

Regulatory Impact Statement

Reducing public harm from devices that artificially tan the skin through the use of UV light

Agency Disclosure Statement

This Regulatory Impact Statement (RIS) has been prepared by the Ministry of Health. It was developed to inform policy decisions on whether to introduce new controls on sunbeds and other UV emitting devices ('artificial UV tanning devices') used for artificially tanning skin.

Concerns about the safety of artificial UV tanning devices are based on a mix of quantitative data and anecdotal evidence, which is summarised below. There is little data about the size of the problem (in terms of number of people, including young people and those with high risk skin types, accessing sunbeds). However, despite this officials consider there is sufficient justification for intervention, particularly in respect of controls to protect young people from exposure to artificial UV tanning devices. There is no data on private ownership and use of artificial UV tanning devices, or the rental or shared use of those devices by others (e.g., individuals allowing family members or friends to use their own privately-owned devices). The potential for this to undermine controls on supply of artificial UV tanning services to those aged under 18 years is uncertain.

A ban on providing commercial artificial UV tanning services to those aged under 18 years will potentially impose costs on businesses that import, manufacture or sell artificial UV tanning devices, and those businesses that provide artificial UV tanning services to members of the public for cosmetic purposes. These costs are not considered to be high. Consultation on this matter has been targeted, rather than widespread, and there may be impacts that have not been identified or quantified.

It is noted that there has not been time to consult with young people, parents, health professional organisations or more widely with industry (beyond a targeted engagement with a small number of solarium operators) about the proposal to ban the supply of artificial UV tanning devices to those aged under 18 years. Their views are therefore not reflected in this RIS.

Sally Gilbert, Manager, Environmental and Border Health, September 2013.

1. Status quo and problem definition

Definitions and scope of this RIS

1. Some people use artificial UV tanning devices to tan or darken their skin. These may comprise either beds (sunbeds) on which people lie, with ultra-violet (UV) emitting lamps above and below, or cubicles in which they stand surrounded by UV lamps. There are also other devices such as sun lamps that people stand in front of or angle over their skin. An *artificial UV tanning device* is defined, therefore, as any device with a UV lamp intended for artificial tanning.¹ For the purposes of this RIS, the terms *solarium* and *solaria* will be used to refer to establishment(s) that offer the commercial use of artificial UV tanning devices.
2. Artificial UV tanning services are provided either on a commercial basis, where people pay to use a solarium's artificial UV tanning devices, or on a private basis, for example, where people use sunbeds in their or another person's own home. If an artificial UV tanning device that is privately owned is occasionally used by others in exchange for financial or other return, then this is considered to be operating on a commercial basis for the purpose of this RIS. Note that spray-on tans are not the subject of this RIS and are considered a safe alternative to UV tanning. The chemical composition of spray tans is regulated by the Environmental Protection Authority.
3. The focus of this RIS is on reducing the risks from artificial UV tanning devices. Interventions for discouraging excessive exposure to UV from the sun are well developed. These comprise substantive education and public awareness programmes run by the Government, the Cancer Society and other agencies in a wide range of settings (including schools), and through a variety of media including television, print and radio, particularly during summer. Territorial authorities, schools and other agencies are active in providing environmental protection from the sun through sun shading and other approaches to urban design. These interventions are under constant review.

Status Quo

Solaria operators

4. The exact number of solaria in New Zealand is not known, as solaria are not registered. However, in its 2011 survey of solaria, Consumer New Zealand identified 260 businesses advertising artificial UV tanning services in Yellow Pages directories and online, a decrease from 301 businesses identified in 2010.
5. In 2012, the Ministry of Health asked public health units (PHUs) of District Health Boards to visit solaria in their districts to educate solarium operators on measures they could take to reduce health risks from the use of UV tanning devices. In some cases PHUs collected data on numbers of premises and their operational practices. Auckland Regional Public Health Service, for example reported on 39 solaria in their district, with a total of 89 artificial UV tanning devices on site.² A survey by Regional Public Health in Wellington found that there were 23 known premises operating artificial UV tanning services. It would appear from these and other PHUs that the majority of solaria (78 percent in Auckland) are premises that operate only one or two artificial UV tanning devices, generally sports, fitness and beauty/spa operations. For these premises, artificial UV tanning comprises part of their operations, but in most cases, not the most significant aspect of the business.

¹ Other types of light-emitting devices sometimes used for cosmetic purposes, but which do not emit UV, such as intense pulsed light and laser devices, are not considered here because the nature of any risks they might pose is different, and not so well defined. They are the subject of separate policy work by the Ministry of Health around future controls.

² One other premises may be being operated as a solarium but could not be contacted.

