

National Skin Cancer Campaigns

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Introduction

This document provides an historical overview of skin cancer awareness campaigns within the UK and international context. Specific details regarding target groups, campaign focus, funding and impact are also included, where available.

UK national campaigns

Sun Know How

The Sun Know How campaign was the first national skin cancer prevention campaign in the UK, coordinated and delivered by the Health Education Authority (HEA). Sun Know How ended when the HEA's functions were moved to the Health Development Agency (HDA) and Health Promotion England (HPE) in March 2000. In 1999–2000 spending on the Sun Know How campaign by the HEA was £543,000. The records are unclear on funding levels before this although they are likely to have been similar.

Year	Funding
1996-1998	Amount unknown – Sun Know How
1999-2000	£543k HEA – Sun Know How

There is no available information on the specific aims and objectives of the Sun Know How campaign, the delivery and target group. There is also no available impact data of this campaign.

SunSmart UK

In 2003 Cancer Research UK was commissioned by the UK Health Departments to launch and run the SunSmart campaign¹.

DH funding for the SunSmart campaign has been modest, however in recent years there has been a significant boost of extra funding from the National Cancer Action Team in late 2008 and 2009, following the 2007 Cancer Reform Strategy commitment to increase funding to skin cancer awareness programmes.

The amount of funding in the first five years of SunSmart represents only one fifth of the amount of funding that the Sun Know How campaign received in its final year.

Year	Funding
2003	£110k UK Health Departments – SunSmart
2004	£170k UK Health Departments – SunSmart
2005	£175k UK Health Departments – SunSmart
2006	£180k UK Health Departments – SunSmart
2007	£127k UK Health Departments – SunSmart
2008	£133k UK Health Departments – SunSmart £500k NCAT – SunSmart
2009	£138k UK Health Departments – SunSmart £420k NCAT – SunSmart
2010	£500k England Health Departments – SunSmart £12k Scotland Govt – SunSmart

¹ At this point permission was sought from the Cancer Council Australia to use the SunSmart brand. However a more bespoke approach was required as the Australian SunSmart campaign message, 'Slip Slop Slap', was deemed inapplicable due to the differences in the UK climate and limited existing public knowledge.

Aims and Objectives

When first launched in 2003, a steering group was established to guide the development and delivery of the campaign. At this time, the main aim of SunSmart was to increase the profile of skin cancer and effective methods of sun protection. Given the modest funding and size of the population it was agreed that behaviour change targets would be unrealistic. The following objectives were set:

- increase **knowledge** of the causes of skin cancer and importance of early detection amongst defined target groups
- increase **awareness** of actions that can be taken to prevent skin cancer
- positively influence **attitudes** to sun protection

Tracking surveys indicated however, that positive changes in sun protection behaviour were evident. Since 2003, year on year increases in behaviour and attitudes have occurred, however between 2007 and 2008, larger increases have been seen in relation to people limiting time spent in the sun, and people understanding that fair skin is a risk factor for skin cancer (Cancer Research UK, 2008, unpublished). It is too early to say if funding increases were attributable for these rises. Specific results of these surveys are outlined in the below section 'overall available trend impact data on UK national campaigns'. Acknowledging this and the increased government investment following the Cancer Reform Strategy, the ambition increased and in 2009 the following vision was set:

Ultimately, we would like to see an end to the-year-on year rise in skin cancer incidence and mortality rates in the UK, and a closing of the gap between male and female survival rates.

Through continuing the national programme of work, and supporting local work, the following objectives intend to address the overall vision. Primary objectives:

- Maintain awareness of UV as a major cause of skin cancer and increase knowledge of the individual risk factors associated with skin cancer.
- Increase knowledge and understanding of effective methods to prevent sunburn.
- Promote positive attitudes towards protection from overexposure to UV.
- Increase the number of people who use their knowledge of their skin type to guide their behaviour and reduce their skin cancer risk.

