EVERYDAY HEALTH SURVEY: Sun Protection
Cancer Council Queensland is the only charity to work across every area of cancer, including research, prevention and support services. We support Queenslanders from the point of diagnosis through to treatment and survivorship. Cancer Council Queensland is committed to reducing the burden of cancer and helping the Queensland community live happy, healthy lives. In 2019, Cancer Council Queensland delivered the latest Everyday Health Survey, with a focus on exploring how Queenslanders keep safe from the sun and what more needs to be done to prevent skin cancer.

Queensland has the highest rate of skin cancer in the world. In 2016, 3962 Queenslanders were diagnosed with melanoma, and over 360,000 non-melanoma skin cancers are removed annually. Almost all skin cancers (95–99%) are caused by over-exposure to ultraviolet (UV) radiation, meaning skin cancer is almost entirely preventable.

Survey results identified significant gaps in Queenslanders’ knowledge of sun protection with only around half of respondents able to identify the correct information to tell them the risk of sunburn for the day. This translated into poor sun protection behaviours with 47% of respondents reporting being sunburnt in the previous 12 months. There is also a clear discrepancy between Queenslanders’ perceived versus actual knowledge of sun protection, highlighting the urgent need for an awareness campaign.

Promisingly, there is a strong desire from the community to improve sun protection knowledge and behaviours, with 95% of respondents in favour of a sun protection mass media campaign, which we know can be an effective means of educating the community and improving behaviour.

Chris McMillan
Chief Executive Officer
The Everyday Health Survey: Sun Protection explored how Queenslanders keep safe from the sun, and what more needs to be done to prevent skin cancer.

This survey was the sixth in a series of surveys designed to give Queenslanders a voice and engage them in conversations about the health issues that affect all members of the community. The mixed methods survey, delivered via SurveyMonkey®, was launched in October 2019 and was open for nine weeks. Recruitment was conducted via media releases, social media, radio advertising, email direct marketing, website and existing communication channels.

Respondents

The survey attracted 1531 completed responses. The respondents can be described as:

- Female (72%)
- Living in Brisbane (53%)
- Aged 50–69 (44%)
- Tertiary educated (79%)
- Employed full time (47%)
- Speak English as a primary language (97%)
- 1% of respondents identified as Aboriginal or Torres Strait Islander.

Overall the survey cohort is older, more female and live more in Brisbane than the general Queensland population.

Knowledge

Survey participants were asked a series of questions to explore their knowledge of sun protection. Positively, 97% of respondents knew that sun protection is required all year round in Queensland. Very few respondents thought that you only get skin cancer if you get sunburnt often, or that you are only at risk of skin cancer if you have fair skin (3% and 2% respectively). This indicates a basic understanding of sun protection in the community.

Further to this, just over one-quarter (26%) of respondents rated their knowledge of sun protection as excellent and just over half (55%) rated their knowledge as good. However, survey results showed discrepancies in participants self-reported knowledge of sun protection compared to their actual knowledge. Understanding of the UV Index amongst survey respondents was low.

The UV Index describes the daily intensity of UV radiation. Only 41% of respondents know that the UV Index is the most useful way to tell you the risk of sunburn for the day. Less than half (48%) were aware that sun protection is required whenever the UV Index level reaches three or above. Alarmingly, only 54% of respondents knew where to find the daily UV Index forecast.

Results show Queenslanders are still confused about the differences between heat and UV radiation. One in five respondents (22%) reported that temperature was the most useful way to tell you the risk of sunburn for the day when in fact temperature is not related to UV radiation strength. Skin can be damaged by UV radiation without knowing because UV radiation cannot be seen or felt.

One in three Queenslanders reported that they received information on sun protection from a doctor or health professional in the last 12 months. This highlights the important role doctors and health professionals play in the prevention and early detection of skin cancer.
Almost two-thirds (65%) of respondents reported that in a normal seven-day week (excluding work requirements) they would spend the majority of their outside time completing day-to-day activities. This was followed by 19% who spent most of their outside time on the street, footpath or walkway, highlighting the need for increased shade in public spaces to support sun safe practices.

