority (55-70%) of melanomas are detected by patients themselves, or their partners^{[17][18][19]}. Among melanomas detected by physicians, only 12% are found during a systematic skin examination; most melanomas detected by physicians (51%) are found during routine clinical examinations unrelated to skin cancer^[17].

Evidence including a number of Australian studies shows that melanomas detected by physicians are more likely to be thinner than those detected by patients^{[17][18][19][20][21]}. Whole-body clinical skin examination in particular is associated with diagnosis of thinner melanomas compared with those diagnosed through other means, including incidental diagnosis by a physician^{[18][20]}.

Skin cancer clinics are staffed by GPs with a particular interest in skin cancer. In some cases the doctors may have undergone some additional training. Current evidence suggests that general practitioners diagnose skin cancers with equal levels of accuracy as doctors working in primary care skin cancer clinics^[22]. However, while overall sensitivity for diagnosing any skin cancer is similar for skin cancer clinic doctors and GPs, sensitivity for melanoma

diagnosis is better among skin cancer clinic doctors (60% compared with 29%)^[22].

Melanomas diagnosed by dermatologists are thinner than those diagnosed by GPs or other doctors^{[17][23]}. An Australian study found that those visiting both a dermatologist and primary care physician before a melanoma diagnosis were more likely to be diagnosed with a thin melanoma and 34% lower melanoma mortality compared with those without such visits^[24].

Cancer Council Australia encourages people to become familiar with their skin, including skin not normally exposed to the sun, and consult a doctor if they notice any change in shape, colour or size of a lesion, or the development of a new lesion.

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Diagnostic technologies

There are various technologies for diagnosing skin cancer, such as the use of dermoscopy, total body photography and sequential imaging.

Dermoscopy improves the clinicians' diagnostic accuracy for melanoma compared with other clinical diagnostic approaches^{[25][26][27][28][29]}. Use of dermoscopy is associated with diagnosis of thinner melanomas^[30].

Total body photography is considered a useful tool of the early detection of melanoma in high-risk patients^[12].

Beyond adequate sun protection, competent, whole body skin examination and dermoscopy for suspicious lesions, no examination or technology has proven value for reducing the harm caused by melanomas or other skin cancers.

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Early detection in high risk groups

People at high risk for skin cancer include those with:

- fair skin, a tendency to burn rather than tan, freckles, light eye colour, light or red hair colour;
- increased numbers of unusual moles (dysplastic naevi);
- depressed immune systems;
- a family history of melanoma in a first degree relative; and
- previous melanoma or NMSC.

Australian clinical practice guidelines recommend that individuals at high risk of melanoma be educated to recognise and document lesions suspicious of melanoma, and to be regularly checked by a clinician with six-monthly full body examination supported by total body photography and dermoscopy as required^[12]. High-risk individuals may benefit from regular clinical surveillance for new melanomas and education to self-screen, based on expert opinion^[12].

The Royal Australian College of General Practitioners (RACGP) recommend that clinical skin examination is offered opportunistically to those at increased risk of melanoma^[13]. For those at highest risk (those with multiple atypical or dysplastic naevi or who have a history of melanoma or other skin cancers in themselves or in a first-degree relative), RACGP recommend clinical skin examination (either with or without photography) every 3-12 months^[13]. RACGP recommends this group are given advice on self-examination and note that they may benefit from use of self-photography^[13].

As a high number of lesions are not easily visible by the patient^[31], people conducting self-checks should be encouraged to ask others to check difficult-to-see areas such as their back, scalp and the back of the neck.

Cancer Council Australia recommends that people at high risk of developing skin cancer are educated to recognise and document lesions suspicious of melanoma, ask others to check difficult-to-see areas such as their back, scalp and the back of the neck, and consult a doctor if they notice any change in shape, colour or size of a lesion, or the development of a new lesion. People at high risk should be regularly checked by a clinician with whole body examinations every 3-12 months.

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Early detection in the workplace

Currently there is no evidence to support skin cancer screening in the workplace. Employers' legal obligations place a clear emphasis on skin cancer prevention and the implementation of a workplace UV policy.

Cancer Council Australia recommends employers focus on the introduction and maintenance of skin cancer prevention measures, through the reduction of and protection against UV exposure, over skin cancer screening programs.

Outdoor workers are at increased risk of melanoma and other skin cancers, and should be alert for new or changing lesions. Cancer Council Australia encourages people, especially outdoor workers to become familiar with their skin, including skin not normally exposed to the sun, and consult a doctor if they notice any change in shape, colour or size of a lesion, or the development of a new lesion.

See Cancer Council Australia's position statement on Sun protection in the workplace ^[32] for more information.

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Position statement details

This position statement was developed by Cancer Council Australia's National Skin Cancer Committee and endorsed by Cancer Council Australia's principal Public Health Committee. It was published in July 2014.

For further information

Cancer Council Australia – <http://www.cancer.org.au>

Cancer Council Helpline – 13 11 20

The Australasian College of Dermatologists – <http://www.dermcoll.asn.au>

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