Annual Report
2005

SBG research projects, activities & publications,
January to December 2005
with
dissemination plans for 2006
SBG staff & students (as at 31 December 2005)

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1 the Cancer Society of New Zealand Inc. (see specific projects / activities for details of support from Centres & Divisions);  
2 University of Otago;  
3 Lotteries Commission;  
4 Health Sponsorship Council;  
5 Genesis Oncology Trust;  
6 NIWA & the South African National Research Foundation;  
7 Asthma & Respiratory Foundation;  
Travel grants from: the  
6 National Heart Foundation;  
Community Trust of Otago Visiting Professorship (to support visit of Prof. Patrick West).
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Forward

The provision of postgraduate training opportunities is an important role for any research group, and 2005 was a successful year for SBG research students. Congratulations are due to Helen Darling for completion of her doctoral study, Predicting youth smoking in New Zealand, based on the Health Sponsorship Council’s Youth Lifestyle Study. Helen was one of five SBG supervised PhD students in 2005, and two more are due to complete their projects in 2006: Caradee Wright’s study of Summer UV radiation exposure of New Zealand school children and Rose Richards’ study of Factors influencing physical activity participation during adolescence and early adulthood. Also due for completion in 2006 is Namomo Schaaf’s Master’s thesis, An investigation of delay in diagnosis of cancer among Pacific Island men living in New Zealand. Namomo is based in the Hugh Adam Cancer Epidemiology Unit, but Tony Reeder contributes supervisory support.

We also extended a welcome to the three postgraduate students who started work with us in 2005. Geri Henry was awarded a doctoral scholarship from the SunSmart Partnership (the Cancer Society and Health Sponsorship Council). The tentative title of Geri’s thesis, based on the Triennial Sun Survey series, is Population trends in sun protection knowledge, attitudes and behaviours, 1994-2006. Richard Egan started his doctoral project, Spiritual well-being concepts and practices in Aotearoa New Zealand palliative cancer care, and Rachel Nicholls started an MPH project, Public consultation: making decisions about public policy. A case study, which explores consent for breast cancer screening in NZ women aged 40-49.

In 2005, our Group received a Strategic Research Initiatives Award from the Dunedin School of Medicine,1 which provided additional funding for Nathalie Huston in her research support role. Such support is critical for the success of research groups, particularly when major grant applications are prepared. This year we submitted collaborative grant applications to the Cancer Society and Health Research Council and Nathalie helped significantly with preparation and submission. The visit of Professor Patrick West from the MRC Social and Public Health Research Unit, Glasgow University supported by an Otago Community Trust Visiting Professorship greatly helped with the preparation of these collaborative project grant applications.2

During 2005, our website http://www.otago.ac.nz/sbreg has enabled us to provide information to a wider audience on our staffing, research and other activities, and a full list of publications. We plan to more regularly update and further develop the site during 2006. We hope that, with more widespread access to the Internet, readers will be able to follow the links provided to read full details of our reports and papers.

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Part 1: SBG activities by major topic area

1. Tobacco control
Tobacco control remains a key area for cancer prevention and, during 2005, the SBG continued to contribute through the publication and presentation of our research findings, some teaching, and substantial collaborative work in research coordination and planning as well as consultation and advocacy.

PROJECT REPORTS

1.1 Youth Lifestyle Study 2004 survey: High level report and report on the Global Youth Tobacco Survey data

Staff and collaborators
Helen Darling and Tony Reeder in collaboration with Andrew Waa (Health Sponsorship Council).

Funding
Health Sponsorship Council and University of Otago (postgraduate scholarships), Cancer Society of New Zealand Inc. (core funding).

Rationale
The WHO international Framework Convention on Tobacco Control (FCTC), of which New Zealand is a signatory, requires governments to implement research to monitor tobacco use and to ensure that data are internationally comparable. The Health Sponsorship Council’s (HSC) Youth Lifestyle Study (YLS) biennial survey includes key measures from the international Global Youth Tobacco Survey (GYTS) which is currently used in over 150 countries. The YLS follows the recommended methods for the GYTS: multi-stage cluster sampling; trained interviewers to administer the survey during school class time; and key questions taken from both the core and optional GYTS questionnaires.

Aims
To document key statistics on New Zealand youth smoking rates using internationally comparable sample selection methods, study procedures, instruments and measures.

Progress / Results
Key findings among the students who participated in the 2004 YLS included:
- 60.3% reported ever trying smoking with 11.4% currently smoking on a daily basis;
• significant differences on all smoking measures between those who self-
identified as Maori and all other students;
• approximately one-third of non-Maori and two-thirds of Maori reporting
exposure to secondhand smoke (SHS) in the home environment.

Dissemination
The ‘high level’ report on the 2004 survey is being prepared for the HSC and a
report on the GYTS data is being written in collaboration with Andrew Waa
(Health Sponsorship Council). Some findings from the 2002 survey were
included in a report published in the University of Otago Magazine.³

1.2 School and personal factors associated with being a smoker

Staff and collaborators
Helen Darling (PhD candidate); Tony Reeder, Rob McGee, and Dr Sheila
Williams (PhD supervisors).

Funding
Health Sponsorship Council and University of Otago (postgraduate
scholarships); conference travel grants from the National Heart Foundation and
the Auckland Division of the Cancer Society of New Zealand.

Rationale
Most adult smokers begin smoking during adolescence. Nicotine dependence
can develop relatively quickly and, once established, most smokers smoke for
approximately 40 years. For adolescents dependent upon nicotine, cessation
interventions are not well established. It is, therefore, essential that public
health interventions focus on decreasing the prevalence of youth smoking by
preventing initiation and maintenance. In spite of legislation to protect New
Zealand adolescents, a large proportion continues to use tobacco at least
weekly. Recent surveys have shown a slight decrease in cigarette smoking
prevalence, overall, but, no reduction and marked increases have been reported
within some subgroups.

Aims
The overall aim of this research was to identify school and personal factors
associated with secondary school students’ smoking. The specific research

³ University of Otago. Through the lethal haze. Coinciding with the enforcement of the Smoke-free
Environments Amendment Act, University of Otago researchers continue to produce definitive
evidence of the dangers of second-hand smoke and are helping to stub out smoking and nicotine
objectives included: a) identifying factors at the personal, family, peer, school and ‘tobacco-genic’ environment levels which were associated with regular and established cigarette smoking; b) describing the extent of smoke-free policy and health education programmes in secondary schools; and, c) evaluating the relations between cigarette smoking among students and potential protective factors, smoke-free policies and practices and health education programmes.

Progress / Results
The research was based on data from 3,434 secondary school students from 82 schools. The multi-stage sampling procedures and data analyses ensured that the results were able to be generalised to the New Zealand secondary school student population. Smoking was more prevalent among girls for all measures of smoking frequency and significant differences were found for smoking prevalence between ethnic groups and school deciles.

In terms of family influences, the smoking behaviours of parents were not associated with increased odds of smoking nor were perceived relationships between students and their parents, or exposure to SHS. In contrast, the smoking behaviour of siblings was associated with increased odds of smoking, but it is likely that both student and sibling smoking are influenced by the same processes within the family. Similarly, low levels of self-concept were not associated with increased odds for daily smoking. The smoking behaviour of a best friend was a pervasive risk factor, as were a high level of disposable income, frequent episodes of unsupervised activities, and ‘pro-smoking’ knowledge. Being male, visiting a place of worship, and the intention to stay at school until after Year 13 reduced the odds of daily smoking among students.

Multilevel models were used to identify school level effects. After adjusting for student, family and school characteristics significant between-school variance in smoking prevalence remained, which suggests that there are factors, arguably beyond the immediate control of the student or family, which may influence a student’s smoking behaviour. The presence of a school effect also supports the WHO concept of ‘health promoting schools’ in that schools can make a difference to health outcomes.

Dissemination
The findings were reported in full in Helen Darling’s PhD Thesis (awarded 3 December 2005). A poster, based on these findings, was presented at the Annual Meeting and 7th Annual European Conference of the Society for Research on Nicotine and Tobacco, Prague, Czech Republic, 20-23 March 2005 - Helen Darling was the recipient of a travel award from the National Heart Foundation (Grant # 1123). A presentation was also given at the 3rd Australian Tobacco Control
Conference, Sydney, Australia, 23-25 November 2005. Papers are being prepared for publication.

