

Submission on behalf of: The Cancer Society of New Zealand, National Office

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To: Chair of the Health Select Committee and all members of this committee

Parliament Buildings

Wellington

Date: February 2015

- NO we do not have any direct or indirect links to the sunbed industry.
- YES we give permission for our details to be released under the Official Information Act 1982.
  - **Yes, we would welcome the opportunity to give an oral submission to the committee.**

We thank the Committee for the opportunity to make a submission on the Health Protection Amendment Bill (abbreviated as 'the Bill' hereafter).

The Cancer Society of New Zealand is a non-profit organisation which aims to minimise the incidence and impact of cancer on all those living in New Zealand. We work across the Cancer Continuum (2003, New Zealand Cancer Control Strategy, MoH) with key work streams that include, provision of supportive care, information, funding of research and health promotion ([www.cancernz.org.nz](http://www.cancernz.org.nz)) at national, regional and local levels.

The Cancer Society commends the government for proposing the ban of sunbeds for under 18 years of age in the interests of protecting future generations from exposure to the harmful ultra-violet (UV) radiation that solarium (sunbeds) emit. However we do not believe that the regulation goes far enough in addressing the significant risk associated with the use of solarium.

Residents in New Zealand are entitled to protection, which at a minimum, aligns with current evidence and scientific practice and the Government has a responsibility to protect peoples from the risks associated with the use of solarium. For this reason, the Cancer Society supports a total ban on the use of solarium for cosmetic purposes in New Zealand.

#### Summary of Recommendation

The Health (Protection) Amendment bill 2014 changed so that the:

- 1) Use of commercial solarium for cosmetic purposes is banned in New Zealand

Skin cancer is New Zealand's most common cancer. Over 300 people each year die from melanoma - the most serious type, which is higher than the road toll. Non-melanoma skin cancer is not registered on the cancer registry but an estimate from 2009 using 1998 data suggests that it costs New Zealanders \$123 million per annum with 67,000 cases per year.<sup>1</sup>

Many people think that using solarium is a safe way to tan however there is no evidence to support this view. On the contrary, there is evidence that the use of solarium increases the risk of melanoma. The risk attributable to solarium use in melanoma patients younger than 30 years old may be as high as 43 - 76 percent<sup>2</sup>. All forms of UV radiation can contribute to skin cancer and a solarium tan is caused by UV radiation. In fact, solarium usually emit much higher concentrations of UV radiation than the sun, often around three times as strong as the midday summer sun. Tierney et al., found that nine out of 10 sunbeds surveyed emitted exposure six times higher than the sun<sup>3</sup>. Gies et al., also found that measurements taken at tanning establishments to assist the development of the Australian/New Zealand standard on solarium had emissions that exceeded intensity of UV Index 12<sup>4</sup>.

The association between exposure to UV radiation from sunlight and skin cancer has been well established by epidemiological and clinical research for many years<sup>5</sup>. The use of solarium significantly increases the risk of melanoma and squamous cell carcinomas particularly for young people. The most recent evidence indicates there is in fact no safe level of solarium use<sup>6</sup>. Wehner et al., found that indoor tanning was a strong risk factor for early-onset basal cell carcinomas and recommends sunbeds need to be targeted by both policy-based and behavioural interventions<sup>6</sup>.

The International Agency for Research on Cancer (IARC), the cancer division of the World Health Organisation, have classified solarium as "carcinogenic to humans" - and in the agency's highest cancer risk category, which also includes tobacco, asbestos and arsenic. In an analysis of over 20 epidemiological studies, IARC concluded that the risk of melanoma is increased by 59 percent when the use of solarium starts before the age of 35. Overall the use of solarium boosts the risk of melanoma, the deadliest form of skin cancer

by 20 percent<sup>7</sup>. Use of cosmetic solarium is also associated with increased melanoma of the eye.

We can look to Australian studies to provide further evidence. Gordon et al (2008) estimated that annually in Australia 281 new melanoma cases, 43 melanoma related deaths (in younger people) and 2,572 new cases of squamous cell carcinomas could be attributed to solarium use. Health care costs for treating these cancers is calculated to be approximately \$3 million<sup>8</sup>.

Most recently, Cust et al (2010) reported the results from the Australian Melanoma Family study that sought to assess whether the use of solarium in adolescence and early adulthood increased the risk of early onset melanoma. The study also sought to assess whether frequency of the use of solarium affected melanoma risk<sup>9</sup>. The association was stronger for earlier use. The association was also stronger for melanoma diagnosed when the person was 18-29 years of age than for those diagnosed when 30-39 years of age. Among those who had ever used a solarium and were diagnosed between 18 and 29 years of age, three quarters of melanomas were attributed to solarium use.

The World Health Organization advises governments to enact legislation/regulations to control the operation and use of solarium<sup>10</sup>. In contrast to many other countries, New Zealand does not currently require training for people who operate solarium or work in tanning centres. Nor is equipment regulated. So when a person uses a solarium they have no way of knowing if the equipment is safe or if the operator is using the equipment safely.