6. The summary report on public health units' 2012 visits to solarium notes that the numbers of solarium operators in some districts were reported to have decreased significantly in recent years, and more were planning to stop offering these services in the near future. Those ceasing operation tend to be those with UV tanning as only one service among many. In Auckland, for example, 73 operators were recorded in 2009, whereas in 2012 there were only 39. Many public health units commented that some existing operators were also planning to stop offering use of artificial UV tanning devices. Reasons given included low revenue, cost of maintenance, the space they take up and difficulties complying with the (voluntary) joint Australia/New Zealand Standard (see paras 9-10 below). A few public health units reported that sunbeds from operators who had ceased offering artificial UV tanning services were ending up for sale on TradeMe, which may be shifting the problem elsewhere (possibly to people operating artificial UV tanning services from private homes).
7. Solarium operators have a voluntary industry organisation, the Indoor Tanning Association of New Zealand (INTANZ). INTANZ describes itself as a not-for-profit incorporated society aiming to protect individuals' freedom to tan, promote beneficial, moderate tanning by educating the public, raise the standard of practice within the indoor tanning industry, work with organisations to achieve these aims, and counter negative information about indoor tanning. INTANZ promotes responsible practices among operators and has a Code of Practice for members. The Ministry understands that the majority of businesses which offer artificial UV tanning services are not members of INTANZ.
8. Several businesses rent artificial UV tanning devices for use in private homes. There are also New Zealand based companies that import and manufacture artificial UV tanning devices. The exact number of these is not known but based on listings on the internet, they are thought to number less than ten.

Recommended best practice for solarium operation

9. The joint Australia/New Zealand Standard AS/NZS 2635:2008 *Solaria for cosmetic purposes* (the joint Standard) is a voluntary standard and not legally enforceable. It provides guidance on reducing risks from artificial UV tanning devices but individual solarium operators make their own decision about whether to comply with it.
10. The joint Standard, supported by guidance issued by the Ministry of Health and actively promoted to solarium by DHBs, recommends the following practices for solarium operation:
 - displaying warning notices on risks of UV exposure, high risk individuals, and the requirement to wear goggles, etc;
 - limiting UV dose rates and the UV content of sunbed lamps;
 - not making health claims about sunbed use;
 - undertaking skin type assessments by operators;
 - securing informed consent from clients;
 - excluding high risk clients, including those aged under 18 years;
 - requiring all clients to use eye protection;
 - certain hygienic practices;
 - requiring 48 hours between sessions;
 - keeping client records;
 - using timers to control time on the sunbed; and
 - training staff on how to reduce risks from sunbed use.

Regulatory controls on solaria

11. Solaria in New Zealand are not explicitly licensed or otherwise regulated.
12. There are no regulatory controls relating to the importation, manufacture or sale of artificial UV tanning devices beyond electrical safety requirements for artificial UV tanning equipment.³
13. New Zealand has no legal requirement that people operating solaria are trained, nor are artificial UV tanning devices or their use regulated. There are general obligations under the Health and Safety in Employment Act 1992 around the prevention and mitigation of harms in the work place for both staff and visitors. New Zealand relies on solaria complying with recommended best practice as outlined in the joint Standard discussed above. Solarium operators need to be able to prove that they are taking all practicable steps to eliminate, isolate or manage any hazards in the workplace to protect staff and others (including clients) in that place of work.
14. There are also duty of care obligations that businesses must meet under consumer affairs legislation such as the Fair Trading Act 1986 and the Consumer Guarantees Act 1993. These obligations apply to solaria as they do to any other business.
15. The making of misleading health claims or other deceptive practices is covered under the Fair Trading Act 1986.

Education efforts

Education to improve operator compliance

16. As there appeared to be a lack of understanding among operators and the public of the health risks relating to artificial UV tanning devices, in 2007, the former Minister of Health directed the Ministry of Health to raise awareness among solarium operators of the risks and the need for compliance with the joint Standard. District Health Board PHUs have accordingly been raising awareness of the joint Standard with solarium operators in their regions from 1 July 2008. This is done through visits and surveys.
17. In 2010 and 2011, Health officials contracted Consumer New Zealand to survey solarium operators' compliance with the joint Standard, including where they obtained their advice. In its survey Consumer New Zealand asked whether solarium operators were aware of the joint Standard and/or the National Radiation Laboratory's guidelines. By 2012, 90 percent of respondents had heard of the joint Standard, compared with 75 percent in 2010. The response rate to the Consumer New Zealand survey was low (38 percent) so these findings may not be representative.
18. Despite 95 percent of operators responding to the Consumer New Zealand survey indicating that they have received information about safe practices, the low level of compliance with the guidance given (17-18 percent in the last two surveys – see para 44 below) suggests that this education of operators is not securing compliance.

Education of consumers

19. In 2007, significant media publicity was given to a young Australian woman dying of melanoma attributed to sunbed usage. The findings from each of the Consumer New Zealand surveys have also received media attention, particularly the poor operator compliance with best practice. The Cancer Society has consistently stated in the media that sunbeds cause skin cancer and that people should not use them.

