

Skin Cancer Prevention Strategy

2017 to 2020

Ultraviolet (UV) radiation whether from the sun or a device is carcinogenic and exposure can cause melanoma and cancers to the outermost layers of the skin. Queensland has a tropical climate and many people enjoy outdoor lifestyles. Taken together, the result is excessive UV radiation exposure, high sunburn rates, and high rates of skin cancer.

Queensland has the highest rate of melanoma in Australia; and Australia the second highest rate in the world after New Zealand.¹

Children and young people's skin is very susceptible to UV radiation damage and sustaining five or more severe sunburns in this critical period more than doubles melanoma risk.²

Encouragingly, over recent years young people have made some positive changes with a significant reduction in those who are intentionally seeking sun to get a tan.³ The benefits are evident with a 46% decrease in melanoma incidence for young people aged 15–29 years since 1995.

Melanoma rates are predicted to increase for many years as there is still a continued upward trajectory in people aged over 45 years who experienced sun damage in their youth.

Skin cancer burden

Melanoma is a prevalent cancer in Queensland with 1 in 14 people likely to be diagnosed in their lifetime. The survival rates are relatively high (over 90% have a five-year survival rate), and about 1 in 20 cancer deaths is due to melanoma.¹

Melanoma is the most commonly diagnosed cancer among 15–39 year olds and the most common cause of cancer death among 20–39 year olds.¹

The social and economic burden of skin cancer is significant. In 2013-14 financial year there were about 24,290 hospitalisations for non-melanoma skin cancers and 3,086 for melanoma.¹ The cost to Medicare for consultations and treatments for non-melanoma skin cancers was \$43.8 million and for melanoma was \$2.8 million in Queensland in 2014.¹

Skin cancer consultations have a significant impact in primary care. In 2015-16 financial year, consultations for skin cancer were the ninth most frequent reason for GP visits for patients with chronic disease problems.¹ Skin cancer consultations in general practice have increased by about 20% over the past decade.¹ Consultations for sunburn were among the 30 leading reasons for visiting a GP, accounting for 1.2 consultations per 100 encounters.¹

Opportunity

Reducing UV radiation exposure is the most effective way to prevent all types of skin cancer.^{4,5} High sunburn rates, too few Queenslanders using recommended sun safe behaviours, and the year round high UV radiation environment, remain significant challenges for people of all ages.

Good sun safe behaviours established in childhood, and reinforced in teenage years, create a strong foundation for lifelong skin cancer prevention.

Appropriate use of sunscreen could reduce the prevalence of all skin cancers by 10–15%, and daily use could reduce the risk of melanoma by 75%.⁶ Sunscreen use is one of the five recommended ways to be sun safe. Other sun protective behaviours include wearing a broad brimmed hat, protective clothing and sunglasses, and seeking shade.

Increasing the availability of shade in public places to create cooler and more comfortable outdoor environments will reduce UV radiation exposure for all Queenslanders.

The Skin Cancer Prevention Strategy is part of the [Health and Wellbeing Strategic Framework 2017 to 2026](#) which sets a prevention-focused pathway for:

- creating healthier places where people live, work, learn and play
- empowering people with the knowledge, positive attitudes, motivation and skills to live healthy lives.

Skin cancer rates and sun safe behaviours are not the same for everyone¹

- Males have higher rates of sunburn than females.
- Melanoma incidence rate is 50% higher in males than females.¹
- Melanoma is the leading cancer diagnosed among young people.
- Adult sunburn prevalence was higher than the State average in two Hospital and Health Service communities (18% higher in Mackay, 8% higher in Central Queensland) and lower in one (7% lower in Metro South).¹
- Outdoor workers generally receive five to ten times more UV radiation exposure per year than indoor workers.⁷
- Only 47% of children and 22% of adults routinely wear a broad brimmed hat, sun protective clothing and SPF 30 or higher sunscreen most times when outside.
- Young people aged 18–24 years are the least likely to use sun protective behaviours and report the highest rates of sunburn.¹

Trend data

Latest trend data (page 3) show that during the period 1995 to 2014, melanoma incidence has increased by 48% in people aged over 60 years¹.