The future
Understanding how the health promoting schools model has been interpreted and implemented in NZ schools, along with critique of the implementation of the amended legislation making all schools smoke-free, would be a pertinent ‘next-step’ in identifying characteristics of schools which are associated with decreased tobacco use.

1.3 Monitoring the use of tobacco imagery

Staff
Helen Darling and Tony Reeder.

Funding
Health Sponsorship Council and University of Otago (Postgraduate Scholarships), Cancer Society of New Zealand Inc. (core grant).

Rationale
The Smoke-free Environments Act (1990) and subsequent amendments banned advertising of tobacco products in New Zealand. However, there is anecdotal evidence that this advertising has been replaced, to some extent, with more subtle and covert advertising which targets young people.

Aims
To monitor the potential use of discreet tobacco advertising techniques to youth in New Zealand.

Progress / Results
Members of the Social and Behavioural Research in Cancer Group have observed popular media and other potential sources for examples of tobacco imagery.

Dissemination
A short ‘Ad Watch’ article was accepted for publication in 2004 and a further brief report has been accepted for publication in Tobacco Control early in 2006.
1.4 Implementation of the Smoke-free Environments (SFE) Act

Staff
Helen Darling and Tony Reeder in collaboration with Andrew Waa (Health Sponsorship Council).

Funding
Health Sponsorship Council and University of Otago (Postgraduate Scholarships), Cancer Society of New Zealand Inc. (core grant).

Rationale
Prior to the 2003 amendment to the SFE Act, a study of smoking restrictions in NZ primary and intermediate schools found variable compliance with legislation and inconsistency in smoking restrictions in a national random sample of 209 schools.\(^4\) Comparison of policy detail and questionnaire responses indicated overestimation by school respondents of smoking restrictions within their school. A later study of NZ secondary schools found poor compliance with the SFE Act.\(^5\) From January 2004, the amended 1990 legislation required all NZ schools to ban smoking at all times in all school buildings and grounds.

Aims
To report on the implementation of the amended Smoke-free Environments Act in NZ primary schools.

Progress / Results
Data were collected from one staff member at 136 of 150 randomly selected NZ primary schools. Data on the implementation of the Act were available for 134 schools. Most participants (79.1%) reported no difficulty in implementing the Act. In cases where difficulties were encountered these related to monitoring and enforcing the Act after school-hours; staff that smoked; and when members of the public were uncooperative.

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Dissemination

A letter was accepted for publication in the *Australian and New Zealand Journal of Public Health*.

![smokefree](image_url)

1.5 A review of tobacco education in New Zealand primary schools

Staff

Jacqueline Walker (Summer Research Student), supervised by Helen Darling and Dr Sheila Williams (biostatistician, Department of Preventive & Social Medicine).

Funding

Asthma & Respiratory Foundation (Summer Research Scholarship).

Rationale

This study is important as: 1) currently there is no information available regarding tobacco education to younger students, despite evidence that this is an important age for education interventions; 2) anecdotally, it is believed that most tobacco related education in NZ is provided by external providers who have either been linked to the tobacco industry or shown ineffectiveness in reducing tobacco use; 3) there is the opportunity to identify successful programmes and programme delivery models to inform the education and health sectors; and 4) it is important that current education programmes are critiqued against international ‘best practice’ models to ensure that NZ students receive the most appropriate and effective education about tobacco.

Aims

To describe the content and delivery of tobacco education programmes among NZ primary school students.

Progress / Results

One hundred and fifty New Zealand schools were randomly selected for the 2004 Youth Lifestyle Study survey. School staff from these schools were contacted and invited to participate in the School Smoking Education Study (SSE) and 134 schools participated. Analyses of these data are currently being undertaken.
Dissemination
A first draft of a paper to be submitted for publication is near completion. A Summer Research Scholarship Report will be submitted to the Otago School of Medical Sciences, February 2006.

1.6 Development of the 10-15 longitudinal study (including tobacco smoking)

Staff and collaborators
Tony Reeder and Helen Darling in collaboration with Professor Patrick West (Programme Leader for Youth and Health Studies, Medical Research Council Social & Public Health Sciences Unit in Glasgow).

Funding

Rationale
Given the limitations of cross-sectional studies, especially with respect to ascribing causality, during 2005 we made further progress on plans for a longitudinal study that included a focus on youth smoking. The aim is to include a broad range of valid and reliable measures of personal, family, school and community factors in predictive models in order to identify those most strongly related to smoking initiation.

Aims
Building on the existing YLS and Pre-Teen databases of the HSC, we aim to establish a theory-grounded, longitudinal, school-based study to follow up a representative sample of students and which includes the critical years of smoking initiation. From this study, among other issues, we aim to identify key factors in smoking initiation.

Progress / Results
As a result of our application, Prof. West was awarded a Community Trust of Otago Visiting Professorship in the Dunedin School of Medicine. Prof. West came to Dunedin in early 2005 to assist with project development and, partly as a result of that visit and meetings with HSC staff, collaborative research grant applications were submitted to the Health Research Council and the Cancer Society of New Zealand. The results of those applications will be known in mid 2006.
1.7 Smoking cessation in early adulthood

Staff and collaborators
Rob McGee & Tony Reeder, in collaboration with Dr Sheila Williams (biostatistician, Department of Preventive & Social Medicine).

Funding
University of Otago; Cancer Society of New Zealand Inc. (core grant).

Rationale
An understanding of those factors which predict sustained tobacco use, or alternatively cessation, has the potential to be useful in developing public health actions to reduce smoking. Smoking cessation has been related to several variables including higher socio-economic status, lower alcohol intake, partner support for quitting, and lower nicotine dependence. However, much of the research on quitting has involved relatively short-term follow-up. Data relating to quit attempts among young adult smokers and successful quitting are available from the Dunedin Multidisciplinary Health and Development Study. These data cover the period from childhood to age 32, the most recent assessment. This research project has collected a large amount of information enabling an investigation of socioeconomic, health, attitudinal and behavioral factors, which might be associated with persistence or cessation of tobacco smoking.

Aims
To examine predictors of quit attempts and successful quitting in a sample of young NZ adult smokers. The nature of the data will allow us to examine quitting from a number of different perspectives.

Progress
All data are available for analysis. The proposed analyses will build on previous work on quitting that we have published.

Dissemination
A series of papers will be written and submitted for publication.
ACTIVITIES

1.8 Conference and workshop attendances and presentations
Helen Darling attended the Annual Meeting and 7th Annual European Conference of the Society for Research on Nicotine and Tobacco, Prague, Czech Republic, 20-23 March 2005. Attendance at that Conference was made possible through Helen being awarded a travel grant from the National Heart Foundation (Grant #1123).

Helen Darling presented a paper at the 3rd Australian Tobacco Control Conference, Sydney, Australia, 23-25 November 2005, with travel grant support from the Auckland Division of the Cancer Society. The paper investigated whether school factors protected young people from tobacco use. Data for this study were from two sources: the 2002 YLS and the School Smoking Policy Survey (SSPS), a survey of tobacco education and school policy. After adjusting for known risk and protective factors a significant school effect remained, indicating that differences in smoking prevalence were attributable to school and school characteristics not included in the model. Students who intended staying at school until after Year 13 had decreased odds for smoking and this was the only specific, school-level protective factor. There were no associations between school policy variables and daily smoking.

1.9 Advocacy and consultation
Helen Darling replaced Tony Reeder as the SBG representative participating in the Cancer Society’s teleconferencing Tobacco Operational Group (TOG) and was a member of the Review Committee convened by the Health Sponsorship Council to oversee the development of the literature review and proposed national plan: Reducing Smoking Initiation in Aotearoa New Zealand. Helen Darling is Chair of the Tobacco Control Research Strategy Steering Committee, and a member of the Dunedin Smokefree Group.

Work is continuing on the Reducing Smoking Initiation in Aotearoa New Zealand: Research and Evaluation Plan which aims to provide a plan for evaluating and monitoring the effectiveness of the Reducing Smoking Initiation in Aotearoa

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New Zealand framework. Helen Darling has been involved in the development of the research plan and it is envisaged that this plan will be released in 2006.

Tony Reeder participated in all the 2005 meetings of the Board of the Smokefree Coalition, commented on documents and contributed to processes, including the appointment of new Director and preparation of the SFC submission on tobacco taxation to the Finance and Expenditure Select Committee.

