



Australian Government

Australian Radiation Protection and Nuclear Safety Agency

**House of Representatives Standing Committee on
Health - Inquiry into Skin Cancers in Australia**

**Submission by the Chief Executive Officer of the
Australian Radiation Protection and Nuclear Safety
Agency**

Purpose of Submission

This submission outlines the nature of the research and services undertaken by the Australian Radiation Protection and Nuclear Safety Agency with regard to exposures to ultraviolet (UV) radiation and prevention of skin cancer, and the Agency's collaboration with other bodies to increase community awareness on the need for sun protection and reducing ultraviolet radiation exposure.

Skin Cancer Rates in Australia

Most skin cancer is preventable. Solar ultraviolet radiation (UVR) exposure has been identified as the cause of around 99% of non-melanoma skin cancers and 95% of melanoma in Australia.

Australia's high skin cancer rates are due to a large proportion of the population being fair skinned and originally from European countries with lower levels of solar UVR. The resulting problem in Australia is substantial, where the annual cost to the health system from melanoma and non-melanoma skin cancers is predicted to exceed \$600 million by 2015.

Preventing skin cancer can be achieved by reducing sun exposures of the population through a combination of awareness campaigns and other measures. Educating people to stay out of the sun when solar UVR levels are high, (or to modify their behaviours and use better protection), would significantly help in reducing UVR exposures. It's been estimated that reducing lifetime exposure to UV radiation by 20% would result in around one third fewer cases of skin cancer.

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) is the Australian Government's primary authority on radiation protection and nuclear safety. ARPANSA regulates Commonwealth entities using radiation with the objective of protecting people and the environment from the harmful effect of radiation. ARPANSA also undertakes research, provides services, and promotes national uniformity and the implementation of international best practice across all jurisdictions.

As the Australian Government's principal radiation protection organisation and a World Health Organisation (WHO) Collaborating Centre for Radiation Protection and a participant in the WHO INTERSUN project, ARPANSA works to protect people from the harmful effects of ultraviolet radiation by:

- making measurements of and providing scientific advice on ultraviolet radiation exposures of various population groups and outdoor workers;
- measuring ultraviolet radiation levels in major population centres across Australia via a network of detectors and communicating this information live over the internet
- providing verification data for the prediction of ultraviolet radiation levels in Australia by the Bureau of Meteorology;
- assessing the safety of sun-protective clothing, sunglasses, shade cloth etc. and providing guidance on their suitability;

- providing scientific input into developing standards such as Sun Protective Clothing and Shade cloth (both currently being revised), Sunglasses, Sunscreens and Solaria;
- collaborating with state and territory regulatory bodies through the national Radiation Health Committee in areas where UVR has a significant health and social impact
- provides guidance material, underpinned by evidence based scientific research; and
- working with government and non-government agencies to increase community awareness on the need for sun protection and reducing ultraviolet radiation exposure. ARPANSA scientists have measured solaria in Australia and found that some of the units had very high intensities (up to five times as powerful as the sun). The resultant number of melanomas attributable to solaria use varied by jurisdiction but totalled 280 across Australia with approximately 42 deaths each year.

Working with government and non-government agencies to increase community awareness

ARPANSA provides scientific support to and collaborates with Australia's Cancer Councils, SunSmart and other organisations that seek to increase public awareness about the need to reduce UVR exposure in order to reduce the risk of developing skin cancers. The Cancer Councils utilise ARPANSA's expertise in responding to enquiries from the public that require more specialised scientific expertise with regards to UV sources and hazards. ARPANSA also provides UV data to their sun protection programmes.

Summary

Most skin cancer is preventable. Community engagement through public health messaging is a critical tool in preventing skin cancer. ARPANSA recognises the benefits of collaborative government and non-government efforts in strengthening national programmes for increasing public and occupational awareness of the risks of sun exposures and subsequent skin cancers.

Yours sincerely