Over recent years young people have made some positive changes with a significant reduction in those who are intentionally seeking sun to get a tan. However, three in four young Queenslanders are still reporting being sunburnt in the last twelve months.

There has not been any significant change in sunburn rates or use of sun protective behaviours among Queensland adults over recent times.

Skin cancer risk and protective factors

protective behaviours

At most times in summer when outside:

prevalence (adults 2016, children 2014)



57% of adults

81% of children

wore SPF30+ sunscreen



46% of adults

63% of children

wore a broad brimmed hat



66% of adults

78% of children

wore protective clothing



90% of adults

72% of children

sought shade



31% of adults

9% of children

wore wraparound sunglasses



=



SPF30+ sunscreen



broad brimmed hat



clothing to protect

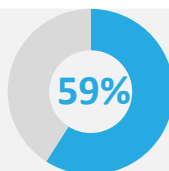
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22% of adults

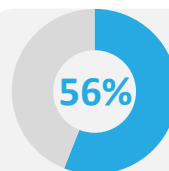
47% of children

sunburn

prevalence



59% of children were sunburnt in the previous 12 months (2015) = 520,000 children



56% of adults were sunburnt in the previous 12 months (2016) = 2.1 million adults

Melanoma and other skin cancer deaths in Queensland

Melanoma and other skin cancer deaths registered in 2015:

mortality

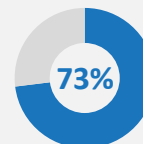
7th

leading cause of cancer death

Queensland's death rate was

13% higher

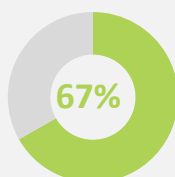
than Australia



73% were due to melanoma

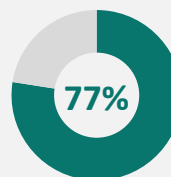
Of the 355 melanoma deaths that occurred in 2012:

sex



67% were males and the male rate was 2.4x the female rate

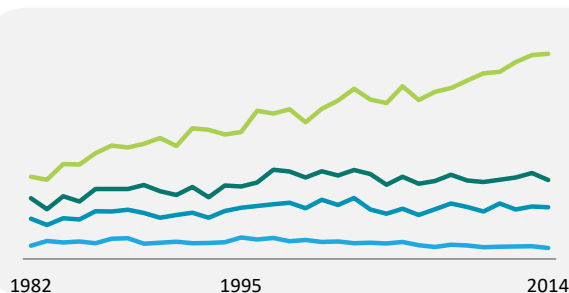
age



77% were aged 60+ years

Melanoma incidence

incidence trends



60+ year olds ↑48% increase 1995–2014

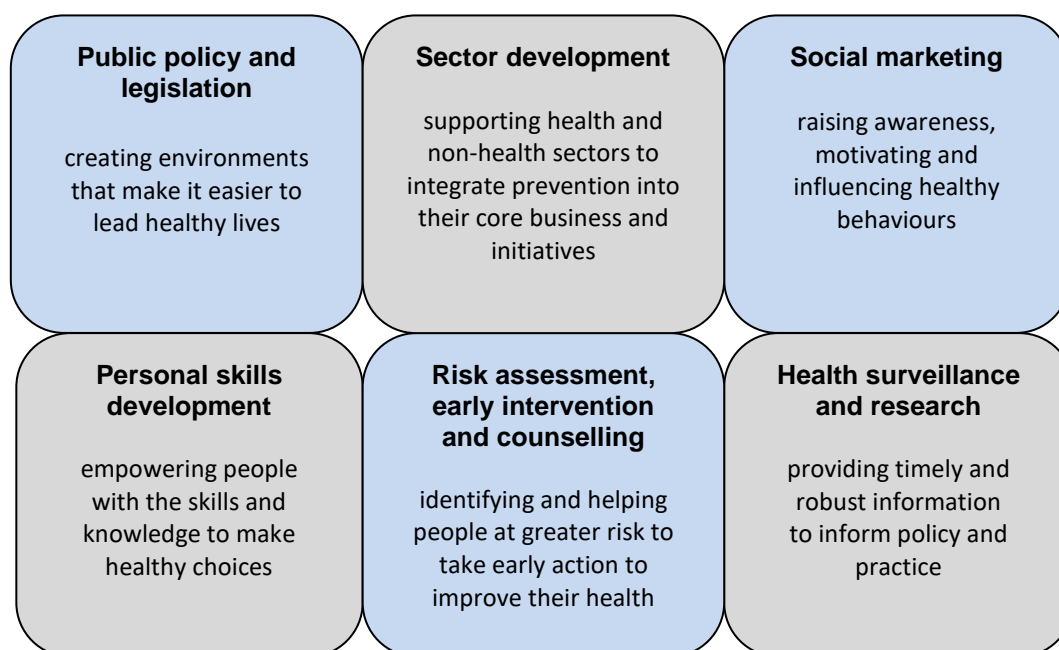
45-59 year olds no change 1995–2014

30-44 year olds no change 1995–2014

15-29 year olds ↓46% decrease 1995–2014

Our approach

A multi-strategy approach can significantly contribute to the achievement of skin cancer prevention objectives and targets. The six integrated strategies below are informed by evidence-based recommendations for influencing broad and sustainable health improvements.



Shared commitment and partnerships

Actions to be implemented by the Prevention Division under this Strategy are part of a growing movement led by the health sector and increasing in the non-health sector to improve health and wellbeing. Examples of other agencies and sectors involved in skin cancer prevention include:

- Queensland Government departments and agencies, particularly Department of Education, Workplace Health and Safety Queensland; Department of State Development, Manufacturing, Infrastructure and Planning; Department of Public Works, Department of Innovation, Tourism, Industry Development and the Commonwealth Games; Department of Transport and Main Roads.
- Local Government and the Local Government Association of Queensland
- Hospital and Health Services (HHSs)
- Primary Health Networks
- health research networks
- non-government organisations, particularly Cancer Council Queensland
- academia (particularly Queensland University of Technology), education and training sectors
- industry.

Monitoring performance

A [Performance Monitoring Strategy](#) has been developed to monitor and report on the outputs, impacts and outcomes of the *Health and Wellbeing Strategic Framework 2017 to 2026* and the Skin Cancer Prevention Strategy.

Specific childhood and adult targets to be achieved by 2020 have been set for use of sun protection behaviours. These targets are ambitious but essential for achieving improved health and wellbeing in Queensland.

The [Performance Report for 2016-17](#) assessed progress to date towards the 2020 targets, and shows the current trend is on track to achieve the adult target.

2020 Targets			Numbers needed to reach 2020 Targets*
Children	Improved sun protection	51% practicing sun protection behaviours (2014: 47%)	41,000 more children using 30+ sunscreen, wearing broad brimmed hats and wearing protective clothing
Adults	Improved sun protection	24% practicing sun protection behaviours (2015: 22%)	87,000 more adults using 30+ sunscreen, wearing broad brimmed hats and wearing protective clothing

** Than there would have been if no behaviour change had occurred since 2014 or 2015 baselines.*

Action Plan

Our actions are influenced by current evidence, best-practice, innovation and engagement and are guided by the strategic priorities of [Our Future State: Advancing Queensland's Priorities](#).

A plan outlining universal and targeted actions for skin cancer prevention to be delivered under the multi-strategy approach has been developed for the two-year period from 1 July 2018 to 30 June 2020 (see over).

Preventive Health Branch, Prevention Division, is accountable for implementing the actions in this plan. This may be undertaken directly by the Branch, in partnership with others, or procured from non-government organisations. The action plan will be updated every two years.

Strategic Communications Branch, Corporate Services Division, is accountable for developing and delivering social marketing activities which contribute to the multi-strategy approach and achievement of healthy weight targets.

Continued effective delivery of initiatives, combined with ongoing investment and effort to create healthier environments and systems responsive to prevention will contribute to empowering Queenslanders to live healthier lives through improved lifestyles.