1.10 Teaching, supervision and scholarships

Helen Darling was supported by scholarships from the Health Sponsorship Council and the University of Otago and, in 2005, was awarded a National Heart Foundation Travel Grant (1123, $3,500) to attend and present findings from her PhD study at the Annual Meeting and 7th Annual European Conference of the Society for Research on Nicotine and Tobacco, Prague 2005.

Helen Darling, in collaboration with Sheila Williams, supervised Jacqueline Walker, a Summer Research Scholarship and the recipient of an Asthma and Respiratory Foundation Summer Research Scholarship, in a review of tobacco education in New Zealand primary schools.

In 2005, Tony Reeder continued to present a series of four seminars on tobacco control for the 5th Year Medical Students’ Public Health Attachment. Tony Reeder and Helen Darling presented a seminar on tobacco control (NZ and the WHO Framework Convention on Tobacco Control) for students taking the Public Health Policy paper (PUBH 702) for the Diploma in Public Health.

1.11 Collaboration

We have continued to maintain good collaborative relations with other tobacco control researchers through participation in the Tobacco Control Research Strategy Steering Group and similar activities. Close relations have been maintained with Health Sponsorship Council staff working in the tobacco control area, in particular, Andrew Waa and Nigel Guenole. During 2005, collaboration focused on data preparation and analyses of data from the 2004 Youth Lifestyle Study, the 2004 Pre-teen (Y6) Study, and the Auckland Sociometric Study. Considerable attention was paid to data quality issues and identifying ways in which future data collection procedures can be improved. SBG staff assisted journals and agencies by contributing to the review of grant applications, papers, and reports.
2. Sun protection and skin cancer control
The high incidence, identified key risk factor (excess UV radiation exposure), potential for prevention, good prognosis for treatment in the early stages, and current high cost to the health system, continue to make skin cancer, particularly melanoma, a New Zealand cancer control priority. SBG research, consultation and advocacy have continued to make a significant contribution to this area and, overall, 2005 was a notable year for skin cancer control in New Zealand. The establishment of two expert advisory groups was particularly significant. The Advisory Groups on Early Detection and Vitamin D, followed recommendations 10 and 23, respectively, in Tony Reeder’s 2004 report to the Skin Cancer Control Steering Committee.9 Early detection has not received due attention in the past 10 years and the Group has begun to revisit issues originally raised in a key 1993 report.10 The issue of Vitamin D had not previously been thoroughly tackled by an interdisciplinary group of experts in New Zealand, but with support from the SunSmart Partnership, and the collaboration of a wide range of individuals and agencies, the production of a position statement was a valuable outcome to help inform health promotion activities.11

PROJECT REPORTS

2.1 The Sun Study: Measurement and mitigation of solar UV radiation exposure among primary and intermediate school children in NZ

Staff and collaborators
Caradee Wright (PhD candidate) and Tony Reeder (primary PhD supervisor), with Nathalie Huston, Jan Jopson, and Vanessa Hammond (SBG research staff) in collaboration with Dr Greg Bodeker (PhD co-supervisor, NIWA, Lauder), Andrew Gray (biostatistician, Department of Preventive & Social Medicine), Assoc. Prof. Brian Cox (PhD co-supervisor, Hugh Adam Cancer Epidemiology Unit) and Dr. Richard McKenzie (NIWA, Lauder).

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Funding
Cancer Society of New Zealand and University of Otago (project funding). University of Otago, National Institute of Water and Atmospheric Research (NIWA) and National Research Foundation (South Africa) (student support and scholarships), Auckland Division of the Cancer Society of New Zealand (conference attendance support).

Rationale
Children are an important target age group for skin cancer prevention efforts because any harmful sun exposure that may occur during school years is a significant risk factor. In addition, there is the opportunity for schools to provide exemplary, sun-safe environments and early education that has the potential to help establish lifetime protective behaviours. No known previous studies have linked actual, time-based UV radiation exposure, concurrent activities and social and environmental factors. Interpreting this relational database will provide much needed information to help guide the targeting of effective and appropriate sun protection interventions for school children.

Aims
The key aim was to quantify, using personal dosimeters, real-time solar ultraviolet (UV) radiation exposure for a large random sample of children during daylight saving months. Associated aims included relating UV dose to personal activities, sun protection attitudes and knowledge; school factors (solar education in curricula, sun protection policies, physical environments - particularly shade provision); and community support (interviews with local health promoters).

Progress / results
Fieldwork was completed by 15 April 2005, with a break over the school holidays. Data entry was completed by June 2005 and data analysis is ongoing, with preliminary results expected by April 2006.

Dissemination
Caradee Wright attended the International Non-Ionising Radiation Workshop, May 20-22, 2004, Seville, Spain and presented a poster on the study dosimeter to an audience of UV radiation experts - supported by funding from our host Department, the University of Otago and the Cancer Society of New Zealand (Auckland Division). Caradee also presented a poster of preliminary results at the 6th World Congress on Melanoma September 6-10, 2005 Vancouver, Canada – with funding from the Cancer Society and our host Department.
Two papers have been published: an invited review, *Youth solar ultraviolet radiation exposure, concurrent activities and sun-protective practices*, and a brief report on the fieldwork campaign with some preliminary results. These are listed in the bibliography at the back of this report. Three further papers are being prepared for publication in scientific journals.

### 2.2 SunSmart Schools National Baseline Survey

**Staff**

Jan Jopson and Tony Reeder, with technical assistance from Nathalie Huston.

**Funding**

Cancer Society of New Zealand Inc. (core and project funding).

**Rationale**

Excess childhood exposure to solar ultraviolet radiation, in particular, a history of sunburns is a risk factor for skin cancer. Because children spend significant time outdoors when they are at school, the presence and content of school sun protection policies represent important health promotion issues. The Cancer Society of New Zealand launched a nationwide SunSmart Schools Accreditation Programme (SSAP) in October 2005. The programme is identified as part of the Ministry of Health’s broader New Zealand Cancer Control Action Plan. Prior to the programme launch, it was deemed desirable to collect baseline information about the sun protection policies and practices of New Zealand primary schools, which would allow subsequent evaluation of the SSAP.

**Aims**

The primary aim of the study was to describe the existing situation in primary schools with regard to sun protection policies, practices, curriculum content and environment. This was to be completed in such a way that it was compatible with the SSAP, in order that we could assess whether schools met accreditation criteria and, if not, what the shortfalls were.

**Progress / Results**

The survey instrument was developed, based on SSAP guidelines and Australian precedents, and posted to the principals of a 10% sample of all NZ state and state-integrated primary schools, randomly selected within geographical region. Completed questionnaires were accepted until mid-October, immediately prior to the launch of the SSAP. Preliminary results
indicate that no school fully met the criteria for Cancer Society SunSmart accreditation.

**Dissemination**

Preliminary distributions of responses to each question were compiled and provided to the National Office of the Cancer Society of New Zealand at the end of October 2005. These preliminary results were also presented at the *Cancer Society Health Promotion Workshop*, Auckland, November 2005. Data analysis is continuing, and a draft technical report will be completed early in 2006. The final report will be prepared in response to feedback from staff of the SunSmart Partnership (the Health Sponsorship Council and the Cancer Society of New Zealand). A full paper, based on the technical report, is scheduled to be prepared and submitted for publication later in 2006.

2.3 **Review of outdoor workers’ sun awareness & interventions to improve sun protection, 1990-2005**

**Staff and collaborators**

Tony Reeder in collaboration with Drs. Judith McCool and Geraldine Meechan (Department of Psychological Medicine, Auckland University).

**Funding**

The Cancer Society of New Zealand (Wellington Division), Auckland University, University of Otago.

**Rationale**

From earlier exploratory research\(^{12}\) it became clear that a systematic review of the literature was required to inform the further development of workplace skin cancer control interventions in New Zealand.

**Aims**

To produce a report on the review of all published studies of occupational skin cancer, 1990-2005, but also including prior seminal papers. A key focus will be on interventions and evaluations, particularly in Australia, and any New Zealand evidence. The report will be structured around occupational injury prevention models and theories and NZ occupational safety and health policies.

Progress and results
Geraldine Meechan was recruited to work on the review and is scheduled to complete this work by August 2006, under the guidance of Judith McCool and Tony Reeder.

Dissemination
A report will be prepared for the Cancer Society of New Zealand (Wellington Division) and a paper prepared for publication.