³ AS/NZS 60335.2.27:2010: Household and similar electrical appliances - Safety - General requirements (IEC 60335-1 Ed 5, MOD)

20. There is, however, no published data on population groups who use solaria in New Zealand, or how effective public health messages are in raising awareness of the risks from using solaria. The number of solaria advertising online or in the Yellow Pages is slowly reducing. This may be in part because consumers are choosing not to use solaria or to use spray tanning instead, but there is no research on this.
21. There has also been no government-organised or funded media campaign or education in schools or other settings against the use of artificial UV tanning devices (whether commercially operated, or privately owned and operated). In part, this is because of fears that such campaigns could, at least for some young people, potentially increase interest and use, and because agencies like the Cancer Society have been proactive in warning about the dangers of sunbed use.

Members Bill

22. Dr Paul Hutchison, MP, has developed a private members bill that if enacted would enable the Director-General of Health to introduce mandatory standards relating to the operation of solaria, laser devices and pulsed light devices. This Bill has not yet been balloted.

Problem definition

Summary

23. Health risks from exposure to artificial UV tanning devices comprise:
 - Increased skin cancers, including melanomas, with a heightened risk for those aged under 35 years
 - Burns to skin and eyes
 - Ageing of the skin
 - Photosensitivity reactions in the skin of those with photosensitive skin.
24. The Ministry of Health has been concerned for some time about the use of artificial UV tanning devices in New Zealand, given the clear evidence that they pose a significant risk of increased skin cancer to users. The World Health Organization advises strongly against artificial UV exposure for cosmetic purposes and both the World Health Organization and the International Agency for Research on Cancer have encouraged governments to regulate sunbed use.
25. In New Zealand, despite considerable education efforts, compliance by solarium operators with the joint Australia/New Zealand Standard AS/NZS 2635:2008 *Solaria for cosmetic purposes*, which sets out a range of operational practices for solarium operators to apply to reduce health risks from their operations, is inconsistent.

Skin cancer in New Zealand

26. Skin cancer is by far the most common cancer affecting New Zealanders. A 2009 report by the Cancer Society⁴ notes there were 18,610 new cancer registrations in 2005. Of those, 2,017 were 'malignant melanoma of skin'. Non-melanoma skin cancers are not registered. If an estimated 67,000 new non-melanoma skin cancers per year are added, new skin cancer cases each year would total about 69,000 and would account for just over 80 percent of all new cancers each year. There were 269 deaths from malignant melanoma of the skin in 2005, representing 3.4 percent of total cancer deaths.⁵ Cancer Registry data from 1996 to 2001 suggests that people of European descent had a significantly higher incidence of skin cancer than those of other ethnicities. For example, the incidence rate was over eight times higher than that of Māori. Pacific Islanders and Asians are also less prone to skin cancer than people of European descent.

⁴ [http://sunsmart.org.nz/sites/default/files/u48/CostsofSkinCancer_NZ_22October2009\(1\).pdf](http://sunsmart.org.nz/sites/default/files/u48/CostsofSkinCancer_NZ_22October2009(1).pdf)

⁵ <http://www.health.govt.nz/publication/mortality-and-demographic-data-2005>

Costs of skin cancer to New Zealand

27. In 2009, the Cancer Society estimated that skin cancer (melanoma and other skin cancers) costs the New Zealand health system about \$57 million a year.⁶ In addition, lost productivity was estimated to cost \$66 million a year. If the estimated 4,741 years of life lost were valued at a very low \$20,000 a year, this would imply a loss approaching \$95 million a year. Additional costs are the personal costs borne by people with skin cancer, including travel and accommodation to receive treatment, non-medical costs during illness, and preventive purchases such as sunscreen and protective clothing. Intangible costs include stress and loss of enjoyment of life, as well as premature death. Around \$2 million a year is spent by nongovernment organisations on preventive measures. In total, this gives an estimated cost for skin cancer of \$220 million a year, not including personal preventive measures and intangible costs.
28. A 2012 research paper⁷ estimated that in Europe, use of artificial UV tanning devices could be responsible for 5.4 percent of melanoma cases. Australian data suggests that 3.2 percent of melanomas (281 out of 8682), and 3.5 percent of melanoma-related deaths (43 out of 1216) could be attributed to sunbeds⁸.
29. The New South Wales (NSW) Environment Protection Authority recently developed a RIS when NSW was consulting on its (subsequently adopted) ban on commercial artificial UV tanning services.⁹ The RIS reported that in 2008, a total of 3591 people in NSW were diagnosed with melanoma, 489 of whom died because of the disease.¹⁰ The NSW Cancer Institute estimates that in NSW solarium are responsible for approximately 120 melanomas per year, including an average of 10.45 fatal cases, and these could be avoided if solarium use was banned.¹¹ Based on the average cost of treating a melanoma patient of A\$5363 and a conservative estimate of the value of a statistical life of A\$3.5 million, the present value of the benefits from banning solarium in NSW was estimated at A\$46.1 million over five years.
30. The NSW RIS estimates of avoided health costs from a ban on commercial artificial UV tanning services in NSW are presented in table 1 below. The RIS assumes the ban would come into force in 2014 and it takes approximately 2 years (after exposure) for a melanoma to be diagnosed and the health costs not to be incurred (i.e. in 2016). The NSW RIS notes that the benefits of such a ban (avoided health costs) would largely fall outside the five year scope of the RIS and were not valued.

