1 Policies and legislation on UV exposures
An amendment to the Health Act 1956 to ban the commercial provision of sunbed services to under-18s now only awaits the Third Reading before being sent for Royal Assent and being made into law. Almost all submissions on the amendment were in support, and most called for a complete ban on commercial sunbeds. Consultation to regulate other aspects of commercial sunbed operations has been completed and a report is expected soon.

A bylaw in Auckland which controls many aspects of commercial sunbed operations and requires registration of premises offering commercial sunbed services is now in its second year of operation. It has resulted in several operators deciding to cease offering sunbed services, and others are now mostly compliant with the requirements.

The New Zealand Skin Cancer Primary Prevention and Early Detection Steering Committee has started work to update the NZ Skin Cancer Primary Prevention and Early Detection Strategy 2014 to 2017. This work is carried out by a national group of researchers and representatives of organisations working in skin cancer control, coordinated by MelNet and the Health Promotion Agency.

2 Public concerns and national response
Concerns about the health effects of UV tend to be raised by health and advocacy groups such as the Cancer Society of New Zealand, the Melanoma Network (Melnet), and Melanoma New Zealand, as well as medical staff and researchers working in cancer treatment and prevention.

2.1 MelNet
MelNet facilitates communication and collaboration between New Zealand health professionals and promotes education and best practice. Priorities for action identified at Melnet’s November 2015 Melanoma Summit included a stronger commitment to funding, resourcing and evaluating primary prevention, and a unanimous agreement that commercial sunbeds should be banned. Further information is available at www.melnet.org.nz.

In the light of findings in a paper published by Whiteman et al from the QIMR Berghofer Medical Research Institute that New Zealand has overtaken Australia as having the highest per capita rates of invasive melanoma in the world, Melnet has called for increased funding for skin cancer prevention initiatives.

2.2 Cancer Society of New Zealand
The Cancer Society of New Zealand (CSNZ) is a non-profit organisation which is committed to helping reduce the incidence and impact of cancer on the community. The CSNZ is the leading NGO in New Zealand for the prevention of skin cancer and advocates for strong policy and regulation that will reduce New Zealand’s high rate of skin cancer.

2.3 Melanoma New Zealand
Melanoma NZ promotes prevention and early detection through campaigns, educational forums and printed materials. They have been very proactive in submissions and select committee presentations around banning sunbeds.
3 Public information activities

3.1 Consumer New Zealand
Consumer New Zealand published its annual survey of commercial sunbed operations (funded by the Ministry of Health) in February 2016. A mystery shopper survey of 58 commercial sunbed operators found that while compliance with recommended operating practices has improved over the years, only 55% of the operators complied with all the requirements that were checked. 50% of the operators allowed a person with skin type I to use a sunbed, and 25% were prepared to let under-18s use a sunbed. The survey is available at www.consumer.org.nz/articles/sunbeds.

3.2 Health Promotion Agency
The Health Promotion Agency (HPA - a crown entity which leads and supports national health promotion initiatives) has continued to provide general SunSmart resources and a Sun Protection Alert to the public and supported MelNet’s work, including general practitioner dermatoscopy courses. The HPA has worked with NZ pharmacists to provide a suite of skin cancer prevention resources for staff and pharmacy customers, and an eLearning tool on Skin Cancer Prevention and Early Detection for NZ pharmacists. The purpose of the pharmacy resources is to encourage pharmacists, their staff, and the public to be SunSmart. The development of similar tools and resources for nurses is now under consideration.

3.3 Smartphone apps
Two free smartphone apps to advise on UVI levels and appropriate actions have been developed.

- **uv2Day** is available for iPhones and android devices, but is limited to the New Zealand/Australia, Pacific region. Development of the iPhone version was supported by the Cancer Society of New Zealand.
- **GlobalUV**, is currently available for android only, but has global coverage.

Both apps were written by Jeremy Burke, in consultation with Dr Richard McKenzie of NIWA. The apps complement the HPA Sun Protection Alerts and NIWA’s UV forecasts (see below).

