



## SunSmart's (Cancer Council Victoria) response to the Inquiry into the Potential for Developing Opportunities for Schools to Become a Focus for Promoting Healthy Community Living

July 2009

### Introduction

#### Why integrate ultraviolet (UV) radiation protection into the school setting?

Australia has one of the highest skin cancer incidence and mortality rates in the world. Over 1,600 Australians die from skin cancer each year, with at least two in three Australians being diagnosed with skin cancer before 70 years of age.<sup>1,2</sup>

#### Childhood and adolescence are critical periods during which sun exposure is more likely to contribute to skin cancer in later life.<sup>3,4,5</sup>

Skin cancer is the most expensive burden on our health system of all cancers.<sup>6</sup> The cost to the health system in Australia of treating skin cancer is approximately \$300 million per year. Australian general practitioners have almost one million patient encounters annually for skin cancer.<sup>7,8</sup>

UV protection is an important health issue for the Victorian government with it being prioritised for action in the Victoria's Cancer Action Plan (2008). The plan outlines the specific target: *Development of a comprehensive UV protection strategy including agreed approaches to target children, teenagers and young adults, with a focus on secondary school students.* The plan acknowledges that more needs to be done, noting that particular efforts need to be made to engage young people and other population groups that have not sustained adequate levels of sun protection behaviours.<sup>9</sup> Protection from UV exposure was also identified as a key priority for VicHealth in 2009–12.

Schools can play an integral role in helping to reduce future skin cancer rates because:

- the most damage due to UV exposure occurs during the early years
- children usually attend schools when UV levels are high
- schools can play a significant role by creating sun safe environments and changing behaviors through education and role modeling.

Importantly in accordance with the Occupational Health and Safety (OHS) Act 2004, schools have a duty of care to provide a safe environment that minimises health risks for staff, students and visitors. This includes taking proper steps to reduce the known health risks associated with exposure to UV for staff and students who spend time on outdoor activities. OHS UV risk controls consider the school environment (developing shade and modifying highly reflective surfaces), outdoor programming schedules and school uniform / dress codes.

Additionally whenever a student-teacher relationship exists, the teacher has a special duty of care.<sup>10</sup> As part of that duty, teachers are required to supervise students adequately. This requires not only protection from known hazards, but also protection from those that could arise (that is,



those that the teacher should reasonably have foreseen) and against which preventive measures could be taken. School authorities in breach of the duty may be liable for injuries inflicted by one student on another, as well as for injuries sustained by a student.<sup>11</sup>

**Inquiry Question: What health promotion programs (if any) has your organisation run for schools?**

**The SunSmart Schools program- a Health Promoting Schools model in practice**

A health promoting school is distinguished by six key features: engages health and education officials, teachers and their representative organisations, students, parents, and community leaders in efforts to promote health; strives to provide a safe, healthy environment; provides skills-based health education; provides access to health services; implements health-promoting policies and practices; strives to improve the health of the community.<sup>12</sup>

The Cancer Council Victoria's SunSmart Schools program is a non-mandatory membership program promoting sun-safe practices in the school setting to help ensure the risk of skin cancer is reduced and adequate vitamin D levels are maintained. The program incorporates the health promoting schools features into its membership criteria including:

- engaging the support of key stakeholders to ensure consistency of messages and policies
- implementing a comprehensive SunSmart policy at appropriate times during the year and ensuring the entire school community is involved and committed
- considering the outdoor environment and the availability and use of shade
- integrating ultraviolet (UV) radiation and sun protection lessons into the curriculum and providing appropriate information for students, staff and families
- encouraging appropriate sun protective behaviours through role modeling
- ensuring a combination of sun protective behaviours are used for all outdoor activities and events
- regularly reviewing the effectiveness of the policy.

In 1993, 12 Victorian primary schools agreed to participate in a Victorian SunSmart Schools pilot program. By 2009, that number had increased to 1446 or 88% of Victorian primary schools. **This is the highest participation rate of any state or territory in Australia.** Special education schools have also steadily increased their SunSmart membership with 52% now participating in the program.