Sun protection is required when the UV level reaches three or above. In Queensland, sun protection is required all year round, even in winter, due to consistently high UV levels. To minimise the risk of skin cancer, Cancer Council Queensland recommends Queenslanders protect themselves in five ways: slip on protective clothing, slop of SPF30+ broad-spectrum water-resistant sunscreen, slap on a shady hat, seek shade and slide on sunglasses.

The most commonly reported barrier to using sun protection everyday was forgetfulness (45%). This further supports the need to create sun safe environments that have well designed and established shade provision, as well as a sun protection mass media campaign to educate the community and put sun protection at front of mind and reduce forgetfulness.

Concerningly, 47% of respondents were sunburnt in the previous 12 months. This is slightly lower than the rate of sunburn experienced by the general Queensland adult population (54%) reported in the Queensland Health Chief Health Officer Report 2018, indicating that respondents have slightly better sun protective behaviours than the general population.1

Cancer Council Queensland recommends people become familiar with their skin and what is normal for them, to help identify changes earlier and increase the likelihood of successful treatment. Four in five (81%) of respondents checked their skin for new spots and changes to existing freckles or moles in the last 12 months. Almost two-thirds (65%) have had a mole or spot removed from their skin (excluding for cosmetic reasons).

### Outdoor workers

Outdoor workers typically receive five to 10 times more UV radiation exposure than indoor workers, increasing their risk of developing skin cancer.

7% of survey respondents were outdoor workers and of those 28% were self-employed. Almost one-third (32%) of outdoor workers worked in the sport and recreation industry, followed by agriculture and fisheries (21%), transport (15%) and construction (15%).

Outdoor workers were asked to report on their sun protection practices in the workplace:

- 18% wore protective clothing
- 19% wore sunscreen
- 23% wore a shady hat
- 16% used shaded areas
- 23% wore sunglasses

As outdoor workers are typically at a greater risk of developing skin cancer due to their increased UV exposure levels, these findings highlight the need for effective sun protection policies that are developed and actioned.

### Behaviour

The most commonly reported barrier to using sun protection everyday was forgetfulness (45%). This further supports the need to create sun safe environments that have well designed and established shade provision, as well as a sun protection mass media campaign to educate the community and put sun protection at front of mind and reduce forgetfulness.

Concerningly, 47% of respondents were sunburnt in the previous 12 months. This is slightly lower than the rate of sunburn experienced by the general Queensland adult population (54%) reported in the Queensland Health Chief Health Officer Report 2018, indicating that respondents have slightly better sun protective behaviours than the general population.1

Cancer Council Queensland recommends people become familiar with their skin and what is normal for them, to help identify changes earlier and increase the likelihood of successful treatment. Four in five (81%) of respondents checked their skin for new spots and changes to existing freckles or moles in the last 12 months. Almost two-thirds (65%) have had a mole or spot removed from their skin (excluding for cosmetic reasons).

**When outside for longer than 10 minutes:**

- **SLIP**
  - 11% of respondents always wear sun protective clothing, 41% wear it most of the time.

- **SLOP**
  - 20% always wear SPF30+ sunscreen, 40% wear it most of the time.

- **SLAP**
  - 28% always wear a shady hat, 39% wear one most of the time.

- **SEEK**
  - 32% always seek shade, 50% seek shade most of the time.

- **SLIDE**
  - 51% always wear sunglasses, 29% wear them most of the time.

**Support for a mass media campaign**

There is significant evidence supporting the benefits of sustained investment in skin cancer prevention programs and educational mass media campaigns. Survey results show overwhelming support for increased community awareness of sun protection, with 95% of respondents in favour of a mass media campaign.

Respondents were most interested to learn more about what the UV level means and where to find it – as well as early detection of skin cancer. The preferred methods to receive this information are television, social media and radio.
Recommendations

Queensland has the highest rate of skin cancer in the world. In 2016, nearly 4,000 Queenslanders were diagnosed with melanoma, over 360,000 non-melanoma skin cancers were removed, and 319 died from the disease.\textsuperscript{2,3,4,5}

Drawing on the latest evidence of skin cancer incidence, best-practice prevention and early detection strategies, and findings from the Everyday Health Survey: Sun Protection, Cancer Council Queensland advocates for the following five recommendations.