Table 1: Avoided health costs (A\$Million)¹²

| | 2012 | 2013 | 2014 | 2015 | 2016 |
|------------------|-------|-------|-------|-------|--------|
| Morbidity | \$0.1 | \$0.1 | \$0.1 | \$0.1 | \$0.64 |
| Mortality | \$5.7 | \$5.7 | \$5.7 | \$5.7 | \$36.6 |

⁶ O’Dea, D. The Costs of Skin Cancer to New Zealand. A report to The Cancer Society of New Zealand. October 2009. Wellington School of Medicine, University of Otago. Available online at:

[http://sunsmart.org.nz/sites/default/files/u48/CostsofSkinCancer_NZ_22October2009\(1\).pdf](http://sunsmart.org.nz/sites/default/files/u48/CostsofSkinCancer_NZ_22October2009(1).pdf)

⁷ Boniol et al. Cutaneous melanoma attributable to sunbed use: systematic review and meta-analysis. British Medical Journal, July 2012. Available online at www.ncbi.nlm.nih.gov/pmc/articles/PMC3404185/

⁸ Gordon et al. What impact would effective solarium regulation have in Australia? Medical Journal of Australia (2008) 189:375 – 378.

⁹ EPA NSW. Regulatory Impact Statement: Proposed Radiation Control Regulation 2012. Sydney: NSW EPA. Available online at: <http://www.environment.nsw.gov.au/resources/radiation/20120469risradiatcontreg.pdf>

¹⁰ Tracey, E, Ling, L, Baker, D, Dobrovic, A & Bishop, J 2009, Cancer in New South Wales: Incidence and mortality 2007, Cancer Institute NSW, Sydney,

www.cancerinstitute.org.au/cancer_inst/publications/CIM2007/Cancer_in_NSW_IM_2007-0-full_report.pdf, as reported in: EPA NSW. Regulatory Impact Statement: Proposed Radiation Control Regulation 2012. Sydney: NSW EPA. Available online at: <http://www.environment.nsw.gov.au/resources/radiation/20120469risradiatcontreg.pdf>

¹¹ As reported in: EPA NSW. Regulatory Impact Statement: Proposed Radiation Control Regulation 2012. Sydney: NSW EPA. Available online at: <http://www.environment.nsw.gov.au/resources/radiation/20120469risradiatcontreg.pdf>

¹² EPA NSW. Regulatory Impact Statement: Proposed Radiation Control Regulation 2012. Sydney: NSW EPA. Available online at: <http://www.environment.nsw.gov.au/resources/radiation/20120469risradiatcontreg.pdf>

Health risks from the use of artificial UV tanning devices

31. There is strong evidence and international consensus that people who use artificial UV tanning devices increase their risk of melanoma and other more common skin cancers.
32. UV rays from artificial UV tanning devices can be up to 3-4 times more intense than those of the summer midday sun. Manufacturers of artificial UV tanning devices usually claim that their products produce mainly ultraviolet A (UVA), while the sun produces both UVA and the more biologically active UVB, implying sunbeds, for example, are 'safer' than sunlight. However, the more a person is exposed to ultraviolet radiation, the greater the risk of developing skin cancer. In addition, UVA penetrates the top layer of the skin and causes damage to the lower layer. Data on long-term exposure to UVA now shows an increased risk of both squamous cell carcinoma and melanoma.
33. There are also known incidents of immediate burning and blistering from gross overexposure to UV rays in a single session on a sunbed. Records of such cases are not formally recorded however, so the frequency and severity of such burns are not known.
34. Some solarium operators claim that artificial UV tanning device exposure can be beneficial for Vitamin D production. A joint consensus statement on this from the Ministry of Health and the Cancer Society does not support artificial UV tanning as the answer to Vitamin D deficiency. Evidence also stresses that required UV doses are much lower than those normally offered by a solarium.^{13,14}
35. There are some instances where the use of sunbeds may be suggested for medical purposes. However, the World Health Organization has stated: "Only in very rare and specific cases should the medically-supervised use of sunbeds be considered. Medical UV devices successfully treat certain skin conditions such as dermatitis and psoriasis. These treatments should only be conducted under qualified medical supervision in an approved medical clinic and not unsupervised either in commercial artificial UV tanning premises or at home using a domestic sunbed"¹⁵.

Magnitude of the problem

36. Numerous studies have found increased risks of skin cancers associated with use of artificial UV tanning devices, and some have focussed on the specific impacts on young people.
37. In 2012, a systematic review and meta-analysis of 27 studies investigated the relationship between sunbed use and melanoma.¹⁶ This found:
 - that having ever used a sunbed was associated with an increased risk of melanoma;
 - a slightly higher risk was reported by studies which accounted for confounding factors related to sun exposure and sun sensitivity;
 - using a sunbed before the age of 35 almost doubled the risk of melanoma compared with people who never used sunbeds; and
 - each additional session of sunbed use per year was estimated to increase the risk of melanoma by 1.8 percent.