SunSmart participation rates for primary schools in each Victorian local government area were analysed according to SEIFA score (a measure of socio-economic disadvantage). There was no correlation between SEIFA score and participation rates. Participation was also examined in the 19 DHS neighbourhood renewal sites (DHS neighbourhood areas identified as particularly disadvantaged). Of the eligible project sites, 11 sites had 100% membership for primary schools, four sites had a membership greater than 80%, and only three sites were below 80%. Given this, it appears that SunSmart has been equally successful in reaching children in areas of low socio-economic status (SES).



The Secondary Sun Protection program was first implemented in 2007 with 59 schools now registered. The program takes the focus off hats by emphasising use of a combination of sun protection strategies. A policy template was developed for schools registering with the Sun Protection Program, which allows schools to choose which sun protection strategies they will focus on initially, and includes explanatory notes and practical tips on what has worked well in other schools.

The program also aims to:

- Use celebrities as role models. Cricket Victoria allowed the captains of the men's and women's state teams to act as ambassadors at the launch of the Sun Protection Program, and provided a cricket clinic to one of the first schools to register.
- Educate with a focus on real life examples of young people with skin cancer. Based on the suggestions of students, the 'Real Stories' resource was developed using television current affairs segments which featured young people with skin cancer. An evaluation of this resource is currently underway.
- Approach school councils and principals, emphasising duty of care.
- Advocate to government to provide additional funding for shade in schools. This has included working with Department of Education and Early Childhood Development's (DEECD) in the implementation of shade as part of the Building Education Revolution.

The SunSmart Schools program is now implemented across Australia based on the Victorian model and principles of the program have also been applied to early childhood settings. Elements of the SunSmart Schools Program have also been adopted in other countries with high skin cancer rates, such as the United States<sup>13</sup>, United Kingdom and New Zealand.

**Inquiry Question: What health promotion programs (if any) has your organisation run for the wider community?**

The SunSmart Schools program is part of SunSmart which was established more than twenty years ago with great insight and ongoing support from the Cancer Council Victoria and VicHealth. It is now recognised as a world leader. SunSmart has positioned itself to be responsive to ever changing environments and has taken a leadership role in promoting a balance between benefits and harms of UV radiation exposure and the links with vitamin D. SunSmart is not only about skin protection – it's an investment in prevention that brings considerable human and economic benefits to Victoria. For more information on the overall SunSmart program please refer to [www.sunsmart.com.au](http://www.sunsmart.com.au)

**Inquiry Question: How successful have these programs been? How has their success been measured?**

The commitment and partnership with allies and Government has seen significant changes in social norms and the health of Victorians with rates of melanoma and non-melanoma decreasing in young people; reductions in the number of people getting sunburnt; and increases in the use of hats and sunscreen.

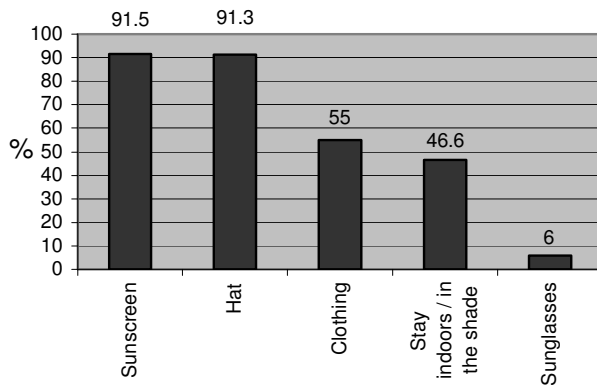


The program is extremely cost effective with a \$2.32 net saving for every dollar spent. The SunSmart program has shown that when there is commitment and ongoing appropriate funding for research, implementation and evaluation, health promotion really does work.

### **Specifically is the SunSmart Schools program making a difference?**

A key factor to SunSmart's success is ensuring work is underpinned by solid research and evaluation and is responsive to community needs. Results from a National Primary School Sun Protection survey indicated that Victorian schools are working well to provide a supportive environment for their students and staff including 94% having a written sun protection policy; 99% enforcing hat wearing in terms one and four (the peak UV radiation months in Victoria), with 75–100% of students wearing a hat during their lunch break; 91% of schools requiring teachers to wear hats.<sup>14</sup> The SunSmart Schools program supports each member school with policy advice and curriculum resources to encourage best practice.