1. Investment in a skin cancer prevention mass media campaign
2. Increase shade availability
3. Support and engage health professionals in skin cancer control
4. Sun safety policies for outdoor workers
5. Sun safety policies in schools

Recommendation 1: Investment in a skin cancer prevention mass media campaign

Cancer Council Queensland strongly recommends government investment in a skin cancer prevention mass media campaign, to reduce skin cancer rates in Queensland.

The survey found one in five Queenslanders did not receive any information on sun protection in the last year, and that overall sun protection knowledge and behaviours were poor.

Mass media campaigns are an important cost-effective intervention for improving knowledge and influencing behaviour.

Encouraging sun protection and increasing awareness about the risks of UV exposure and the benefits of early detection are among the most lifesaving and cost-beneficial interventions available. Skin cancer costs the public health system an estimated $175 million annually in Queensland.\textsuperscript{2,3,4,5} This does not include costs associated with loss of productivity associated with morbidity and premature mortality. With the rates of skin cancer increasing, so too will the costs unless appropriate action is taken. Mass media campaigns are a known cost-effective means of reducing skin cancer rates.\textsuperscript{10,11}

Evidence shows that for every $1 invested in skin cancer prevention mass media campaigns, a $3.85 return on investment is achieved.\textsuperscript{10}

What do we suggest?

Cancer Council Queensland recommend at least a $3 million per annum investment over a period of at least four years. A campaign that focuses on skin cancer prevention will have an awareness-raising effect and is expected to improve behaviour and prompt early detection of skin cancer. This can save lives in the immediate term and reduce the risks, and treatment costs, of skin cancer in the longer term.

Survey respondents indicated a desire for a campaign focused on UV, including what is means and where to find it, as well as to learn more about early detection. To ensure maximum benefit, it is critical that a skin cancer prevention mass media campaign is focus group tested and evaluated to ensure alignment with best practice, including methods for directly and indirectly assessing behaviour change.

This investment will provide the Queensland Government excellent value for money and is supported by the Queensland community, with 95% of survey respondents in favour of a mass media campaign on sun protection and early detection.

Survey responses

“I think this is an extremely important health issue. It is imperative to run public education campaigns…”

“I still remember the ‘Slip slop slap’ campaign. Highly effective.”

“Time for another slip slop slap campaign…”
Recommendation 2: Increase shade availability

Cancer Council Queensland recommend the incorporation of shade requirements in the planning and design of all public infrastructure and public open spaces, and an increased investment in grants and other funding schemes to support community organisations in increasing their current shade provision.

Why is shade important?

Effective shade is a necessary environmental intervention to reduce the burden of skin cancer in Queensland. Environments that do not provide enough shade place great demands on individuals to protect themselves from harmful UV damage. Shade is one form of sun protection that individuals cannot always supply themselves. As Queenslanders require sun protection year-round due to our UV levels, it is vital that we all work together to provide effective shade to support the protection of Queenslanders, including while using the street, footpath, public transport, playgrounds and parks.

Benefits of shade:
- Shade can reduce overexposure to UV radiation by up to 75% 12.
- Provision and use of shade is an effective sun protection measure.
- Shade has been identified as an important component in the design and creation of safe and healthy communities, with numerous co-benefits, including:
  - Increased physical activity 13,14.
  - Increased use of existing facilities 15,16,17.
  - Reduced urban-heat island effect 18,19,20.
  - Natural shade provided by trees can also reduce air pollution, including; ground level ozone, sulphur dioxide, nitrogen oxides and particulate matter 18,21.

What do we suggest?

a) All public infrastructure and public open spaces should have effective shade.

b) Policy makers should incorporate the provision of shade in all relevant legislation, policy, regulations, building codes, design guidelines and other documents related to the planning and design of public infrastructure and public open spaces.

c) Those responsible for the planning, design, development and maintenance of public infrastructure and public open spaces should prioritise effective shade provision.

d) Increased investment in grants and other schemes to support community organisations to increase their available shade.