¹³ See: <http://www.health.govt.nz/publication/consensus-statement-vitamin-d-and-sun-exposure-new-zealand>

¹⁴ McKenzie et al. Sunburn versus Vitamin D induced by UV from solarium and sunlight in New Zealand. *Weather and Climate* 32 (1), 51-65, 2012

¹⁵ See: <http://www.who.int/mediacentre/factsheets/fs287/en/>

¹⁶ Boniol et al. Cutaneous melanoma attributable to sunbed use: systematic review and meta-analysis. *BMJ* 2012;345:e4757 doi: 10.1136/bmj.e4757

38. The authors estimated that 5.4 percent of European melanoma cases could be attributed to sunbed use.
39. There is some further evidence that children and adolescents are more sensitive to UV (from any source). For example, studies have looked at melanoma risks in migrants to countries such as Australia and New Zealand, compared to people who were born there. People born in Australia and New Zealand have a higher incidence of melanoma compared to people who moved there as adults from countries with lower ambient UV (for example, the United Kingdom), indicating that UV exposure in childhood is an important factor for melanoma risk.¹⁷

International Agency for Research on Cancer

40. In 1992, an International Agency for Research on Cancer (IARC) Working Group concluded that:
 - there was a clear increase in melanoma risk associated with the use of sunbeds by teens and people in their twenties;
 - there was an increase in risk of SCC of the skin associated with the use of sunbeds in teens;
 - the skin’s immune response is affected by use of sunbeds; and
 - there are no positive health effects from the use of sunbeds.
41. The Working Group concluded that effective action should be considered to restrict minors and young adults from accessing artificial UV tanning devices.
42. In a 2009 update¹⁸, IARC reaffirmed the carcinogenicity of solar radiation, and the use of UV-emitting tanning devices was classified as ‘carcinogenic to humans’.

Concerns about the operation of solarium in New Zealand

Lack of compliance with the voluntary joint Australia/New Zealand Standard

43. Consumer New Zealand (formerly the Consumers Institute) surveyed solarium in 2005 and 2006 for compliance with clauses in the joint Standard relating to: not providing artificial UV tanning services to those aged under 18 years, skin assessment, provision of eye protection, use of a consent form, timing of any follow-up session, and use of warning notices. In 2010 and 2011, the Ministry of Health commissioned Consumer New Zealand to undertake more extensive surveys, including ‘mystery shopper’ surveys in all main centres, and a postal survey of all solarium that could be identified.
44. Overall, these surveys have found only marginal improvements in compliance over time. In 2012, for example, only 15 percent of the operators surveyed refused sessions to someone with Type 1 skin. Of the operators who allowed the sessions to go ahead, only 17 percent met all the other requirements checked.

Table 1: Results of Consumer New Zealand surveys

| Year | Operators Visited | How many complied? |
|------|-------------------|--------------------|
| 2005 | 30 | 2 (7%) |
| 2006 | 22 | 1 (5%) |
| 2010 | 69 | 7 (10%) |
| 2011 | 66 | 11 (17%) |
| 2012 | 20 | 3 (15%) |

¹⁷ Studies, reported in Longstreth, J. D., ed. 1987. Ultraviolet radiation and melanoma-with a special focus on assessing the risks of stratospheric ozone depletion. Vol. 4, Appendix A of *Assessing the risk of trace gases that can modify the stratosphere*. Washington, D.C.: U.S. Environmental Protection Agency. Available at: <http://www.ciesin.org/docs/001-545/001-545-C7.html>

¹⁸ IARC. A review of human carcinogens-Part D: Radiation. *The Lancet Oncology* (2009) 10:751-752

45. In 2012, public health units of the District Health Boards were asked by the Ministry of Health to visit solaria to raise operators' awareness of best practice requirements for operating solaria to minimise risks. Public health units visited 144 establishments across the country. Although assessing compliance with the voluntary Australia/New Zealand Standard was not specifically requested, many of the public health units also checked compliance with key requirements (such as refusing sessions to high risk individuals, using consent forms, etc.). The results suggest that compliance with recommended practice for minimising UV exposure risks was generally mediocre. Table 2 presents the results, but note that there are significant uncertainties and caveats around the interpretation of this data (see footnote).

Table 2: Results of 2012 public health unit compliance checks, compared with Consumer NZ survey results

| Compliance area | % fully compliant PHUs 2012 ¹⁹ | % compliant 2011 Consumer NZ | % compliant 2012 Consumer NZ |
|---|---|------------------------------|------------------------------|
| Staff training | 29 | | |
| No health claims | 61 | | |
| Warning signs | 32 | 25 | 47 |
| Skin assessment | 38 | 35 | |
| Exclude high risk clients (including U18 year olds) | 31 | | 15 |
| Consent form | 51 | 38 | 47 |
| Records kept two years | 44 | | |
| Eye protection | 89 | 85 | 100 |
| 48 hours between sessions | 40 | 75 | 65 |

46. In 2011 the Commerce Commission cautioned the industry under the Fair Trading Act 1986 about overstating the benefits of sunbed use and understating the risks following a complaint from Consumer New Zealand and the Cancer Society. The Commission put sunbed operators and distributors on notice about the practice of making false or misleading claims about the health benefits and risks of sunbed use.