The Victorian Child Health and Wellbeing survey is a statewide survey of parents and carers of Victorian children aged zero to 12 years. Parents were asked how often they try to protect their child from the sun on summer days when the child is outside (graph 1). The majority (82.5%) of children were reported to have been protected from the sun every day. Less than 1% of children had parents who reported they never tried to protect their child from the sun. Using sunscreen and a hat were the most common ways parents attempted to limit sun exposure. Parents were unlikely to mention sunglasses when reporting how they limit sun exposure.<sup>15</sup>



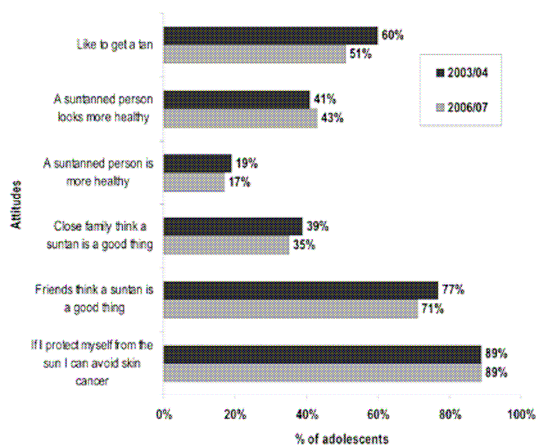
**Graph 1:** % of children whose parents protect them from sun exposure using the following methods

Source: Victorian Child Health and Wellbeing Survey 2006

The Sun Protection Survey is the main study used to assess the Victorian population's response to the SunSmart program. There were nine waves of this survey conducted between 1987 and 2002, interviewing Victorians aged 14 to 69 throughout summer about their outdoor activities and sun-protective behaviours over the previous weekend. In the summers of 2003–04 and 2006–07 the survey was expanded to become the National Sun Protection Survey.

Recent survey results show Australian adolescents reporting:

- they like to get a suntan has dropped from 60% in the summer of 2003–04 to 51% in 2006–07 (Graph 2)
- their friends thought a suntan was a good thing (77% in the summer of 2003–04 to 71% in 2006–07) (Graph 2)
- they attempted a sun tan, from 32% to 22%.<sup>16</sup>



**Graph 2:** Australian adolescents' sun protection attitudes in summer 2006–07 (percentage of adolescents who agreed with each statement)

However, there was no evidence for a change in adolescents' sun protective behaviours after controlling for demographic and weather variables. Recently published analyses of previous National Sun Survey data showed that adolescents are significantly less likely than adults to use most forms of sun protection (hats, clothing, shade, sunglasses), and as a consequence are more likely to be sunburnt.<sup>17</sup>

Particular efforts need to be made to engage young people and other population groups that have not sustained adequate levels of sun protection behaviours, such as secondary school children.<sup>18</sup> Research shows that a focus on shade is important in the secondary school setting. Shade alone can reduce overall exposure to UV radiation by up to 75%.<sup>19</sup> The 2008 Cancer Council study published in the prestigious British Medical Journal, examined whether students use or avoid newly shaded areas created by shade-sails installed at schools.<sup>20</sup>

The shade-sail intervention, purpose-built, was shown to increase students' use of newly shaded areas at schools. Further, the students did not avoid the shaded areas. Extending the data in this study to daily use during a typical spring and summer term, potentially up to one third of the student enrolment would have a reduced level of exposure to UV radiation by using newly shaded areas.

The installation of permanent shade at secondary schools has the added advantage over educational interventions for adolescents' sun protection, in that the benefits may be sustained over months and years, with small maintenance costs.

The findings suggest that among a population of adolescents with good knowledge about skin cancer dangers and the need for sun-protection, providing attractive purpose-built shade in secondary schools is sufficient on its own to increase shade use by students. Shade is a great example where a whole-of-government approach could be used to address UV risks for young people. Establishing a process whereby shade is considered in the initial planning, budget and overall design of buildings, as well in the upgrading of school facilities, would again see Victoria lead the way nationally in UV protection strategies.