The future
It is intended that the review will help guide the development of future research and interventions in New Zealand.

2.4 Sun protection policies and practices of Territorial Authorities

Staff
Tony Reeder and Jan Jopson with Nathalie Huston (Technical Assistant).

Funding
University of Otago research grant; Cancer Society of New Zealand.

Rationale
The emphasis in skin cancer control in NZ until recently has tended to be placed on raising awareness and achieving individual behaviour change, but the need to place greater emphasis on supportive public policies and institutional changes was accepted at the August 2001 meeting of agencies involved in skin cancer control. Local authorities are influential in shaping the social and physical environments in which we live – having responsibilities for recreational and sporting facilities, outdoor swimming pools, outdoor workers, community events, and the granting of planning and building approvals. The study was developed in response to a lack of the collated, national information that is essential for needs assessment, programme planning and the evaluation of advocacy and interventions for skin cancer prevention.

Aims
The three key aims of the study were to: (i) collect and collate national information to build a comprehensive picture of the sun protection policies, practices and plans of local councils in New Zealand; (ii) help inform and guide the development of a SunSmart programme designed to encourage councils to implement appropriate sun protection policies and practices; and (iii) establish
a baseline against which any change could be measured and interventions evaluated.

Progress / Results
One or more parts of the five-part questionnaire were returned from 52 of 74 territorial authorities. Data were obtained on sun protection policies and practices that affect outdoor staff, parks and gardens, swimming and paddling pools, other outdoor facilities and planning and building approvals. During 2005, analysis of fixed response and hand written ‘free response’ options proceeded.

Dissemination
Preliminary findings were presented at the PHA Annual Conference in Wellington, July 2005, within the Place-based public health initiatives stream. A condensed presentation was also given at the Cancer Society Health Promotion Workshop, Auckland, November 2005.

The future
The full technical report is scheduled for completion early in 2006. Another presentation will be prepared for the Dunedin international conference, UV radiation and its effects: an update (2006). In addition, it is intended that a paper will be prepared and submitted for publication in 2006. The SBG will continue to work closely with the Health Sponsorship Council, the Cancer Society and other agencies to help implement and evaluate sun protection strategies targeted towards local authorities.

2.5 NZ population trends in sun protection knowledge, attitudes and behaviours, 1994-2006.

Student, staff and collaboration
Geri Henry (PhD candidate), Tony Reeder (primary PhD supervisor), Andrew Gray (co-supervisor, biostatistician), Rob McGee (co-supervisor, Head of Department), Dr. Jean-Luc Bulliard (Technical Advisor, Unité d’épidémiologie du cancer, Institut universitaire de médecine sociale et préventive, Switzerland), and Nathalie Huston (Technical Assistant).

Funding
A three-year, PhD scholarship from the SunSmart partnership (HSC and CSNZ).
Rationale

Key aims of the NZ skin cancer prevention programme have been to raise awareness and reduce the risk of excess sun exposure by encouraging the public to engage in sun protective behaviours appropriate for the diurnal and seasonal UV levels. This research will quantify to what extent the SunSmart message is remembered and the recommendations achieved among the New Zealand population. Based on data collected in the Triennial Sun Survey, this study will be the first assessment of trends and relations between sun protection knowledge, attitudes and behaviours in the New Zealand adult population over the twelve-year survey period 1994-2006.

Aims

The proposed research aims to comprehensively describe population trends in sun protection knowledge, attitudes and behaviours for the years 1994-2006, and relations between knowledge, attitudes and behaviours relevant to the SunSmart Program. Changes in the incidence of sunburn and in possible contributing factors (e.g., outdoor activities, sunscreen use) will be a specific focus of interest. In addition, National Institute of Water and Atmospheric Research (NIWA) historical data on UV levels and weather at the time of each survey will be included in the analyses. Differences between the five city locations, based on the combination of survey and NIWA data, may provide information regarding particular local issues. Overall, the research will provide valuable feedback to help inform skin cancer awareness and behaviour modification programmes in coming years.

Progress/Results

Four databases exist from the Triennial Sun Surveys, 1994-2003. Data have been checked for completeness and consistency and to ensure accuracy of the labelling and coding. Analyses are currently being conducted on the data regarding the attitude variables, with preliminary results expected in early 2006.

The 2006 questionnaire has been prepared, based on the 2003 survey, in collaboration with the HSC, CSNZ, and TNS (the market research company contracted to collect the data). At the beginning of December 2005, householders were sent letters explaining the upcoming telephone survey and asked to participate when a researcher called. Data collection about behaviours during the previous weekend began in December 2005, and will continue every Monday and Tuesday evening (except February 6, due to Waitangi weekend) until March 2006.
Dissemination
A presentation will be made at the workshop: *UV radiation and its effects: an update* (2006), Dunedin, April 2006. Two papers, based on the results of the attitude data will be prepared and submitted for publication in 2006. The PhD project is due for completion in 2008.

**ACTIVITIES**

2.6 Conferences and workshops
Presentations were made at a number of conferences and workshops during 2005. Tony Reeder presented preliminary findings on the sun protection policies and practices of NZ territorial authorities at the *Public Health Association of New Zealand Annual Conference*, 6-8 July 2005, Town Hall, Wellington. Jan Jopson shared these at the *Cancer Society Health Promotion Workshop*, Auckland, November 2005. At that Workshop, Jan Jopson also presented preliminary findings from the SunSmart Schools National Baseline Survey 2005. Caradee Wright presented a poster of preliminary results from the Sun Study at the *6th World Congress on Melanoma* September 6-10, 2005 Vancouver, Canada – with funding from the Cancer Society and our host Department.

2.7 Consultancy and advocacy
Tony Reeder continued to be a participant in the Cancer Society SunSmart Operational Group (SOG) which, through regular teleconferences, helps to guide Cancer Society skin cancer prevention programmes and advocacy. Tony Reeder and Jan Jopson provided feedback on the development of school programmes and participated in teleconferences of the newly established SunSmart Schools Operational Group. Tony Reeder and Geri Henry have worked closely with the HSC and their contractor, TNS, on the procedures and content of the 2006 wave of the Triennial Survey.

Following recommendation 23 in his 2004 report to the Skin Cancer Control Steering Committee,¹³ and Committee agreement that there needed to be a renewed focus on early detection, with the first stage being to call a meeting of agencies and individuals involved. Tony Reeder was invited to serve on the *Early Detection of Skin Cancer Advisory Group* (EDAG) which was convened in July 2005 and first met face to face in Wellington on 14 October 2005. Further meetings were planned and the goal is to ‘develop evidence-based policy and strategies for the early detection of skin cancer, particularly melanoma, to

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¹³ Reeder, A.I. *Report to the Skin Cancer Steering Committee to inform the development of the Skin Cancer Control Programme Plan 2005*, July 2004.
reduce mortality.’ Tony Reeder was also invited to serve on the Vitamin D Expert Working Group, convened by the Health Sponsorship Council, which first met in Wellington on 23 June. A consensus position statement was finalized in September 2005. Following this, Tony was invited to participate in the 8 November vitamin D teleconference held by the National Board of the Cancer Society which concluded by recommending Cancer Society support for the position statement.

SBG staff and students also commented on the development of proposed curriculum resources for schools on sun protection issues. Feedback was provided on a range of media releases and other documents prepared by the SunSmart Partnership.

With respect to advocacy, a media release was prepared on territorial authorities’ sun protection policies and practices to coincide with Tony Reeder’s presentation at the 2005 PHA Annual Conference, and some media reports resulted. Caradee Wright prepared a preliminary media report about the Sun Study and was interviewed by NewzTalk ZB about her poster presentation at the World Congress on Melanoma. Tony Reeder commented on, and was quoted in a cover story article on skin cancer in the NZ Listener.

2.8 Collaboration
We have continued to maintain close relations with Health Sponsorship Council staff working in the sun protection area, in particular, Wendy Billingsley and Kiri Milne. During 2005, collaboration continued with Jean-Luc Bulliard, of the Unité d’épidémiologie du cancer, Lausanne, Switzerland, with Dr Bulliard agreeing to be an advisor for Geri Henry’s thesis.

Collaboration on the Sun Study and related activities has continued with NIWA staff at Lauder, in particular, Greg Bodeker and Richard McKenzie, and also with the 2003 Royal Society of New Zealand Science, Mathematics and Technology Teacher Fellow, Martin Allen.