Sources:

1. Queensland Health. The health of Queenslanders 2016: report of the Chief Health Officer Queensland. Queensland Government: Brisbane; 2016.
2. Whiteman, D.C., Whiteman, C.A., Green, A.C. Childhood sun exposure as a risk factor for melanoma: a systematic review of epidemiologic studies. *Cancer Causes Control*, 2001; 12(1):69-82.
3. Cancer Council Australia. 2013-14 National sun protection survey: Report 2. National Skin Cancer Committee: Victoria; 2014.
4. Armstrong, B.K. How sun exposure causes skin cancer: an epidemiological perspective. In: Hill, D., Elwood, J.M. and English, D.R. (Eds). *Prevention of Skin Cancer*. Kluwer Academic Publishers: Dordrecht; 2004.
5. Veierod, M.B., Adami, H.O., Lund, E. Armstrong, B.K. and Weiderpass, E. Sun and solarium exposure and melanoma risk: effects of age, pigmentary characteristics, and nevi. *Cancer Epidemiology Biomarkers and Prevention*, 2010; 19:111-120.
6. Green A, Williams G, Logan V, Strutton G. Reduced melanoma after regular sunscreen use: randomised trial follow-up. *Journal of Clinical Oncology* 2011; 29: 257-263.
7. Australian Radiation Protection and Nuclear Safety Agency. Resource guide for UVR protective products. Commonwealth of Australia; 2003.

SKIN CANCER PREVENTION Action Plan 2018-19 and 2019-20

	Public policy and legislation	Sector development	Social marketing	Personal skills development	Risk assessment, early intervention and counselling	Health surveillance and research
Universal actions that can reach people living in cities, regional and remote areas	<ol style="list-style-type: none"> 1. Influence state government departments and local governments to develop, implement and evaluate policies and initiatives that reduce exposure to UV radiation. 2. Partner with the Department of Education to monitor industry adoption of sun safe school uniform specifications under the Standing Offer Arrangement. 3. Strengthen the uptake of the 'Sun Safety Public Health Guidelines for Mass Gatherings' by assessing options for embedding the guidelines in the Events in Queensland handbook. 	<ol style="list-style-type: none"> 4. Collaborate with academia, local governments and industry to identify and promote good practice for built and natural shade creation. 5. Influence the apparel design, manufacturing and retail sector to increase availability and desirability of sun protective clothing. 6. Strengthen partnerships with the sport and recreation sector to increase the amount of available shade at junior sporting facilities and improve uniform design to reduce UV radiation exposure. 7. Collaborate with Department of Education to identify the status of sun safety in schools and support improved uptake of a comprehensive sun safe policy approach. 8. Work with Cancer Council Queensland to support early childhood, school and junior sport sectors to implement sun safe policy and increase access to permanent and portable shade structures. 9. Explore opportunities to work with the beauty and aesthetic sector to promote and encourage sun safe behaviours. 	<ol style="list-style-type: none"> 11. Collaborate with Strategic Communications Branch to support the development and delivery of marketing activities that provide clear and consistent messaging to promote daily use of the five sun safe behaviours: <ul style="list-style-type: none"> - seek shade - wear broad brim hat - wear protective clothing - use SPF 30 or higher sunscreen - wear sunglasses. 12. Provide expert sun safety advice to Strategic Communications Branch to expand the impact of media and communication activities. 			<ol style="list-style-type: none"> 15. Monitor prevalence, trends, and impacts of sunburn and sun safe behaviours using: <ul style="list-style-type: none"> - Queensland preventive health survey - hospitalisations - deaths - burden of disease. 16. Assess changes in prevalence of sunburn and sun safe behaviours by sociodemographic groups (sex, age, socioeconomic status, remoteness, and HHS) for adults and children. 17. Strengthen linkages with academic and research sectors to stay abreast of new technology and approaches to support uptake of sun safe practice. 18. Identify and apply system insights through monitoring and sharing updates on public health approaches, research and media related to sun safe practice.
Targeted actions for groups with higher risk of sun exposure.		<ol style="list-style-type: none"> 10. Strengthen partnerships with Workplace Health and Safety Queensland to reduce occupational UV radiation exposure by embedding sun safety into core business. 	<ol style="list-style-type: none"> 13. Collaborate with Strategic Communications Branch to support the integration of marketing and communication activities to increase the use of the five sun safe behaviours by: <ul style="list-style-type: none"> - adolescents 12-17 years - young people 18-24 years - outdoor workers. 	<ol style="list-style-type: none"> 14. Explore innovative approaches to support young people's use of sun protective behaviours and reduce sunburn risk. 		