

How SunSmart are NZ Primary Schools?

J.A. Jopson and A.I. Reeder

Social and Behavioural Research in Cancer Group, Department of Preventive and Social Medicine, Dunedin School of Medicine, University of Otago, Dunedin, New Zealand

Abstract. This paper presents the findings of a postal baseline survey to assess how New Zealand primary schools address the issue of sun protection.

Introduction

Skin cancer is by far the most common cancer affecting New Zealanders, and over 300 people die from skin cancer every year. In the 2003 New Zealand Cancer Control Strategy, one objective under the primary prevention goal was to 'reduce the number of people developing skin cancer due to UV radiation exposure' (Ministry of Health, 2003). Schools were identified as a priority action area for skin cancer control in the Cancer Society and Health Sponsorship Council's Strategic Plan for Skin Cancer Control in 2001 (Cancer Society, 2001), and reinforced in a report undertaken by the Cancer Society in 2003-04 (Galtry, 2003). Internationally, primary schools have been identified as effective settings for educational and policy interventions in skin cancer control (Saraiya, 2003). Students spend extended periods outdoors during the school day, both in organised and discretionary recreational activities. Providing a supportive environment at school has the potential to significantly reduce UV exposure and skin cancer risk through improving sun protective behaviour.

In 2005 the Cancer Society of NZ implemented a national SunSmart Schools Accreditation Programme (SSAP). As part of that programme, the baseline survey reported here was commissioned to document the current state of sun protective policies and practices in NZ primary schools. This information will also be useful in assisting health promotion staff with the ongoing planning and implementation of the SSAP.

Data and Methodology

Two hundred primary schools were randomly selected from the Ministry of Education schools database. This sample size was selected to represent approximately 10% of state and state-integrated schools in New Zealand which cater for primary school age children. Twenty-seven additional schools were selected to raise the minimum sample size to 15 in each of 11 identified geographical regions, corresponding to the operational Divisions and Centres of the Cancer Society of NZ.

The survey instrument was designed to assess sun-related policy and practice and included questions on school practices, environment, curriculum and policy in relation to sun protection. It was based on Australian precedents (Dobbinson, 2002), but was adapted for NZ conditions, and was consistent with the SSAP guidelines. These are listed on the SunSmart Schools website (www.sunsmartschools.co.nz) and include 12 standards listed in Table 1. Responses to specific

survey questions determined the 'attainment' of each of these standards for each school. For the purpose of the baseline study, we also developed a 'partially attained' scoring for 9 of the standards. Standards relating to *staff role modelling, outdoor event planning and policy review* could not be assessed as 'partially attained' from the survey alone.

The surveys were mailed directly to the principal of each randomly selected school on 8 July, 2005. Up to two written reminders were given, followed by a telephone reminder. Prior to the first mailing, replacements were randomly selected for any non-responding schools. On 26 August 2005, 72 survey forms were mailed to 'replace' schools which had not returned a completed survey prior to that date.

Results and Discussion

In total, 189 of the original 227 schools completed a survey, a completion rate of 83%. Additionally, 53 of the 72 replacement schools (74%) returned a completed survey before the cut-off date of 17 October 2005. The 242 schools that responded were well distributed throughout the regions, and representative regarding type of school (full primary vs. composite or contributing), school size and socioeconomic decile.

Percentages of schools which were deemed to have 'attained', 'partially attained' or 'not addressed' each of the 12 SSAP standards based on responses to the survey are presented in the two left hand columns of Table 1. Several standards require specific comment. For example, 51% of schools noted that they had a sun protection policy and provided us with a copy, and thus 'attained' this standard. However, none of the policies were as comprehensive as the SSAP requires for accreditation, and therefore all would need to be upgraded before this standard would be truly 'attained'.

Schools which sent documentation with their completed survey were assessed separately on the material supplied. These scores are presented in the far right column of Table 1.