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2.9 Teaching, training, supervision and scholarships

Tony Reeder is the primary supervisor for Caradee Wright’s and Geri Henry’s PhD projects, Rob McGee is a co-supervisor for Geri Henry. Caradee took up a South African National Research Foundation (NRF) overseas PhD scholarship in 2004. NIWA met the first year of her university fees as an overseas student, since (particularly with recent changes in international exchange rates) the NRF funding in US$ was insufficient to cover both overseas student fees and living expenses. At the end of 2004, Ms Wright was awarded one of only four prestigious University of Otago International Student Scholarships. In 2005, Geri Henry was awarded a SunSmart Partnership PhD scholarship.
3. **Healthy physical activity and nutrition**

The promotion of physical activity and prevention of obesity are priority areas for public health interventions for the primary prevention of cancer.\(^{19,20}\) Children and young people up to 24 years are identified as a priority group for physical activity promotion in the national policy for physical activity and sport developed by Sport and Recreation New Zealand (SPARC).\(^{21}\) The suggested benefits for targeting young New Zealanders are threefold: the potential for positive influences on child health, for the establishment of healthy lifetime activity patterns, and on later adult health outcomes.\(^{22}\) With respect to advocacy, local government is a key player in influencing opportunities, and it represents an important target. With appropriate planning and promotion, active transport such as walking and cycling has great potential for increasing physical activity. Active transport provides opportunities for people to build into their personal daily routines a regular contribution to increased activity levels. For those who are overweight, walking provides an appropriate starting point for becoming more physically active.

**PROJECT REPORTS**

3.1 **Tracking sport participation from childhood through to young adulthood**

**Staff and collaborators**

Rose Richards (PhD student) and Tony Reeder (primary supervisor), in collaboration with Assoc. Prof. Richie Poulton (Director, Dunedin Multidisciplinary Health and Development Study (DMHDS)), and Dr Sheila Williams (biostatistician, Department of Preventive and Social Medicine).

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Funding
Cancer Society of New Zealand Inc (core grant). The DMHDS is supported by the Health Research Council of New Zealand.

Rationale
One of the most important benefits of physical activity participation during childhood and adolescence may be the creation of a foundation for continuing participation into adult life. Any examination of the degree to which physical activity during youth impacts on adult participation requires longitudinal research, and few studies exist where it is possible to examine the entire ‘natural history’ of participation from childhood to adulthood.

Aims
The current study aimed to track sport participation from two perspectives; any participation in organized club sports; and participation among the DMHDS cohort in a group of 12 sports which are popular in NZ.

Results
Correlation coefficients indicated that tracking of club sport membership (7-12 years) and sport participation (15-21 years) was statistically significant, but at low to moderate levels. The study findings suggest some benefit from encouraging sport participation during childhood and adolescence for participation later in life. However, the substantial movement both into and out of sport participation observed in this and other studies cautions against over-reliance on promotion at these ages to achieve the goal of sustained participation in physical activity throughout the life span.

Dissemination
A scientific paper based on this study has been submitted for publication and is under review.

3.2 Influences on physical activity during adolescence

Staff and collaborators
Rose Richards (PhD student) and Tony Reeder (primary supervisor), in collaboration with Assoc. Prof. Richie Poulton (Director, Dunedin Multidisciplinary Health and Development Study (DMHDS)), and Dr Sheila Williams (biostatistician, Department of Preventive and Social Medicine).

Funding
Cancer Society of New Zealand Inc (core grant). The DMHDS is supported by the Health Research Council of New Zealand.

Rationale
Late adolescence is a time of substantial decline in physical activity participation. Arresting this decline is a key part of ensuring adequate participation in physical activity throughout the lifespan, and requires greater understanding of the factors which influence participation during this period.

Aims
The current study examined two patterns of physical activity from age 15 to 18 years: (i) consistent inactivity and (ii) decline in activity. It was hypothesized that adolescent physical activity would be associated with concurrent and preceding aspects of family, physical and intellectual abilities, health status, health risk behaviour and psychosocial factors, and that these factors may differ between declining and consistently low activity pattern groups.

Progress /Results
This study found important differences in the factors associated with consistently low and declining participation in physical activity during adolescence and highlights the potential importance of early intervention and addressing physical inactivity in the context of other health risk behaviors during adolescence.

Dissemination
Preliminary findings were presented at Kavea ake te wero – Call to action National Nutrition and Physical Activity Public Health Conference in Christchurch. Rose Richards was successful in gaining a Maurice and Phyllis Paykel Trust Travel grant to travel to Melbourne to present at the 5th National Physical Activity Conference. A paper is in the final stages of preparation for submission to a scientific journal.
3.3 Childhood and adolescent influences on physical activity in young adulthood

Staff and collaborators
Rose Richards and Tony Reeder, in collaboration with Assoc. Prof. Richie Poulton (Director, Dunedin Multidisciplinary Health and Development Study (DMHDS)), and Dr Sheila Williams (biostatistician, Department of Preventive and Social Medicine).

Funding
Cancer Society of New Zealand Inc (core grant). The DMHDS is supported by the Health Research Council of New Zealand.

Rationale
Information is sparse about factors from childhood and adolescence that influence adult physical activity. Much of the research has examined the influence of early physical activity and fitness, with very few studies examining the influence of social and behavioural variables. Such information is particularly useful for intervention development as it may be possible to target factors that have long-term as well as concurrent implications for physical activity participation.

Aims
It was hypothesised that aspects of family, physical and intellectual abilities, health risk behaviour and psychosocial factors during childhood and adolescence which are associated with low or declining physical activity during adolescence would also relate to low levels of participation in physical activity during adulthood.

Progress/Results
This study found evidence that some factors which were associated with low levels of participation in physical activity during adolescence continued to be important into young adulthood (age 21 years).

Dissemination
A paper is being prepared for submission to a suitable scientific journal.

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3.4 Walking to school: A trainee intern Health Care Evaluation Project

Staff
Tony Reeder was the ‘client’ for this research project in collaboration with Dr Jason Eberhardt-Phillips (Public Health Course Coordinator, Department of Preventive & Social Medicine) and a team of 5th year medical students.

Funding support
University of Otago, Cancer Society of New Zealand (core grant).

Aims
The study aims were to obtain baseline data on the frequency of walking to school, and investigate factors that either facilitate or present barriers to walking to school.

Progress
An SBG proposal for a study of walking to school among Dunedin primary school children, which was submitted to the trainee interns for consideration, was enthusiastically taken up towards the end of 2004 and developed into a Trainee Intern Health Care Evaluation Project. The project methods were developed and the survey began in December 2004.

Dissemination
Study methods and findings were presented at a public Departmental seminar and prepared as a printed report.25 A paper for publication is being prepared for submission in early 2006.

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25 Burt, R., Chow, K., Donohue, R., Sani, H.S.H., Taylor, K., Towns, C., Yelavich, S. Walking to primary school or being driven: how many children and why? Trainee health care evaluation project. Department of Preventive and Social Medicine, Dunedin School of Medicine, January 2005.
3.5 A tailored intervention to increase New Zealanders’ fruit and vegetable consumption

Staff and collaborators
Tony Reeder (co-investigator) with the Otago University research team: Dr. Caroline Horwath Matthaei and Louise Mainvil (principal investigators), with Silke Hellwig and Assoc. Prof. Christine Thomson (Department of Human Nutrition); Andrew Gray (biostatistician, Dept. Preventive & Social Medicine), Grant Baxter (Design Studies) and Dr Elaine Rose (Physical Education).

Funding
National Heart Foundation of New Zealand (project grant number 1016), University of Otago, and the Cancer Society of New Zealand Inc. (Tony Reeder’s component).

Rationale
Low fruit and vegetable intake is associated with increased health risks and there is evidence that these may include some types of cancer. In order to complement environmental and policy interventions, there is a need for effective behaviour interventions which motivate and enable New Zealanders to make healthy food choices.

Aims
The project aim is to increase fruit and vegetable consumption among those who do not meet the current recommended criteria, and to achieve this through the development of a health communication programme based on personally tailored, computer generated messages.