3.4 Cancer Society of New Zealand
The CSNZ has produced a range of resources for workplaces, educational settings and the general public to raise awareness of the dangers of over exposure to ultra violet radiation, and provide information on how to reduce exposure. The SunSmart Schools Programme is a major programme funded and supported by the Cancer Society, with the aim of reducing exposure from ultra violet radiation to children and staff while they are at school. It acknowledges Primary and Intermediate Schools that have a sun protection policy in place which meets the Cancer Society’s minimum criteria. See http://www.sunsmartschools.co.nz/

4 Research activities

4.1 Public health units
For the past three years, staff from Public Health Units (PHUs) around the country have been visiting sunbed operators to make sure they are aware of best practice methods to minimise the risks from sunbed use and have resources to help them with this. Once a year the effectiveness of these visits is gauged by checking aspects of solarium operation against recommended best practice in eleven areas. These mostly cover administrative and procedural aspects of the operation (use of consent forms, display of warning signs, excluding high risk clients etc). While there has been an
improvement in performance, the most recent survey concluded that further improvements will only come about through regulatory actions. Copies of survey reports are available at http://www.emfservices.co.nz/resources/uv-and-sunbeds.

4.2 University of Otago Cancer Society Social & Behavioural Research Unit

4.2.1 Sunbeds
As part of its submission on proposed sunbed Regulations\(^1\), the University of Otago SBRU carried out a comprehensive search for commercial sunbed operators and found that numbers were higher than suggested by the PHU work. Most have only one bed, and tanning services are secondary to other parts of the business (e.g. hairdressing, beauty salon, gym). Only 13 relied on indoor tanning (sunbeds and/or spray tans) as their sole source of income, and of these only 4 relied on sunbeds as their sole source of income. The submission proposed a ban on commercial sunbeds.

4.2.2 Secondary school sports days
This observational study of secondary school sports days (published in the Australian and NZ Journal of Public Health\(^2\)), found that sun protective behaviour was poor with only 3% of students and 25% of adult supervisors wearing a sun protective hat. Shade was not available to most students, either as competitors or while waiting to compete. Sunscreen provision was 50%. It was concluded that students should be encouraged to use sun protection practices while not competing, SPF30+ should always be provided and guidelines for adult supervisors should be developed so they role model appropriate sun protection.

4.2.3 National survey of secondary school sun protection policies, practices and environments.
This national survey (published in Preventive Medicine Reports\(^3\)) found that only 50% of responding secondary schools had a comprehensive sun protection policy, but that those with such a policy scored significantly better on a summary measure (which including all dimensions of sun protection) than those without. The least attained sun protection components were adequate environmental shade (6%), sun protective clothing (7%) and outdoor event planning (17%). It was concluded that a comprehensive SunSmart programme needed to be implemented nationally for all secondary schools so that appropriate student sun protection could become universal and equitable.

4.3 NIWA
NIWA (National Institute for Water and Atmospheric research) continues to provide ozone and UV information, including daily reports and forecasts of the UV Index (UVI) on the internet, at https://www.niwa.co.nz/our-services/online-services/uv-ozone. Although the ozone hole in Antarctica was prolonged, and more severe than in recent years (see http://ozonewatch.gsfc.nasa.gov/), any effects on UVI values in New Zealand were small.

NIWA staff have been involved in initiatives with South American colleagues\(^4\) to make UVI forecasts more applicable to regions where peak UVI values far exceed the current UVI 11+ threshold. NIWA considers that UVI values themselves should always be reported (along with appropriate behavioural information), rather than just reporting subsets (e.g., colour codes), or derived products (e.g., “UV

\(^1\) http://www.otago.ac.nz/sbru/publications/otago068856.html#submissions-to-government-agencies
\(^2\) http://onlinelibrary.wiley.com/journal/10.1111/%28ISSN%2921753-6405
\(^3\) http://www.journals.elsevier.com/preventive-medicine-reports/
Alert” periods). Additionally the colour ranges of the UVI scale should be extended to better represent values at UVI values greater than 11, because such values are reached over half the area of the globe.

### 4.4 HPA

The HPA has undertaken the eighth New Zealand Sun Exposure Survey (SES) in the 1st quarter of 2016, with results due later this year. In 2016 the SES was extended to ensure adults 55 years and above are represented in addition to adults between the ages of 18 and 54 years, and teens between the ages of 13 and 17 years.

The HPA has also supported Dr Mary-Jane Sneyd, Hugh Adam Cancer and Epidemiology Unit, University of Otago, to develop a statistical computer programme for GPs to identify whether someone is high, medium or low risk for developing melanoma over the next five years. The Melanoma Risk Predictor Tool is in the pilot phase and it should be rolled out to most New Zealand GP practices through the Best Practice Advocacy Centre system later in 2016.

New Zealand Ministry of Health
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