Supportive objectives (achieved through supporting other's work):

- Increase knowledge of the key signs of skin cancer and the benefits associated with diagnosing skin cancer early.
- Promote positive attitudes towards spotting skin cancer early and visiting the doctor with any concerns.

An example of supporting other's work is the Anglia and Humber Cancer Network's project looking at the development of an early detection programme targeting men over 50.

Evolution of the SunSmart messages and target groups

Since 2003, campaign target audiences and key messages have been carefully considered and reviewed to reflect current research, evidence and expert opinion. The messages in particular have evolved to become more sophisticated over the years focusing on sunburn prevention, knowledge of skin type and acknowledging necessary sun exposure for vitamin D production.

Although infants and carers were specifically targeted as an important sub group, the first year of the SunSmart campaign in summer 2003, adopted a 'broad brush' approach to disseminate key campaign messages to as wide an audience as possible, and establish SunSmart as a credible national campaign. In subsequent years, the campaign targeted specific population groups who are

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at particular risk of skin cancer, such as school children and their guardians, young adults aged 17-21, men aged 20-50, holiday makers, and young people aged 12-24. The table below outlines the target audiences for each year of the campaign and evidence supporting why they were chosen.

Year	Audience	Overview of evidence
2003	Infants and carers	Children and young people are especially vulnerable to the harmful effects of the sun. Sunburn in childhood can significantly increase the likelihood of certain skin cancers in later life.
2004	School children	
2005	Teens and young adults	
2006	Men and outdoor workers	Malignant melanoma rates in men have quadrupled in the past 30 years, and people who are repeatedly exposed to sunlight are at greater risk of developing certain types of skin cancer and tend to have poorer survival.
2007	Holidaymakers	Intermittent, intense periods of exposure to UV rays, leading to burning, increases risk of melanoma by 70%. As a nation, more holidays abroad are being taken.
2008	Teenagers and young adults (12-24)	Excessive sun exposure and sunburn during early life affects melanoma risk later on in life. Teenagers and young adults are a key sun-seeking group and less likely to stay safe in the sun.
2009	Teenagers and young adults (12-24)	As above for 2008.

Components of the campaign

SunSmart is based on sound health promotion principles and the campaign is built around the following key elements:

- Research - ONS surveys monitor its impact and effectiveness, and together with qualitative and pre-test research, drive its strategic direction and outputs.
- Public communication - A high profile, intensive press and PR programme forms a major element of the campaign. This is supported by targeted distribution of public information resources including flyers, posters and postcards.
- Professional support - Local professionals such as community nurses, school teachers and health promotion workers are encouraged to incorporate sun protection initiatives into their work to further extend the reach of the campaign.
- Policy development - SunSmart is underpinned by the development of supportive public policy. Work has included developing guidelines for sun protection in schools.

In its early days, the campaign consisted of media promotion, opportune involvement in local events and development of resources to convey the SunSmart message. In recent years, activity has grown, with additional funding, to make way for more targeted promotion of resources and activities as well as supporting work at a local level.

Key successes of SunSmart

The SunSmart campaign has achieved notable success across a wide range of activities. Key campaign successes from 2009 include the distribution of 456,405 free leaflets and posters; 70,959 resource downloads from the SunSmart website; 1,620 media articles worth an 'Advertising Value Equivalent' (AVE) of over £14 million and a monthly average of 20,000 unique website visitors. In addition to this, 66% of all UK adults were exposed to SunSmart messages between April and November 2009 through promotion of information resources, media articles through news channels and exposure to the SunSmart website. A recent study showed that prompted awareness of

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SunSmart increased from 6.5% in 2003 to 17.5% in 2009 (Jones, 2010). This indicates the growing awareness of SunSmart amongst the UK public.

