Sunbeds - Artificial Ultraviolet Radiation (UVR)
Tanning Devices
Policy Statement

The Public Health Association of New Zealand supports the banning of commercial artificial UVR tanning devices (sunbeds) as there is clear evidence that they cause cutaneous malignant melanoma and other skin cancers, while providing no health benefits.

Overview
The World Health Organisation (WHO) classifies all UVR-emitting devices (including sunbeds) as Group 1 carcinogens, sufficient to cause cancer in humans \(^{(1,2)}\). The scientific evidence clearly shows no safe level of sunbed use for individuals of any age \(^{(1-4)}\). WHO recommends that Governments should use comprehensive legislation to govern the operation of sunbeds \(^{(4)}\).

In New Zealand skin cancer is the most common type of cancer, leading to about 500 deaths each year \(^{(5)}\). There is strong evidence of an association between sunbed use and the development of cutaneous malignant melanoma (melanoma) as well as other skin cancers \(^{(6)}\). New Zealand now has the highest overall incidence of melanoma in the world, a trend projected to continue \(^{(7)}\). Melanoma is the fourth most commonly diagnosed cancer in NZ and the second most common in adults 25-44 years; over 2000 New Zealanders are diagnosed each year, with over 350 deaths \(^{(5)}\). The lifetime risk of developing melanoma in NZ is 1 in 13 for males and 1 in 18 for females \(^{(8)}\). As well as other skin cancers, other documented harmful effects of sunbeds include skin and ocular burns, cataracts, immune suppression and photosensitivity \(^{(9,10)}\).

In Australia there have been high profile, sustained and successful education campaigns and policy changes, including banning sunbeds in all states \(^{(8,11)}\).

In New Zealand it is hard to elicit information on sunbed use from the industry, which has been largely unregulated, but sunbeds are predominantly available for use through commercial facilities with some home ownership and rental \(^{(12)}\). Sunbed use is more common among women than men, and is most common in 25-34 year olds, with 8% reporting having used one in the previous 12 months \(^{(13)}\). Most sunbed users live in urban areas, with the greatest proportion living in Auckland \(^{(13)}\).

Sunbed use and health issues for specific populations
99% of melanomas in New Zealand are in Europeans \(^{(8)}\). In contrast to many other health problems, melanoma rates are higher in the least socioeconomically deprived groups \(^{(5)}\). Being exposed to sunbeds before the age of 35 increases the risk of developing melanoma by 75% \(^{(3)}\).
Sunbed use and health issues for Māori and Pacific Peoples

There is no significant difference in sunbed use by ethnicity in New Zealand, with 3.4% of Maori and 1.9% of Pacific people reporting using sunbeds in the 2010 health and lifestyle survey [13]. Melanoma is less common in Māori and Pacific people, accounting for less than 1% of diagnoses [14]. The probable mechanism for this is that darker skin filters UVR, preventing it from reaching and damaging the deeper levels of the skin [15]. Despite being less common, melanomas in Māori are significantly thicker, making them more difficult to treat and with a poorer prognosis [14]. Unlike non-Māori, Māori women are much more likely to develop melanoma than men [14]. Māori are also more likely to present with more advanced melanoma, which may reflect barriers to detection such as lower awareness of melanoma due to low rates; melanoma being more difficult to detect in people with darker skin; and reduced access to health care, in particular expensive private melanoma screening services, which are not yet publicly funded [14].

Treaty of Waitangi Implications

Maori as tangata whenua and treaty partners have the right to highest attainable standard of physical health and equitable access to services. The Government has legal and ethical obligations to uphold these rights [16,17] in relation to melanoma prevention, detection and treatment. Poorer outcomes for Maori and lack of access to screening should be considered in Government decision making regarding banning a major risk factor for melanoma, such as UV tanning devices.

Legislation and policy in New Zealand

A voluntary industry code of practice was developed in 2002 [18], but the industry has been largely uncompliant [19,20]. This may have resulted in those at high risk of developing melanoma (such as people with fair skin that burns and those under 18) being exposed to harmful UV radiation [21].

The 2014 Health (Protection) Amendment Bill [22] included a proposal to limit commercial sunbed use to people over 18. Most health and professional organisations, including the Public Health association, asked the Health Select Committee to go further and recommend a complete ban [23-26]. However, the Committee decided to continue with an age restriction [27]. In late 2015, the Ministry of Health consulted on options for commercial sunbed control [12]. Five options were presented:

i. Maintain the status quo – voluntary compliance
ii. Implement an active campaign to discourage the use of sunbeds
iii. Introduce regulations under section 119(d) of the Health Act 1956, with respect to the provision of sunbed services: the regulations would have two components: (a) licensing of sunbed premises and businesses that hire out sunbeds for use in private settings, and of staff/operators that provide sunbed services or set up hired sunbeds in private settings); and (b) mandatory operational practices for sunbed premises
iv. Ban the provision of sunbed services
v. Ban the importation, manufacture, sale and rental of sunbeds for commercial, and possibly private, use.

The Ministry expressed its preference for Option (iii) and the bill was passed into legislation on July 4th 2016 [28]. The PHA supported Option (v), but given the government’s decision not to support a ban, considered that the next best option would be mandatory regulation for commercial sunbed premises, as a limited form of harm reduction [29,30]. Concerns about a regulatory approach include the costs of enforcement, the cost of educating consumers and communities about the risks associated with using sunbeds, and the potential for operators to exit the market and sell their old sunbeds privately [29] – there is already evidence that this may be happening [9]. Internationally, when similar regulation has
been put in place, compliance with standards has improved, but is still considered inadequate to lower the public health risk\(^{31,32}\).

The Public Health Association of New Zealand continues to support a complete ban, as do the Cancer Society, MelNet, the NZNO, the NZMA and other organisations.

**Priorities for action**

The Public Health Association recommends that government:

- Recognise that New Zealand rates of melanomas and other skin cancers are now the highest in the world
- Recognise that there are no exclusive health benefits of sunbed use
- Based on the evidence of significant harms, legislate to ban sunbeds completely
- Until this legislation is passed, work with local government to introduce and enforce strong regulation
- Continue to support action to decrease the New Zealand population’s sun exposure
- Provide targeted and appropriate information regarding melanoma and other skin cancer risk factors, detection and treatment for vulnerable population groups, including young women and people with fair skins
- Provide culturally appropriate information regarding melanoma and other skin cancer risk factors for Māori and Pacific New Zealanders
- Look at ways to reduce barriers to skin cancer diagnosis and treatment for Māori and Pacific New Zealanders.

**PHA actions to support this policy**

- Keep members informed of relevant research, key policy/legislative developments and consultations on sunbeds
- Work to influence central government sunbed policy-making through further submissions and participation in policy development
- Strengthen relationships with aligned advocacy groups and organisations such as the Cancer Society, MelNet, and the NZMA, who also support a full ban based on evidence of harm and a desire to protect the health of New Zealanders
- Align with and support public awareness campaigns to promote changes to sun-seeking behaviour and early detection of melanoma
- Engage those with an interest in the community, such as health professionals and people who have been affected by melanoma, to support them to advocate for banning sunbeds.

**References**

25. Duncan G. Health (protection) amendment bill: Submission of the melanoma network of New Zealand incorporated (MelNet) to the health select committee. 2015.