Concerns of health professionals and agencies

47. In a December 2011 media release discussing the latest survey results from their mystery shopper visits to solaria, Consumer New Zealand chief executive Sue Chetwin said, *"Enough is enough, sunbed operators aren't complying with the voluntary Standard, and it's time to make that Standard compulsory and to licence all operators."*
48. Since 2003, the World Health Organization has been advising strongly against artificial UV exposure for cosmetic purposes.²⁰ Because of the poor record of operators in self-regulation, the World Health Organization encourages governments to formulate and enforce effective laws governing the use of sunbeds, including banning use by those aged under 18 years.
49. The Australasian College of Dermatologists, the Cancer Council Australia, and the Cancer Society do not support cosmetic tanning in solaria under any circumstances.
50. The Melanoma Network of New Zealand (MelNet)²¹, describes itself as a network of professionals committed to reducing the incidence and impact of melanoma in New Zealand. It has called for the Government to regulate the indoor tanning industry.

¹⁹ Note: The numbers presented should be treated cautiously. For example, while some PHUs systematically presented information on compliance with a fixed set of requirements, others were not so systematic. In that situation, if compliance or non-compliance with a requirement was mentioned for one establishment but not another, it is not clear whether that is because it was not checked, or because compliance or non-compliance should be assumed. In addition, some PHUs graded compliance on a three-point scale, ranging from none to partial to full compliance. For those reports, only full compliance scores have been counted in the analysis presented here. Because of these limitations, the results presented here should be taken as indicative only and not considered as authoritative data on the degree of compliance in New Zealand.

²⁰ See <http://www.who.int/mediacentre/factsheets/fs287/en/>

²¹ See <http://www.melanoma.org.nz/MelNet/>

MelNet's position is that the existing voluntary Standard for sunbeds must become mandatory, especially to protect young people from the harm of sunbed use. MelNet states that its position is supported by other leading organisations, including the New Zealand Nurses Organisation, New Zealand College of Public Health Medicine, Nurse Education in the Tertiary Sector, New Zealand Association of Plastic Surgeons, The Paediatric Society of New Zealand, General Practice NZ, The Royal New Zealand College of General Practitioners, and the New Zealand College of Appearance Medicine.

51. At the National Melanoma Summit on 11 March 2011, a call for regulation was initiated by the Cancer Society of New Zealand, Cancer Society Social and Behavioural Unit, University of Otago, Consumer New Zealand, Melanoma Foundation of New Zealand, New Zealand Dermatological Society Incorporated, and MelNet. It was unanimously endorsed by the 200 health professionals who participated in the Summit.²²

Privately-owned artificial UV tanning devices

52. There is no data on private ownership and use of artificial UV tanning devices or the shared use of those devices by others (for example, individuals allowing family members or friends to use their own privately-owned devices). Further, there are no interventions targeting these persons with information and advice on safe use, other than information that may (or may not) be provided at the time of purchase of the device.
53. There are several businesses offering rental of artificial UV tanning devices for use in the private home. The scale of use of these devices is unknown.

Objectives

54. Ministry of Health officials developed objectives against which policy options could be assessed.
55. The primary objective of the policy proposal is to help reduce the risks to the public, particularly young people, from harm from devices that artificially tan skin through the use of UV light.
56. Any new controls or interventions for this purpose need to:
 - be risk- and evidence-based, and consistent with good international practice;
 - be appropriate to protect health and safety, while still enabling the use of medical UV devices for the treatment of certain skin conditions under qualified medical supervision in approved medical clinics;
 - not impose any unnecessary or unjustified compliance costs, or unnecessarily restrict access to services desired by well-informed adults, unless there is good reason.

Identification of policy options

Non-regulatory options

Option 1: Maintaining the status quo: voluntary compliance

57. Under the status quo, there would be no regulatory controls introduced on the use of commercial artificial UV tanning devices beyond the current general consumer protection and health and safety laws as discussed above. People could also purchase their own, or rent, artificial UV tanning devices for their private use and legally offer those for use by others.

²² See: <http://www.melanoma.org.nz/MelNet/News/Call-for-sunbed-regulation/>

58. The Ministry of Health, and public health units, have undertaken extensive efforts to promote solarium operators' compliance with the voluntary joint Standard and related guidance produced by the National Radiation Laboratory. There has also been education of consumers about the risk of artificial UV tanning devices. Officials would continue with this work.

Assessment of Option 1

59. This option would have the least impact on Government to implement and enforce, does not impact on importers, manufacturers, sellers or renters of artificial UV tanning devices, or providers of solarium services (unless they choose to comply with the joint Standard), and would not interfere with the rights of consumers to purchase or use solarium services.