British Association of Dermatologists (BAD) – Sun Awareness Campaign

Sun Awareness (including Sun Awareness Week in May) is the British Association of Dermatologists' annual campaign to raise awareness of skin cancer and to encourage people to check their skin regularly (focused over one week in the year). Information is provided to the public, including leaflets, posters and press releases, in partnership with the British Skin Foundation. Historically, BAD and SunSmart have kept each other informed on respective campaigns and messages are generally aligned. (<http://www.bad.org.uk/site/574/DesktopDefault.aspx>)

British Skin Foundation

This charity is dedicated to raising money for research into all skin diseases, their treatments, prevention and cures. The Skin Cancer Appeal was set up based on the statistics that 200 people are diagnosed with skin cancer every day and that four out of five cases are preventable. The Appeal was also developed due to requests from the Foundation's supporters. Sun protection is not a central point of their work given that they focus on all skin diseases; however there is some information on their website which predominantly supports messages from the BAD. British Skin Foundation receives industry funding from pharmaceutical companies in addition to public donations. (www.britishskinfoundation.org.uk/SkinInformation.aspx)

SKCIN – General awareness

The principle objective of this charity is to ensure that the danger of over-exposure to the sun is given greater profile with the emphasis on education resulting in the vital early detection of the disease. The charity provides downloadable leaflets and posters. SKCIN receives funding from two sunscreen industry companies (Croda and Uvistat). (www.skcin.org/)

Teenage Cancer Trust (TCT) – Sunburn campaign

In 2008, TCT launched the Sunburn campaign, to encourage teenagers to avoid getting sunburnt. The campaign was sponsored and promoted by Superdrug. The target audience was encouraged to sign up text alerts and could download vouchers for Solait (Superdrug's sunscreen brand). (www.teenagecancertrust.org/)

Overall available trend impact data on UK national campaigns

According to an ONS SunSmart survey analysis of trends from 2003-2008 amongst UK adults, there has been a significant trend towards increased awareness of the importance of protecting children (5.2% in 2003 to 12.4% in 2008), checking moles (3.3% in 2003 to 11% in 2008), seeking medical advice about moles and avoiding sunburn (0.3% in 2003 to 2.5% in 2008). No significant trends in attitudes towards the benefits or risks of the sun have been observed, although significantly more people have reported using shade (34% in 2003 to 41% in 2008), covering up (26% in 2003 to 40% in 2008) and avoiding sunbeds (1.2% in 2003 to 7.5% in 2008) to reduce the risk of skin cancer (Cancer Research UK, 2008).

Whilst it is unknown if these results can be directly attributable to the SunSmart campaign, it is encouraging to see such increases which also reflect key SunSmart campaign messages.

Results from two CRUK commissioned surveys (2009 Omnibus extracts and a specifically commissioned national telephone survey relating to sun exposure behavior and circumstances in which sunburn occurred in Great Britain) indicate high awareness of skin cancer prevention campaigns in general but also strong normative beliefs regarding the social value of a suntan and less than optimal sun protective behaviours (Eagle et al., 2010; Jones et al., 2010).

Conclusion, gaps in available evidence base and recommendations

There is evidence to suggest a population's behaviours and attitudes towards sun protection are subject to fluctuation and consequently conducive to improvement or decline in response to prevailing influences. In Australia, positive trends towards sun protection were seen in the late nineties; these trends declined once funding was cut and media presence of campaign messages reduced (Dobbinson et al., 2008). This indicates that long-term commitment and adequate resources for population-based skin cancer prevention programmes may reduce the population's skin cancer risk.

Although there is a recognised need for ongoing skin cancer prevention activity in the UK, the evidence base for what works on a UK population is limited. Much of what is known about skin cancer interventions comes from Australia and other high UV countries with an increased incidence of skin cancer. This makes it difficult to tailor messages to a UK audience without adequate knowledge of what works, particularly for settings such as schools and recreation.

There are other issues in the UK which have the potential to hinder skin cancer prevention advice such as vitamin D production which is becoming more of a public issue. More information is needed around how much vitamin D is required for optimal health and how much sun exposure is required to meet the undetermined 'appropriate' level.