Recommendation 3: Support and engage health professionals in skin cancer control

Cancer Council Queensland recognises the critical role health professionals, particularly General Practitioners (GPs), have in prevention and early detection of skin cancer. Strategies aimed at developing GPs skills in early detection of skin cancer and encouraging Queenslanders to seek early diagnosis and treatment for suspicious lesions should be supported.

Cancer Council Queensland recommends that the general population seek advice from their GP regarding any suspicious lesions, to discuss their skin cancer risk (for example outdoor workers are at a higher risk), concerns around vitamin D deficiency and appropriate recommendations and treatment options. Providing information, resources and training to health professionals will support them in being equipped to respond to all community enquiries is essential and will support skin cancer prevention and early detection.

In addition, ensuring that GP knowledge and skills keep pace with scientific developments in best-practice early detection and treatment of skin cancer is important, particularly in relation to capacity building in rural and remote Queensland. Initiatives that empower health professionals with the information, tools and training to effectively detect skin cancer early should be explored. This could include Dermoscopy training and a free dermatoscope, as they are a useful tool that can lead to improved diagnosis, and therefore improved patient outcomes.

“We need more shade in public places – awnings on buildings, shade in parks and on footpaths…”

Survey respondent
43% of Queensland students aged 12–17 years did not have any lessons or part lessons at school about skin cancer or sun protection, which highlights a missed opportunity for education.

“We should do more to inform young people about the dangers of too much sun...”

“I believe sun protection for children is done well in primary school but not in high school...”

Survey responses

Recommendation 4:
Sun safety policies for outdoor workers

Under the Queensland Work Health and Safety Act 2011, an employer must ensure, so far as reasonably practical, the health and safety of workers at the workplace. In turn, employees have a responsibility for their own health and safety and must follow UV protection guidelines and use adequate sun protective measures. Cancer Council acknowledge that an appropriately drafted and implemented sun safety policy will benefit workplaces, people and encourage a sun-safe workplace environment.

It has been estimated that around 200 melanomas and 34,000 non-melanoma skin cancers are caused by occupational UV exposure in Australia each year.

Cancer Council Queensland encourages all workplaces, including small businesses and self-employed outdoor workers to adopt a comprehensive sun protection policy. Support, education and compliance auditing will be important to ensure workers and workplaces understand their regulatory requirements and the need for strong sun safety practices due to their higher risk of skin damage and skin cancer.

Recommendation 5:
Sun safety policies in schools

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

Evidence shows that young children were 3.4 times more likely to practice sun protection than older children.1 Older children aged 12–17 years were approximately 60% more likely to have been sunburnt in the last 12 months compared to 5–7 year olds.1 In addition, young people (18–34 years) were the least likely to use sun protective behaviours, and were at least four times more likely to report sunburn than Queenslanders 65 years and older.1

The role of education facilities:
Early childhood education and care facilities, primary schools and secondary schools are organisations that play a significant role in shaping the health outcomes for future generations. High UV exposure during the first 18 years of life is an important contributor to skin cancer risk later in life, therefore it is essential that education facilities, where children typically spend most of their day during periods of high UV, protect children through enforcing appropriate sun safety policies.2

Sun protection policy and practices among early childhood education and care facilities are very strong, with nearly all Queensland facilities having a written sun protection policy.23 Sun protection policy and practices among primary schools and secondary schools are less strong, with more than one-third of Queensland primary schools not having sun safety policies, and effectiveness and compliance can be poor.24,25

Cancer Council Queensland recommends a mandatory sun safety policy for all Queensland primary and secondary schools, with clear requirements and minimum standards that align with the SunSmart Program’s policy guide.24 Sun safety policies that educate students and protect both students and staff from harmful UV exposure will support a reduction in skin cancer risk.

Hat wearing of Queenslanders 12–17 years when outside during the day?

No hat 46%
Cap 31.60%
Sun protective hat 19.50%
References

BRISBANE
BUNDABERG
CAIRNS
GOLD COAST
MACKAY
ROCKHAMPTON
SUNSHINE COAST
TOOWOOMBA
TOWNSVILLE

13 11 20
cancerqld.org.au