Progress
During 2005, the message library and computer delivery system for stage-targeted, individually tailored print communications (ITPC) for all `stages of change” with respect to fruit and vegetable intake were refined and finalized, appropriate for both Maori and non-Maori. These resources were then applied to the randomized controlled trial to determine the effectiveness of ITPC in comparison with standard print materials. The screening of a random sample of 2,300 New Zealanders (25-60 years) for at-risk status (not eating at least two fruit and three vegetable servings a day) identified 653 eligible participants. A second batch was screened, resulting in recruitment of 497 additional

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participants and assignment of at least 382 participants to each of three groups (intervention, comparison and no-treatment) by the end of 2005.

**Dissemination**
An annual report was prepared for the National Heart Foundation. A number of papers will be prepared for publication and presentation. Participants will receive a brief report of the study findings and those in the tailored group will receive personalized results.

### 3.6 Alcohol content of evening TV and popular videos

**Staff**
Rob McGee, Juanita Ketchel and Tony Reeder.

**Funding**
Lotteries Commission, University of Otago, Cancer Society of New Zealand Inc.

**Rationale**
In 2002, we initiated a study of tobacco imagery in television programmes broadcast during prime-time viewing. In 2003, this research was extended to include alcohol and other drug imagery on television. Since we were successful in obtaining contestable grant funding to repeat the survey in 2004, we decided to report imagery across the two time periods in order to allow examination of any changes in its extent or nature. In addition, we will examine substance use in popular videos.

**Aims**
To examine the amount and nature of depictions of alcohol use in one week of prime time television in 2002 and 2004.

**Progress**
All coding has now been completed and data for 2004 are currently being checked and entered into electronic storage format for analysis.

**Dissemination**
A paper will be written and submitted for publication.
ACTIVITIES

3.7   Conferences and workshops
Rose Richards presented research findings at *Kavea ake te wero – Call to action National Nutrition and Physical Activity Public Health Conference* (Christchurch, May 2005) and at the *5th National Physical Activity Conference* (Melbourne, October, 2005).

3.8   Collaboration, consultation and advocacy
We continued to work in collaboration with researchers based in the Department of Human Nutrition at Otago University, and with staff of the Agencies for Nutrition Action and Sport and Recreation New Zealand. A media release was prepared about research on school fundraising issues (see also Section 4).  

3.9   Teaching and supervision
Dr Reeder continues to provide supervision for Ms Richards’ PhD project, *Factors influencing physical activity participation during adolescence and young adulthood.*

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4. Other research in cancer control and health promotion

The SBG is mainly involved in specific areas of cancer control identified as significant by the Cancer Society of New Zealand, but we also carry out some generic research that fits into the broader National Cancer Control Strategy. Our work is designed to help inform and guide future action.

PROJECT REPORTS

4.1 Public perceptions of cancer risk, prevention and treatment

Staff and collaborators
Tony Reeder in collaboration with Dr Judy Trevena of the Department of Psychological Medicine, Dunedin School of Medicine.

Funding
University of Otago research project, Cancer Society of New Zealand Inc.

Rationale
It is important to document public perceptions about cancer because they are potentially relevant for targeting primary prevention activities, and underlie motivations that influence the uptake of screening programmes and the acceptability of diagnostic and treatment services.

Progress / Results
During 2005, data relating to perceptions of alternative and preventive treatments for cancer, obtained during an earlier national random telephone survey, were analysed and prepared for publication. Many New Zealanders believed that non-conventional treatments were beneficial and almost a quarter considered conventional medical treatments as ‘worse than death.’

Dissemination
A paper on public perceptions of the causes and primary prevention of common fatal cancers in New Zealand was published in 2003. The second paper, on public perceptions of treatment and alternative and complementary therapies (CAM) was published in December 2005. A media release28 resulted in several media reports29,30 and Dr Trevena was interviewed on radio.31

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4.2 Spiritual well-being concepts and practices in Aotearoa New Zealand palliative cancer care

Staff and collaborators
Dr. Rob McGee supervising Richard Egan (PhD student) in collaboration with Professor Rod McLeod (North Shore Hospice), Dr Chrystal Jaye (Department of General Practice, Dunedin School of Medicine), and Dr Ruth Panelli (Otago University Department of Geography).

Funding
Genesis Oncology PhD Scholarship, University of Otago

Rationale
Palliative care aims to meet the needs of the whole person dying from cancer: including the physical, social, mental and spiritual dimensions. This integrated approach to health is increasingly recognised as best practice in both end of life care and other areas of medicine. Current research suggests that spirituality is a key aspect of end of life care, but that it is not well attended to, and under researched. The topic is broad so as to be exploratory and hypothesis generating. As the project develops, more clarity and definition will result, for this research is breaking new ground in the New Zealand context.

Aims
Within a context where the incidence of cancer is increasing, the proposed research aims to investigate, explore and improve spiritual well-being concepts and practices in Aotearoa New Zealand palliative cancer care.

Objectives
- Conduct a literature search and review of both overseas and New Zealand literature.
- Explore the range of understandings concerning spirituality and spiritual care in hospice settings held by staff, patients with cancer and families.
- Choose and/or develop a valid instrument to measure spiritual well-being and other health outcomes.
- Investigate the relationship between staff concepts and practices of spiritual care and spiritual well-being of patients.
- Analyse and present findings as: a written PhD thesis; a website; hui; and presentations to participants / communities.
- Make recommendations for resources needed to address spirituality in the populations surveyed.

**Progress/Results**
Richard is undertaking his literature search and conducting focus groups. He also attended the *First Spirituality in Health Conference* in Adelaide, Australia, July 2005.

**Dissemination**
The results of this work will be made available to all respondents, including New Zealand hospices, in both written and oral forms. Lay and academic presentations will be made, both nationally and internationally, at conferences and hui. Articles will be prepared for publication in national and international journals.

**4.3 Public consultation: making decisions about public policy. A case study**

**Staff and collaborators**
Rob McGee & Professor Charlotte Paul supervising Rachel Nicholls (MPH Candidate) (Department of Preventive and Social Medicine).

**Funding**
University of Otago.

**Rationale**
Publicly funded mammography is now being offered to NZ women, 45-69 years (previously 50-64 years), and may be extended still further to women 40-44 years. Mammograms significantly reduce breast cancer mortality in women over 50 years, but are controversial in women 40-49 years because there is no reliable evidence to show that it is beneficial in this age range. The lack of quality evidence has contributed to fierce debate. On the one side are experts who believe that mammograms can reduce mortality and therefore are important in the fight to avert the tragedy of breast cancer. On the other side are experts who consider that screening women 40-49 years benefits few, at most, and has significant potential for harm.

**Aims**
As the benefits of screening women 40-49 years is uncertain, informed consent - a legal and ethical duty – is necessary, but is difficult to achieve. One solution is the ‘citizens’ jury’; a representative random sample of 12 ‘ordinary citizens’ that meet over a few days to listen to ‘expert witnesses’, discuss & debate the issue, and provide recommendations. This proposal seeks to trial this method of consultation in a New Zealand setting, by asking a group of Dunedin women (40-49 years) to consider possible harms, benefits and cost effectiveness of
screening, & decide whether mammography should be offered to women in their age group. Citizens’ juries that have been held overseas have been commissioned by decision-making authorities, such as government, with the intention that the public’s informed views should be fed into the development of policy.

Progress/Results
The citizens’ jury is planned for March, 2006. Three ‘expert witnesses’ have agreed to attend: Dr Simon Baker, (National Screening Unit/Ministry of Health), Assoc Prof Ann Richardson, (Christchurch School of Medicine, University of Otago) & Dr Belinda Scott, (the New Zealand Breast Cancer Foundation). The participant ‘jurors’ are currently being selected.

4.4 Sponsorship and fundraising in New Zealand schools

Staff
Rose Richards, Helen Darling and Tony Reeder

Funding
Health Sponsorship Council (special project funding), Cancer Society of New Zealand Inc. (core grant)

Rationale
New Zealand schools have a long tradition of fundraising within the school community. However, the range of potential sponsorship, incentive and fundraising partnerships available provides school communities with both opportunities and challenges for their efforts to provide quality education for their students. Anecdotal evidence suggested that schools were receiving support for educational activities through sponsorship or fundraising practices which were potentially health compromising. Examples included the selling of chocolate bars, ‘fast food’ nights, ‘sausage sizzles’, and the provision of soft-drink machines on school grounds.