The current Australia / New Zealand Standard for the solarium industry (AS/NZ2635:2008) is voluntary, which means it is not mandatory for solarium operators to abide by it<sup>11</sup>.

The Standard advises operators to:

- Ban people under 18 years from using a solarium
- Ban people with fair skin that easily burns from using the solarium
- Display a warning notice in the foyer
- Provide a consent form for customers to read and sign – outlining the risks of solarium use
- Complete a skin assessment of all customers
- Train staff in carrying out skin checks and implementing the Standard
- Not promote a solarium as a ‘safe’ or ‘healthy’ way to tan, or as providing any health benefits
- Provide protective eye goggles
- Maintain strict hygiene and maintenance controls.

The Minister of Health instructed Public Health Units (PHUs) to check for compliance to the standard and educate operators after a number of Consumer reports were published suggesting both compliance and education was low. The PHUs found compliance with the voluntary standard is very low<sup>12</sup>. In particular, those recommendations with the greatest

potential for minimizing harm such as enforcing age and skin type restrictions and discussing safety procedures with clients were not being applied.

On the 1<sup>st</sup> July 2014 the Auckland City Council (ACC) introduced a by-law to ban under 18 year olds from using solarium and regulates the operators. The Cancer Society commends ACC and would like to point out that this bill will not do anything further to protect 1/3 of New Zealand's population who fall under this geographical area. We further consider it should be the Government's responsibility to protect all New Zealanders from the danger of solarium.

Reasons for recommending a ban on commercial solarium for cosmetic purposes rather than just the proposed ban for under 18s include:

- Exposure to this form of artificial UV radiation occurs in a commercial environment where government can easily intervene.
- New Zealanders are already exposed to high levels of UV radiation from the sun and we have the highest rate of melanoma and other skin cancers in the world.
- Compliance to the voluntary standard by operators is low
- Cancer Council Australia, the Cancer Society of New Zealand, the New Zealand Dermatological Society Inc and the Australasian College of Dermatologists do not recommend the use of solariums for cosmetic purposes or to boost vitamin D levels.
- There is no evidence to show that solarium for cosmetic purposes offers any health benefits to individuals or the community.
- The solarium industry arguments that tanning in solarium is safer or a more controlled way for people to obtain a tan are not valid. Exposure to UV radiation has been proven to be harmful and there is no such thing as a 'safe tan'.
- Proposed amendments to exclude people under the prescribed age from accessing solarium will be hard to enforce.
- The evidence does not support a ban for only under 18s, it shows that those under 35 are at high risk.

In Australia total bans of solarium have come in to force on the 1<sup>st</sup> January 2015 by the New South Wales, South Australian, Victorian, Western Australian, Tasmanian, ACT and Queensland State and Territory Governments. The Cancer Society of New Zealand would like to see the New Zealand Government implement the same ban to protect all New Zealanders.

## References

1. O'Dea D. The Costs of Skin Cancer to New Zealand. In: A report to the Cancer Society. 2009.
2. Dore J.F and Chignol M.C. Tanning salons and skin cancer. *Photochemical and Photobiological Sciences* 2012, 11 (1):30-37.
3. Tierney P et al., Nine out of ten sunbeds in England emit ultraviolet radiation levels that exceed current safety limits. *British Journal of Dermatology* 168 (3) 602-608.
4. Gies P. et al., UVR emissions from solarium in Australia and implications for the regulation process. *Photochemistry and Photobiology* 87 (1) 184-190.
5. Autier P. Issues about solarium. In: In D.Hill et al (eds), editor. *Prevention of Skin Cancer*. Dordrecht, The Netherlands: Kluwer Academic Publishers: 2004 p 157-76.
6. Wehner M. R. et al., Indoor tanning and non-melanoma skin cancer: systematic review and meta-analysis. *BMJ* 345: e5909.
7. International Agency for Research on Cancer Monograph Working Group (2009). Special report: Policy. A review of human carcinogens - Part D: radiation. *Lancet Oncology* online. Vol 10.
8. Gordon LG, Hirst NG et al. What impact would effective solarium regulation have in Australia? *Med J Aust* 2008; 189:375-8.
9. Cust AE, Armstrong BK, et al. Sunbed use during adulthood is associated with early onset melanoma. *Int J Cancer* 2010.
10. World Health Organisation (2003). Artificial tanning sunbeds: risk and guidance. Geneva: WHO. [www.who.int/uv/publications/en/sunbeds.pdf](http://www.who.int/uv/publications/en/sunbeds.pdf)
11. Refer standards New Zealand, Wellington. [www.standards.org.nz](http://www.standards.org.nz)
12. Refer Consumer NZ. [www.consumer.org.nz/reports/sunbeds](http://www.consumer.org.nz/reports/sunbeds)