

The Ultraviolet Index

How New Zealand sold it as a health promotion tool

The Health Issue

Skin Cancer in New Zealand

New Zealand (NZ) has one of the highest rates of melanoma in the world. Contributing factors are NZ's:

- fair skinned population who have a very 'outdoors' lifestyle Southern Hemisphere location
- clear skies
- temperate climate yet high UV levels.



Since the early 1990's NZ had used Burn Time (BT) to communicate danger from Ultraviolet Radiation (UVR). This is a measure, using units of time, of how long it would take skin to burn if exposed, unprotected, to direct sunlight. BT is subjective – with different skin types burning at different rates.

The Challenge

Was there a way to:

- provide New Zealanders with a more effective tool by which to indicate the level of UVR intensity
- link that measure directly with appropriate sun safety behaviours and thereby contribute to the ultimate sun safety goal of reducing the number of people in NZ who develop or die from skin cancer?

The Ultraviolet Index (UVI)

- The UVI is the recommended international measure for communication of the level of solar UVR. It is an integer numbers scale, with colour coding. The Index is generally presented as a forecast of the maximum amount of skin-damaging UV expected to reach the Earth's surface at solar noon. The values of the Index range from zero upward and the higher the Index number, the greater the likelihood of skin and eye damaging exposure to UV, and the less time it takes for damage to occur. WHO recommends protection once the UVI is above 2.
- In NZ the UVI reaches 6 or above most days between the summer months of October and March, and regularly gets to 10 or above, with highs in January of up to 14.

Research

Research was undertaken to:

- Obtain information about perceptions and practices related to the presentation of sun protection information in summer weather reports, in particular, the UVI and the BT.
- To investigate barriers to the communication of the UVI and identify the most effective methods for presenting sun protection information. **



Based on the findings key recommendations were:

- NZ adopt the WHO UVI international guidelines
- The UVI be used nationally in summer weather reports

- The UVI be supplemented with behavioural sun protection messages.

This research suggested that the UVI visuals/graphics as promoted by the WHO needed further refining for the New Zealand environment, particularly in order to communicate the behavioural messages.

The UVI as a Tool to Initiate Sun Safety Behaviour Change

Collaboration

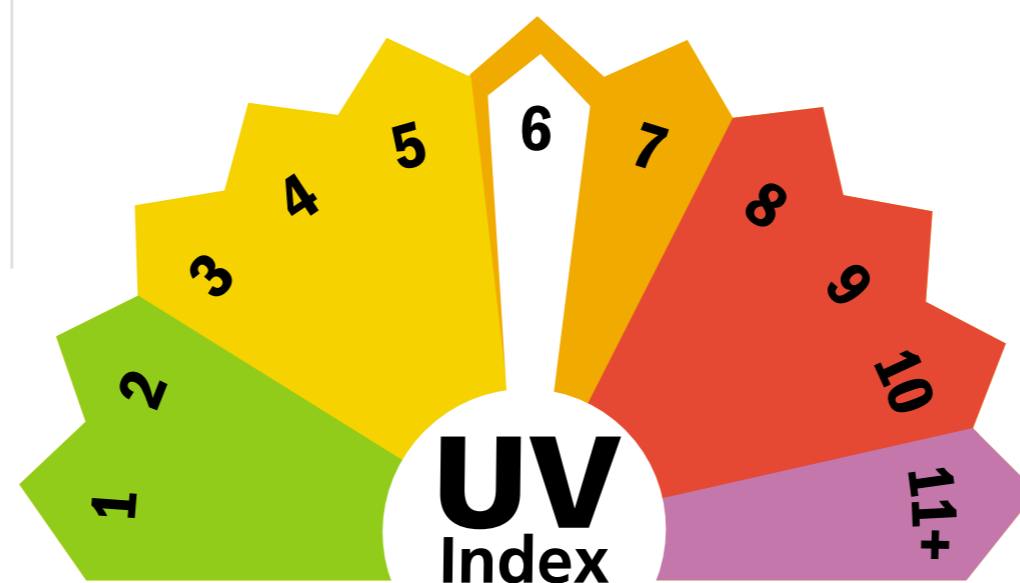
A national UVI Working Group was formed, consisting of NZ's key stakeholders in sun safety including:

- Cancer Society of NZ
- Health Sponsorship Council
- NIWA, (National Institute of Water and Atmospheric Research)
- MetService
- Academic institutions Otago University and Victoria University.

Development of the UVI as a health promotion tool

The Working Group decided that the introduction of the UVI to NZ would:

- Be nationally driven yet globally based
- Require a process framework incorporating
 - development of the characteristics of the UVI for the NZ environment – design, graphics, wording
 - involvement of stakeholders including media and community
 - communication and promotion of the UVI in a consistent way
 - other national sun safety initiatives
- Be monitored and measured.



The UV Index is an international, scientific measure of the level of Ultraviolet radiation from the sun. The higher the level, the greater the risk of skin damage.

Audiences

- Two key audiences were identified:
 1. Media that would be presenting the UVI in print, television and radio
 2. The general public who would use the information to protect themselves
- A brief was developed, tendered, and the resulting proposals were evaluated
- A choice was made that:
 - was based on the WHO UVI scale and colour coding
 - worked across mediums (print, television, radio, web, outdoor signage)
 - drew on New Zealander's high awareness of existing safety graphics that had been in use for decades in New Zealand (Rural Fire Safety Signs)
 - pre-tested well for understanding of the UVI, and importantly, of the incorporated behaviour guidelines

Making the Science Relevant – Turning Information Into Action

The way the UVI was to be presented was now agreed. The next step was putting a communication plan into action.

Objectives were to:

1. Increase awareness, understanding and acceptance of the UVI as a scientific, accurate and relevant measure of skin damage risk.
2. Increase use of the UVI as a guide to sun protection behaviour.

Key strategies:

- Inform and galvanise national media as 'UVI allies'
- Provide all media with free, regular, standardised UVI information in a format that fitted their particular news and weather delivery
 - Leverage off existing sun safety initiatives including national SunSmart Week
 - Resource and galvanise health promoters nationally
 - Use as many information channels as possible, including web and mobile phones (PXT and TXT) and allies such as the national Pharmacy Guild
- Extensive use of Public Relations.

Key constraint:

No ability to fund an information campaign.

Timing

- Introduction in national weather reports was October 1 2003, the start of the Southern Hemisphere summer.

Results

We know:

- BT is no longer used in NZ
- The UVI, with behaviours, is incorporated into national media weather forecasting
- Extensive media interest has been generated

We are still waiting for end of summer research results that will include:

- Awareness and understanding of UVI
- Attitude to UVI
- Use of UVI and incorporated behaviours to inform sun safety decision making.



Plans/Recommendations

Increase the availability of forecasted and real time UV information alongside recommended behaviours for:

- Increased understanding of the high risk UV exposure poses in NZ
- The ability to compare our UV levels with those of other countries
- A greater understanding of the behaviours that are required as the UV levels rise and fall
- A greater understanding of how UV levels alter throughout the day
- Faster response time to the need for protection
- Further development of UVI Real-time Indicators – outdoor displays that read the UV in real-time, and have the behaviour messages attached; particularly relevant for public settings such as schools, parks and outdoor pools.

Acknowledgements

** Kime H. Nicola, & Reeder Anthony (Tony) I., "Sun protection information in summer weather reports: perceptions and practices." Social and Behavioural Research in Cancer Group, Department of Preventive and Social Medicine, Dunedin School of Medicine, December 2002
MetService
NIWA (National Institute of Water and Atmospheric Research)
www.who.int/uv/en/