Aims
Primary, intermediate and secondary schools were surveyed with the aim to examine participation in sponsorship, incentive and fundraising initiatives and identify the health implications of these. Feedback on these findings was sought from key stakeholders.

Progress / Results
Most schools were involved in sponsorship, incentive and fundraising initiatives and some had potentially negative health implications for students. Two examples included the promotion and sales of food products high in fat and sugar content to students (in the case of vending machines) and to the
wider school community (via fundraising products). Key stakeholders provided feedback on a draft report and identified concerns that classroom health education may be undermined and that schools were being perceived as having endorsed consumption of particular products.

Dissemination
The results of this study were published during 2005 in the Australian and New Zealand Journal of Public Health, and a number of media reports followed. A presentation is being prepared for the Department of Public Health, University of Otago (Wellington) workshop on The effects of the food and marketing industries on population health and health inequalities, Wellington, March 2006.

4.5 The History of Health Education Posters in New Zealand

Staff
Rob McGee and Juanita Ketchel with Dr. Warwick Brunton, Department of Preventive and Social Medicine

Funding
Department of Preventive and Social Medicine

Rationale
Posters have been used as tools for health education in NZ for a considerable period of time. They usually have a high visibility in terms of attracting attention. They provide information for people who may have difficulty reading. They may be very cost effective. They can serve a function as reminders or cues at various behavioural choice-points (e.g. to encourage fruit and vegetable purchase in supermarkets). Archives in Dunedin (Hocken Library) and Wellington (Archives NZ) have in their collections a large number of health-related posters from each decade dating back to the 1920s. However, there has been no comprehensive examination of this material.

Aims
The project aims to provide a systematic examination of these poster collections to see what is there and to provide a photographic record of examples of the material available. The second aspect will involve using coding frames based

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upon the visual qualities of the posters together with a communication framework to examine the way health messages were delivered. This will allow us to document the relevant health issues of the time; how the communication was constructed (e.g. appeals to fear, humour, safety, good citizenship, and so on); and the target audiences (e.g. children, parents, workers, health professionals). We will be able to trace changes in the nature of posters over time, and relate the poster content to historical Department of Health (DoH) concerns.

Progress / Results
Cataloguing of posters from the Hocken Library in Dunedin is underway. In addition, articles in the Health Bulletin, published by the DoH from 1948-1993 have been recorded in category groups in order to document any shifts in focus on health issues within the department over that time. This search has also aided in dating some of the poster materials from earlier years. Photographic documentation is yet to begin.

Dissemination
The results of this study will be published as an illustrated book. There is also potential for publication in a suitable academic journal.
APPENDIX 1

A1.1 SBG criteria for prioritisation and conduct of research

Our research priorities are based on a number of criteria, which include:

- prioritisation by the National Health Promotion Committee of the Cancer Society of particular cancer prevention efforts that require research;34;
- our ability to provide timely and high quality research to inform the health promotion efforts of the Cancer Society and other agencies;
- conducting research of an applied nature to inform health promotion practice;
- the possibilities of building research alliances.

A1.2 Cancer Society of New Zealand prioritisation criteria are based on:

- the scale of a particular cancer problem – how many people develop or die from it;
- how well the causes of the particular cancer are known;
- whether behavioural risk factors or factors in the social and physical environments are potentially modifiable;
- whether there are evidence-based opportunities for prevention;
- whether interventions have the potential to impact favourably on other chronic diseases, thus allowing for collaboration and strategic alliances with other research groups and health agencies.

In New Zealand, the key areas for which the evidence to support cancer prevention interventions is most compelling are:

- tobacco control;
- sun protection and skin cancer prevention;
- the promotion of physical activity and appropriate nutrition.

Most SBG activities and publications fit into one or other of these three categories, although some are of a more generic nature.

All SBG cancer prevention and health promotion work is carried out within the frameworks of the Ottawa Charter, the Jakarta Declaration and the Treaty of Waitangi.

Part 2: Staff publications, by major topic area, 1992-2005
(In chronological order, with the most recent listed last in each sub-section)

Tobacco control

Refereed papers


**Invited editorials**

TE1 Reeder AI. Let’s clear the air of second hand smoke! *New Zealand Medical Journal*, 2001;114: 53-54.


**Letters published in scientific journals**


**Theses**

TT1 Darling H. *Personal, family, school and other factors that protect young people from cigarette smoking*. A thesis submitted for Doctorate of Philosophy (PhD), University of Otago, Dunedin, 3rd December 2005.
Professional publications / non-refereed (recorded from 2003)


TN2  (Reeder A) How things have changed.  *Link*.  Otago-Southland Division of the Cancer Society of New Zealand, Dunedin, May 2003.


TN5  Darling H and Reeder AI.  Exposure to secondhand smoke (SHS) is associated with adverse health outcomes for children and adolescents, including increased risk of invasive meningococcal disease, respiratory and middle-ear infections, and exacerbation of asthma symptoms.  *Health Promoting Schools Magazine*.  May 2004.

Reports


TR7  Darling H, Reeder A and Waa A.  *Tobacco use among Year 10 and 12 students in New Zealand: a report on the Global Youth Tobacco Survey data*.  University of Otago / Te Whare Wanaga o Otago and Te Ropu Whakatairanga Hauora / Health Sponsorship Council, July 2004. (26 p.)

Conference presentations (from 1998)


TC4 Reeder AI and Blair A. *Views from the hospitality industry on smoking bans.* The Environmental Tobacco Smoke / Passive Smoking Conference, Wellington, 30 November 1999.

TC5 Reeder AI and Blair A. *Environmental tobacco smoke: New Zealand legislation & hospitality industry views on the prohibition of smoking in licensed premises, Dunedin (poster).* 11th World Conference on Tobacco or Health, Chicago, August 2000.


TC11 Darling H and Reeder AI. *Student quit attempts, smoking sanctions and cessation programmes in New Zealand schools.* Oral presentation at the 12th World Conference on Tobacco or Health, Helsinki, Finland, 3-8 August 2003.

TC12 Darling H and Reeder A. *Exposure to second hand smoke at home and its relation to daily smoking among New Zealand youth.* Oral presentation at the 12th World Conference on Tobacco or Health, Helsinki, Finland, 3-8 August 2003.


**Workshop presentations (from 2003)**


**Tertiary seminars and lectures (2005)**

1. Reeder Al. *Tobacco control.* Seminars for 5th year medical students public health attachment (four seminars throughout year).

Public seminar presentations (from 1998)

TPS1 Reeder AI. Youth smoking: A burning issue. Public Health Association, Otago Branch, and Department of Preventive and Social Medicine. Department of Preventive and Social Medicine, Dunedin, September 9, 1999.

Media releases


TMR2 Reeder AI. Smoky bars, like sawdust and spittoons, are “a thing of the past.” November 24, 2000.

TMR3 Reeder AI. Study underlines continuing need for quit smoking services. September 14, 2001.


TMR6 Darling H and Reeder A. Smoke-free homes help youth stay smoke-free. Otago University media release, 30 May 2003.


Submissions


TS2 SBG staff submissions supporting ASH’s submission on MP Grant Gillon’s Cigarettes Fire Safety Bill, 2001.

2 Sun protection and skin cancer prevention

Refereed papers


**Book chapters**


**Theses**


**Professional publications**


**Reports**

MR1 Morris J, and Elwood M. *How effective are sun exposure modification programmes?* Social & Behavioural Research in Cancer Group / Hugh Adam Cancer Epidemiology Unit, Department of Preventive and Social Medicine, University of Otago, May 1995.


MR4 Reeder AI. *Skin cancer prevention in New Zealand: A discussion document to help guide future SunSmart programme directions.* A report prepared for the Cancer Society and Health Sponsorship Council Joint Working Group. Social & Behavioural Research in Cancer Group, Department of Preventive and Social Medicine, Dunedin School of Medicine, August 2001.

MR5 Kime N, Reeder AI. *Sun protection information in summer weather reports: perceptions and practices.* A report prepared for the Cancer Society of New Zealand Inc., and the Health Sponsorship Council. Social & Behavioural Research in Cancer Group, Department of Preventive & Social Medicine, Dunedin School of Medicine, December 2002.

MR6 McCool J, Gorman D, Petrie K, Reeder AI, & De Silva K. *Outdoor workers’ perceptions of the risk of developing non-melanoma skin cancer.* Progress report prepared for the Wellington Division of the Cancer Society of New Zealand Inc. Health Psychology, Faculty of Medical and Health Sciences, University of Auckland, 2003. (8p).