60. Table 2 summarises how Option 1 aligns with the objectives set out in paras 55-56 of this RIS.

Table 2: Summary of assessment of Option 1 against stated objectives

| Objective | Level of alignment with policy objectives |
|--|---|
| Helps reduce the risks to the public, particularly young people, from harm from devices that artificially tan skin through the use of UV light | Status quo has not been effective in encouraging industry compliance with best practice guidance, including the protection of high risk individuals (such as those under 18 years of age). This is demonstrated by Consumer New Zealand and public health unit surveys. Harms experienced would continue. |
| Option is risk- and evidence based, and consistent with good international practice | Status quo does not address the significant risks associated with artificial UV tanning, especially the high risks of artificial UV tanning by young people. The option is inconsistent with recommendations by the World Health Organization and IARC to regulate the provision of solarium services. International best practice for regulation of solarium services includes age limits and a range of other controls on access to artificial UV tanning and good operating practices. |
| Be appropriate to protect health and safety, while still enabling the use of medical UV devices for the treatment of certain skin conditions under qualified medical supervision in approved medical clinics | Option does not interfere with medical treatment options. The option does not advance public health and safety in any meaningful way. |
| Not impose any unnecessary or unjustified compliance costs, or unnecessarily restrict access to services desired by well-informed adults, unless there is good reason. | Imposes no compliance costs, nor does it restrict access of adults (or young people) unless individual operators choose to do so. |

Option 2: Active campaign to discourage the use of tanning devices

61. Under this option, the Government would fund (on an ongoing basis) mass media campaigns, and potentially school-based programmes, against the use of artificial UV tanning devices. The campaign would specifically identify the dangers of sunbeds and other artificial UV tanning devices and would actively discourage the public's use of commercial or privately-owned artificial UV tanning devices. This campaign could also directly target businesses that provide solarium services, asking them to cease.

62. Table 3 summarises how Option 2 aligns with the objectives set out in paras 55-56 of this RIS. Further analysis is included below.

Table 3: Summary of assessment of Option 2 against stated objectives

| Objective | Level of alignment with policy objectives |
|--|---|
| Helps reduce the risks to the public, particularly young people, from harm from devices that artificially tan skin through the use of UV light | Option 2 would likely heighten awareness and could better inform the public, including young people, of the risks of using artificial UV tanning devices. It would also heighten awareness of the availability of artificial UV tanning services and could conceivably spark a perverse response, including increasing the appeal of artificial UV tanning. |

| Objective | Level of alignment with policy objectives |
|--|--|
| Option is risk- and evidence based, and consistent with good international practice | The option raises some risks around uncertainty of the public's behavioural response. It is not consistent with good international practice. Officials are not aware of any other country having taken such an approach. |
| Be appropriate to protect health and safety, while still enabling the use of medical UV devices for the treatment of certain skin conditions under qualified medical supervision in approved medical clinics | The option does not interfere with medical treatment options. This option will need consideration of the most effective ways to promote public health and safety as it will rely on consumers making informed choices to avoid solaria. |
| Not impose any unnecessary or unjustified compliance costs, or unnecessarily restrict access to services desired by well informed adults, unless there is good reason. | The option imposes no compliance costs, nor does it directly restrict access by adults (or young people) unless individual operators choose to do so. However, its goal is to actively drive customers away and if successful, the likelihood of which is uncertain, it would reduce business revenue. A benefit is that it would better inform the public of the health risks of tanning devices. |

Costs, benefits and risks

63. This option would undoubtedly improve public awareness of the risks of using artificial UV tanning devices. It could also leverage off other public campaigns and the way social norms are shifting in response to related campaigns and efforts around the dangers of UV exposure (e.g. slip, slop, slap). It would likely reduce use of the devices by both young people (via parental control) and adults. It would promote individual responsibility around healthy lifestyle choices and contribute to reducing information asymmetry in the market.
64. The development of a mass media campaign of this nature would therefore be relatively easy to develop and could draw on decades of experience in developing mass media campaigns promoting public health messages on such matters as moderate use of alcohol, tobacco use, healthy eating/healthy action and immunisation.
65. Campaigns of this nature have been undertaken against the tobacco industry overseas, and, to a lesser extent, in New Zealand by civil society groups. There is over 50 years of building (and now strong) public acceptance of tobacco use as being inherently harmful. However, there have still been no State-initiated media campaigns in New Zealand directly confronting the tobacco industry itself, although some campaigns have included elements focussing on the unethical conduct of the tobacco industry. A campaign against services provided by the solarium industry would suffer from an absence of past, strong public health campaigns about the health risks of artificial UV tanning devices and from a lack of public awareness or acceptance that there might be a need to confront the solarium industry directly due to its impacts on public health.
66. While it is possible that such a campaign might drive a number of solaria to cease providing solarium services, it is likely to be divisive, with the solarium industry undoubtedly strongly opposing such media campaigns. It is conceivable that an operator(s) could initiate legal action against the Government for loss of business. Such a campaign may also be seen by a portion of the public as heavy-handedness on the part of the State, and raise concerns among, and criticisms from, other industry groups of what industry 'will be next' for targeting.
67. While it could be argued that this option imposes no costs on operators of solaria because there is no regulation requiring them to exit the provision of services, public opposition may mean that some operators would likely feel pressured to cease operation anyway, meaning they would experience a reduction in business revenue. It is likely that others would remain in operation and would continue to meet any demand for commercial artificial UV tanning services, at least in the main centres.