In most cases, the documentation which schools sent to us with regard to sun protection, was not as comprehensive as the survey results otherwise indicated. That is, the school policy did not fully explain all that the school was doing to support their students in being SunSmart. The Cancer Society of NZ is encouraging schools to upgrade their sun-related policies to document these levels of sun protection, and also to provide a platform on which to build a stronger policy. The Education Review Office in NZ monitors schools to ensure they complete a cycle of policy review at least once every 3 years.

Conclusions

No school fully measured up to the accreditation standard. Schools also generally did not have documentation which adequately reflected all the sun protection measures being carried out in a school. Assistance is needed to help schools improve their sun protection policies, which reinforces the need for the SSAP. With the national implementation of the SSAP from October 2005, future research will entail the evaluation of its effects against the baseline information collected in the survey reported here.

Acknowledgements

The Cancer Society of New Zealand Inc. is acknowledged for their funding of this project, in addition to the ongoing support they offer the Social & Behavioural Research in Cancer Group. Special thanks to Mary Duignan and Judith Galtry for their collaboration on the survey instrument development. Nathalie Huston was invaluable in coding questionnaires and assisting with mailouts. Thanks to

all the school staff who took the time to complete the survey.

References

- Cancer Society SunSmart Operational Group. *SunSmart Strategy and Action Plan Summer 2001-2002*, 2001.
- Dobbinson S, Harper S, Balmford, J. Australian SunSmart Schools Program. Proceedings of the 14th Annual AHPA Conference; 2002 June; Sydney.
- Galtry J. *Sun protection and skin cancer prevention in New Zealand educational settings: an overview and suggested interventions*. Wellington: Cancer Society of New Zealand, 2003.
- Ministry of Health, The New Zealand Cancer Control Trust. *The New Zealand Cancer Control Strategy*. Wellington: Ministry of Health and the New Zealand Cancer Control Trust, 2003.
- Saraiya M, Glanz K, Briss P, et al. Preventing skin cancer. Findings of the Task Force on Community Preventive Services on Reducing Exposure to Ultraviolet Light. *Morbidity & Mortality Weekly Report* 2003;52((RR15)):1-12.

Table 1. Percentage of schools *attaining*, *partially attaining*, and *not addressing* each of 12 requirements of the SunSmart Schools Accreditation Programme, based on survey results or written documentation provided by the school.

SunSmart Schools Accreditation Criteria	Survey results (n=242)			Documentation provided (n=144)		
	Attained (%)	Partially Attained (%)	Not Addressed (%)	Attained (%)	Partially Attained (%)	Not Addressed (%)
1. The sun protection policy is implemented during terms 1 and 4, when ultraviolet radiation levels are most intense.	51	25	24	65	15	20
2. All staff, students and parents/caregivers are to be informed of the skin protection policy and its intended practices.	81	10	9	50	31	19
3. All students wear a broad brimmed, legionnaire or bucket hat (minimum 6cm brim, deep crown) when outside.	30	67	3	45	53	2
4. Students not wearing a hat are required to play in allocated shade areas.	69	11	20	42	15	43
5. The use of SPF 30+ broad spectrum sunscreen is encouraged.	65	20	15	6	82	12
6. The use of sun protective clothing is encouraged (e.g. sleeves and collars).	25	44	31	31	7	62
7. Staff are encouraged to act as role models by practising SunSmart behaviours.*	90	—	10	65	1	33
8. SunSmart education programmes are included in the curriculum at all levels every year.	55	21	23	9	68	23
9. The sun protection policy is reflected in the planning of all outdoor events (eg camps, excursions, sporting events).*	72	—	28	44	27	28
10. Outdoor activities are rescheduled, whenever possible, to minimise time outdoors between 11 am and 3 pm.	89	9	2	41	3	56
11. The school has sufficient shade or is working towards increasing the number of trees and shade structures so as to provide adequate shade in the school grounds.	43	54	3	78	4	18
12. The Board of Trustees and Principal review the sun protection policy regularly, including making suggestions or improvements at least once every three years.*	51	—	49	33	26	41

* for these categories there is no 'partially attained' score possible through survey responses alone.