**Inquiry Question: How could health, education and other organisations work together more effectively to coordinate health promotion activities between communities and schools?**

**Opportunities for the future – working together to ensure a comprehensive UV strategy for schools and the wider community**

*1. Promoting Cancer Council Victoria's Sun Protection Program*

Although some schools have already joined the new Cancer Council Victoria's (CCV) Sun Protection Program (developed to assist all Victorian E-12, P-12 and 7-12 schools to implement a comprehensive sun protection policy), Ministerial endorsement of this and the supporting curriculum resource, Real stories about skin cancer and skin damage - A teaching resource for secondary students, could help raise the profile and awareness.

*2. Shade*

To ensure shade is included in the initial planning, budget and overall design of buildings Ministerial endorsement of shade in the Department of Education and Early Childhood Development's (DEECD) building schedules for all new schools would be required. Increased levels of shade would also impact on heating and cooling, as well as providing shelter, attractive and welcoming outdoor learning spaces and greater opportunity for physical activity. We propose that a shade audit scheme be developed to complement DEECD's existing redevelopment/refurbishment grants program. A shade audit assesses shade in a systematic way and ensures optimum results before building or planting. The scheme would require schools to complete a shade audit as part of the grant application process. The scheme would offer secondary schools financial support to commission/conduct a shade audit. This would help ensure quality control of shade development throughout schools.

Outdoor spaces that stimulate exploration, encourage students to engage with the natural environment, provide opportunities to learn first hand about conservation and environmental issues, promote physical activity and provide greater UV radiation protection are responding to a number of health and wellbeing issues.

*3. Using new media to engage young people and adolescence in changing UV protection behaviours*

To help reach and work young people and adolescence to improve UV protective behaviours, support is requested to develop, pilot and evaluate online tools to emphasise the more immediate and visible effects of UV radiation exposure and personalise the sun protection message. This online tool/resource would be linked to various domains of the Victorian Essential Learning Standards. Research shows that demonstrating the negative consequences of sun exposure on one's appearance and appealing to issues of vanity, such as wrinkles, can be an effective motivator to changing young people's attitudes and behaviours to sun protection.<sup>21, 22, 23</sup>

*4. Climate change*

As well as protecting people from the sun's UV radiation, shade can create a comfortable environment for staff and students by reducing heat. This is important, as it is now generally accepted that Australia will experience a climate in the near future that is drier, hotter and has more extreme weather events than it had in the past.<sup>24</sup>



Temperature is a strong determinant of sunburn for adults and adolescents. Next century global warming of 1.1– 6.4 °C is predicted.<sup>25</sup> Early data shows that for each 1 °C increase there are estimated increases in the incidence of basal cell carcinoma and squamous cell carcinoma of 3% and 6%, respectively.<sup>26</sup> Ensuring schools are prepared and able to respond to these changes will be crucial in the future.

### **Conclusion- the role of schools in promoting healthy community living**

The schools setting provides an effective and efficient way to reach large portions of the population, including young people, school personnel, families and community members. Promoting health through schools enhances both health and the capacity of pupils to learn.<sup>27</sup> School programs that are integrated, holistic and strategic are more likely to produce better health and education outcomes than those which are mainly information based and implemented only in the classroom.<sup>28</sup>

The value of the health promoting schools model has been increasingly recognised by many international initiatives including those from the World Health Organization.<sup>29</sup> SunSmart has been using this model since its school program began 16 years ago. Jointly funded by Cancer Council Victoria and the Victorian Health Promotion Foundation, SunSmart leads the world in skin cancer prevention, with the Cancer Council appointed the World Health Organization Collaborative Centre for Ultraviolet Radiation in 2004.

Childhood and adolescence are critical years for skin cancer prevention. A key objective of the SunSmart Schools program is to encourage healthy, balanced sun protection habits for life. Schools not only encourage and reinforce these habits but affect behaviour change throughout the family network. It is essential however that this action is supported with local and state government initiatives such as provision of shade and relevant policy frameworks.

The SunSmart Schools program has been a great success and helped pave the way for other health promotion programs. It has influenced social norms and the culture of school playgrounds. But there is still more work to be done. There is clear evidence on what causes the majority of skin cancers and effective interventions for behaviour change. While the SunSmart program has made many gains, looking at trend data over its history suggests that some gains may be in danger of being lost unless investment is increased.

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- <sup>11</sup> Chapter 4.6.1.2 Duty of Care, Schools Reference Guide, DEECD
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