Although current skin cancer prevention campaigns have generated significant prevention activity in settings based interventions, developing resources, and receiving media attention, there is a gap in the evidence base showing what activity will lead to behaviour change and how to change the wide spread desire for a tan.

Without the continuation of national campaigns for skin cancer prevention, there is a danger of inconsistent messages leading to public confusion. The UK has seen promising results after 7 years of the SunSmart campaign and other community based interventions run at a PCT level, however to see a decrease in skin cancer rates, continued and coordinated investment in this issue is critical.

It is recommended to place an emphasis on partnership working across UK organisations delivering skin cancer prevention campaigns to avoid duplication of work and to align messages to minimise public confusion.

Non UK National Campaigns

Australia

SunSmart is the main nationally recognised skin cancer awareness campaign in Australia. In 2006 the Australian government launched the 'Protect yourself in 5 ways' campaign which ended in 2009 due to a cease in funding after a change of Government. This campaign centred on a mass media approach and used a logo containing five icons supporting the campaign slogan. Although the campaign is no longer actively promoted, the logo has been adopted for use by Cancer Council Australia to support the SunSmart campaign.

Smaller, ad hoc activity is conducted by state government departments however the majority of evidence based and evaluated skin cancer awareness work is coordinated by Cancer Council Australia and each state member Cancer Councils.

Slip! Slop! Slap! and SunSmart

In 1980, the Slip! Slop! Slap! campaign was launched as a limited public education programme funded by public donations. In 1986, the Cancer Council was restructured and centres for behavioural research and epidemiological research were established. This facilitated a strong data,

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research and evaluation basis for the subsequent skin cancer campaign. In 1988, with the support of the government department VicHealth, a new broad-based, multi-faceted skin cancer control programme, SunSmart, was introduced.

SunSmart centres on a multi-component public education programme including television advertising and environmental changes at locations such as schools, local government, workplaces and swimming pools. Creative approaches began with simple awareness raising messages to the whole population; later campaigns focussed on showing the consequences of skin cancer and targeting specific population groups at higher risk. Long term improvements in attitudes and behaviours were evident through tracking studies in the state of Victoria (Dobbinson et al., 2008).

Studies in Australia, primarily in the states of Victoria and New South Wales, of several short-term multi-component interventions run in conjunction with the SunSmart programme and including mass media showed significant improvement in children and adult sun protection practices, although the improvement among the latter was less marked than for children; adolescent behaviours have proven more resistant to change (Dobbinson et al., 2008; Montague et al., 2001).

Schools embracing the SunSmart programme in all Australian states and territories have been shown to have higher levels of both sun protection policies and practice (Jones et al., 2008). Behaviour among Australian adolescents did not show the same improvement between 1993 and 2002, with routine use of recommended sun protection behaviours actually declining over this time (Livingston et al., 2007). Australia has seen an improvement in adolescent's attitudes to tanning with desire for a tan declining from 60% in 2003 to 51% in 2006 (Dobbinson, Jansen et al., 2007).

An economic evaluation of SunSmart in Victoria (Shih et al., 2009) suggests that there are significant savings in disability-adjusted life-years and in skin cancer treatment costs as a result of the activity. An increasingly profitable merchandising business, feeding profits back into sun protection activity exists under the SunSmart brand, selling sunglasses, sunscreen, hats and other clothing (Montague et al., 2001). All Australian state based Cancer Councils have an ongoing commitment to delivering SunSmart activity in some form, which is dependant on funding sources either from within the charity or through Government grants.

New Zealand

The Cancer Society of New Zealand has run similar multi-component, multi-media activity as Australia since the mid 1980s, with similar evolution in strategies and an initial focus on children and adolescents (Watts, Reeder & Glasgow, 2002). Examples of current material, including television commercials, are available at: <http://www.sunsmart.org.nz/>.