MR7 Reeder A.I. *Report to the Skin Cancer Control Steering Committee to inform development of the Skin Cancer Control Programme Plan 2005.* Health Sponsorship Council Board Room, Wellington, February 2004 (44 p.)

MR8 Jopson JA and Reeder AI. *Sun protection in New Zealand secondary schools: obstacles and opportunities.* Social & Behavioural Research in Cancer Group, Department of Preventive & Social Medicine, Dunedin School of Medicine, June, 2004. (42p. plus appendices).
MR9 McCool J, Petrie K, Gorman D and Reeder AI. Non-melanoma skin cancer: outdoor workers' perceptions of risk and sun protection use. Final report prepared for the Cancer Society of New Zealand (Wellington Division) Inc. Department of Psychological Medicine, Faculty of Medical and Health Sciences, University of Auckland, December 2004. (104p).

Conference presentations (from 1998)


MC10 Reeder AI, and Jopson JA. Sun protection policies and practices of NZ territorial authorities: Rationale and preliminary findings. Oral presentation at the Public Health Association of New Zealand Conference, Wellington, July 2005.
MC11 Wright CY, Reeder AI, Bodeker G, Allen A and McKenzie R. *Linking real-time solar UV radiation exposure with the social and physical environment, activities, knowledge and attitudes of New Zealand school children*. 6th World Congress on Melanoma, Vancouver, Canada, 6-10 September 2005. (poster)

Public seminar presentations (from 1998)

MPS1 McGee R. *Fun in the sun*. Otago Branch of the Public Health Association of New Zealand and the Department of Preventive and Social Medicine, University of Otago, Dunedin, 30 April, 1998.

MPS2 Reeder AI. *The Melanoma Prevention Programme in New Zealand*. Barnett Lecture Theatre, Dunedin Hospital, 4 October 2001.

MPS3 Jopson JA and Reeder AI. *Sun protection in New Zealand secondary schools: obstacles and opportunities*. Department of Preventive and Social Medicine & Otago Branch of the Public Health Association of New Zealand, University of Otago, Dunedin, September 9, 2004.

Workshop presentations (from 2003)

1. Reeder AI. *Current commitment to population monitoring of sun protection in New Zealand*. Australian Sun Protection Survey meeting, Melbourne, 8 April 2003.


Media releases

MMR1 Reeder AI and Richards R. *Sun protection information in weather reports helps everyone*. December 8, 2000.


3a Physical activity

Refereed papers

Reports
PR1  Reeder AI, Chalmers DJ, Begg DJ and Langley JD. Participation in physical activity and selected sports, the use of protective practices, and sports injury experience of the Dunedin Multidisciplinary Health and Development Study cohort at age 21 years. A report prepared for the Accident Rehabilitation and Compensation Insurance Corporation, February 1997. Injury Prevention Research Unit, Department of Preventive and Social Medicine, Otago Medical School, Dunedin.
PR2  Richards R, Reeder AI. Physical activity: its measurement and health benefits, and the participation and opinions of young New Zealand adults. A report to the Cancer Society and Hillary Commission, Social & Behavioural Research in Cancer Group, Department of Preventive & Social Medicine, Dunedin School of Medicine, January 1999.
PR3 Richards R, Reeder AI. Physical activity for cancer prevention. A report prepared for the Cancer Society of New Zealand. Social & Behavioural Research in Cancer Group, Department of Preventive & Social Medicine, Dunedin School of Medicine, September 2001.


Conference presentations (since 1998)


Workshop presentation

Tertiary seminars and lectures

1. Richards R, Reeder AI & Poulton R. Longitudinal patterns and tracking of sport participation from childhood to early adulthood. Student research seminar, Department of Preventive & Social Medicine, Dunedin School of Medicine. May 8, 2003.

Submissions


PS5 Bragg C and McGee R. Draft Dunedin Pedestrian Strategy. Submission to the Dunedin City Council on behalf of the Mornington Primary School and Board of Trustees, Dunedin, December 2002.


3b Nutrition and alcohol

Refereed papers


Reports
NR1 Reeder AI. The development and implementation of the Otago Lifesaver host responsibility programme for licensed club premises. Occasional Report 36, ISBN 0-0908958-37-4. Injury Prevention Research Unit, Department of Preventive & Social Medicine, Dunedin School of Medicine, Dunedin, November 1998.


Conference presentations (from 1998)


Submission
NS1 Begg DJ, Reeder AI and Simpson J. Submission on Alcohol and Young People - comments on proposed ALAC strategic approach. Submitted to Alcohol Advisory Council, 23 October 1996.

Tertiary seminars and lectures

4 Other research in cancer control and health promotion

TREATMENT ISSUES

Refereed papers


**Media Releases**


**Reports**


**CHILD AND ADOLESCENT HEALTH**

**Refereed papers**


**Invited editorial**


**Professional publications**

AN1 Richards R, Darling H. and Reeder A.I. *Current research about sponsorship and fundraising in New Zealand schools*. Health Promoting Schools, Otago, Muihiku and Wakatipu, Public Health South, August 2004.
Conference presentations


Workshop presentations (from 2003)


Media Releases

PSYCHOSOCIAL FACTORS

Refereed papers


Book chapter

Book review

Report
PSR1 McGee R. Comment on “Cannabis: the PHC’s advice to the Minister.” A report to the Cancer Society of New Zealand, Department of Preventive & Social Medicine, Dunedin School of Medicine, August 1995. (This report formed the basis of the Society’s submission on Cannabis and Health to the Minister of Health).

Professional publications


Submissions

PART 3: Dissemination plans for 2006 by major topic area

1. Tobacco control

Refereed papers
1. Darling H, Reeder AI, McGee R and Williams S. Is there a relation between school smoking policies and youth cigarette smoking, health knowledge, and tobacco purchasing behaviour? (Accepted – Health Education Research)

2. Darling H, Reeder AI, McGee R and Williams S. Brief report: disposable income, spending on gambling, alcohol, fast food and cigarettes and saving by New Zealand secondary school students. (Accepted – Journal of Adolescence)

3. Darling H and Reeder AI. Tobacco advertising on mini-motors. (Accepted – Tobacco Control)

4. Darling H, Reeder AI and Waa A. Implementation of the Smoke-free Environments Act (2003 amendments) in New Zealand primary schools (Accepted – Australian and New Zealand Journal of Public Health)

5. Guthrie J, Darling H and Williams S. A review of tobacco education in New Zealand primary schools.

6. Darling H, Reeder AI, McGee R and Williams S. Personal, family and school factors that protect young people from cigarette smoking.

7. Darling H. The relations of part-time employment and work intensity with purchasing of potential health risk products.


Brief report
Darling H, Reeder AI, McGee R and Williams S. Changes in youth access to tobacco products, 2002-4 (brief report / letter)

Reports
1. Darling H and Reeder AI. High level results of the 2004 Youth Lifestyle Study survey.

2. Darling H, Reeder AI, and Waa A. The prevalence and correlates of tobacco use among Year 10 and 12 students in 2004.


2. Skin cancer control

Refereed papers

Reports
1. Reeder AI and Jopson J. Sun Protection policies and practices of territorial authorities in New Zealand.

Conference presentations

PhD thesis

3. Physical activity

Refereed papers
2. Richards, R. Reeder, A.I., Poulton, R., Williams, S. Childhood and adolescent influences on adult participation in physical activity: a longitudinal study.


**PhD Thesis**
Richards, R. Factors influencing physical activity participation during adolescence and young adulthood. University of Otago

4. **Nutrition**

**Papers and reports**
McGee R and Ketchel J. Alcohol and illicit drug imagery on New Zealand television 2002-2004 *(report and refereed paper)*

5. **Other research in cancer control and health promotion**

**Refereed paper**
Trevena J. and Reeder AI. Public perceptions of the risk of specific cancers.


**Report**
McDermott V, Darling H and Reeder AI. Student educational transitions in New Zealand: to inform proposed longitudinal study

**Public seminar presentations**
*Study on Sponsorship and Fundraising in New Zealand Primary and Intermediate Schools.*
The Effects of the Food and Marketing Industries on Population Health and Health Inequalities Research Workshop; Department of Public Health, University of Otago; Friday 3 March 2006, Westpac Trust Stadium, Wellington.