A formal school accreditation programme commenced in 2005, based on an Australian model. This provided national co-ordinated administration and resources, plus on-site support from Cancer Society of New Zealand staff. As part of the programme, schools develop a sun protection policy. Unsurprisingly, accredited schools have been found to have better sun protection practices than non-accredited schools (Reeder, Jopson & Gray, 2009).

USA

There is no official nationally coordinated skin cancer prevention campaign in the US however the American Academy of Dermatology hosts the National Coalition for Sun Safety database on its website (www.aad.org/public/sunsafetydb.htm). This contains links to resources from a number of bodies who work with skin cancer prevention and early detection in various ways:

- The SunWise Programme (www.epa.gov/sunwise) is run by the US Environmental Protection Agency. It is an environmental and health education programme that aims to

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teach the public how to protect themselves from overexposure to the sun through the use of classroom, school, and community-based components.

- The SHADE Foundation of America (www.shadefoundation.org), which aims to eradicate melanoma through the education of children and the community in the prevention and detection of skin cancer and the promotion of sun safety.
- SunSavvy, which works to support and complement dermatologists' efforts to treat and care for their patients, by increasing access to (and affordability of) the most effective sun protective clothing/products. The SunSavvy motto is "protecting what protects you!"
- The Skin Cancer Foundation also runs an educational initiative called La Piel Sana, aiming to reduce the incidence of skin cancer and high rates of advanced stage melanoma found among Latinos and Latin Americans.

Summary and impact of non UK national campaigns

The 2009 *Synthesis of the West Midland Health Technology Assessment Collaboration Reports: "Providing Public Health Information to Prevention Skin Cancer: Review of Effectiveness and Cost-Effectiveness"* noted that internationally, a number of studies of sun protection interventions suggested evidence of effectiveness of improved knowledge-related outcomes, however very few demonstrated effectiveness relating to actual long-term sun protection or skin cancer prevention behaviours.

A recent Australian study provides evidence that mass media campaigns, coupled with interventions targeted at specific population segments have significantly reduced sunburn rates, although there is a need to repeat and reinforce messages as sun protection behaviours appear to fluctuate in relation to funding levels (Sinclair & Foley, 2009).

Adolescents remain a challenge in all countries, as the point at which they leave high school reflects a marked lessening of parental influence regarding sun exposure, coupled with increased time spent in the sun (Stanton et al., 2004). Young adults have the lowest skin cancer protection rates of all age groups and are resistant to health-related messages (Stanton et al., 2004; Baranowski et al., 1997); there is some evidence from the USA that they respond to appearance-based interventions (see, for example, Mahler, 2008; Olson et al., 2008). We cannot locate any studies that have investigated this approach within other countries.

Conclusion

Currently worldwide activity in skin cancer prevention is varied and depends largely on funding sources and capacity of Government and Non-Government sectors. Most activity undertaken is largely evidence based and derived from work conducted in Australia as part of the Slip! Slop! Slap! and SunSmart campaigns.

Countries with a high incidence of skin cancer are more likely to see improved attitudes and awareness of prevention campaigns however sustained funding and reminders of key messages are crucial to the success of such campaigns. More insight is required to understand how to effectively target populations such as the UK where tanning preferences are high, existing knowledge of the issue is low and the need to be protective is not always top of mind.

National coordination of skin cancer prevention activity is required to minimise duplication, ensure activity is evidence based, ensure quality resources and to carry out robust evaluation. In addition to this, local engagement with skin cancer prevention activities and local tailoring of campaigns is essential to the proliferation of key messages.

Declaration of interests

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Three authors of this paper, Sara Hiom, Caroline Cerny and Lisa Naumann are staff members of Cancer Research UK and responsible for the delivery of the SunSmart campaign.

Lynne Eagle and Simon Jones from the University of the West of England have been commissioned by Cancer Research UK to conduct the trend analysis report for 2003-2009 and sunburn surveys which are referenced in this paper.

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