68. While its likelihood is uncertain, there is potential for this option to increase awareness of the availability and purpose of use of artificial UV tanning devices and solarium services. This could conceivably lead to increased interest among some individuals to make use of these devices and services. In the absence of restrictions on the use of these services by those aged under 18 years, there is a theoretical risk of an increased uptake of use of artificial UV tanning devices and solarium services by young people. This cannot be estimated or verified.
69. The costs to Government would include designing and implementing media campaigns and other public awareness initiatives. Depending on the scale of such campaigns, and assuming that they would include television, radio, print and social initiatives, this could cost anything from \$500,000 (low impact campaign) to \$5,000,000 (moderate to high impact) per annum. Research would be required to identify key messages and test those with target audiences to determine whether campaign(s) could be initiated that would have the desired effects (as well as avoid undesired effects, as described above).

Potential regulatory options

Option 3: Amendments to the Health Act 1956 to ban the supply of solarium services to those aged under 18 years and introduce a set of controls on the provision of solarium services

70. Under this option, there are two sub-options. Option 3a would be the immediate response. Option 3b would be initiated, but its detail would not be confirmed or advanced until further consultation had taken place with industry and until further regulatory analysis is undertaken.

Option 3a: Ban the supply of solarium services to those aged under 18 years

71. Option 3a would ban the provision of solarium services to those aged under 18 years of age. The promotion of voluntary compliance with the joint Australian/New Zealand standard on the operation of solaria would continue.
72. A standalone amendment would be made to the Health Act 1956 to ban the provision of solarium services to those aged under 18 years. A maximum penalty of \$10,000 for a body corporate and \$2,000 for an individual would apply for any solarium operator convicted of providing artificial UV tanning services to a person aged under 18 years. The offence would also apply to persons who rent sunbeds or other artificial UV tanning devices to any person aged under 18 years (for the avoidance of doubt this would include both commercial operators and individuals renting out their privately owned sunbeds). The penalty chosen has been proposed to be consistent with penalties under Sale and Supply of Alcohol Act 2012 for sells or supplies alcohol to a person under the age of 18 years.
73. It would not be an offence for a person to allow a person aged under 18 years to use a sunbed or other artificial UV tanning device where there has been no payment or provision of any other form of consideration. Thus supply by, for example, a family member would not be prohibited. However, the existence of the ban on commercial provision of UV tanning services to people aged under 18 years will serve to emphasise the hazards of use and hopefully discourage such supply.
74. A suitable transition period to allow for education of operators on the amendment would be provided. The ban on providing UV tanning services to those aged under 18 years would be enforced by PHUs of DHBs.
75. *Note:* the making of regulations under the Health Act 1956 was considered as an alternative vehicle for this option. This was rejected as it was considered that given human rights implications, an age restriction was best dealt with under primary

legislation. Age restrictions in other areas, for example, tobacco, alcohol and gambling, are all dealt with in primary legislation.

Option 3b: Introduce mandatory controls on the operation of solaria

76. Option 3b would enable the Director-General of Health to issue, after consultation, a mandatory standard that provides for all or any of the following:
- safety and quality criteria, that are, in the opinion of the Director-General, compatible with the interests of public health;
 - records that must be kept by operators;
 - criteria and procedures for demonstrating compliance with the standards; and
 - any other matters that may affect public health.
77. The proposed controls under Option 3b would also:
- describe consultation processes before the adoption of such standards;
 - make the Ministry of Health responsible for enforcement of the standard;
 - require a formal review within five years of the commencement of the standard.
78. The Ministry of Health would also continue to annually review operator practices via public health unit visits and surveys, and Consumer New Zealand surveying as appropriate.
79. Health officials consider that the starting point for the development of a standard would be to draw on overseas regulatory controls (such as those of South Australia) and guidelines for operators prepared by Health officials. Any standard would need to be evidence based and require measures proportionate to the risk being managed. Its scope would, therefore, likely include solarium operators having to:
- display warning notices on risks of UV exposure, who is particularly at risk from UV exposure ('high risk individuals'), and the requirement to wear goggles, etc.;
 - limit UV dose rates and the UV content of the UV lamps (including, possibly, the requirement for artificial UV tanning plans to be personalised to each individual);
 - avoid making any health claims about artificial UV tanning devices;
 - undertake skin type assessments of clients;
 - secure informed consent from clients before providing services;
 - exclude high risk clients from use of artificial UV tanning devices;
 - require all clients to use eye protection;
 - implement hygienic practices around cleaning and maintenance of devices;
 - require 48 hours between sessions;
 - keep client records;
 - use timers to control time on the sunbed;
 - train staff on how to reduce risks from sunbed use; and
 - (potentially) be registered and pay a registration fee.
80. Option 3b involves the development of a standard. This would take longer than Option 3a and would be subject to detailed consultation on its potential content. Under this option, amending the Health Act 1956 to provide for future standard setting would be part of wider amendments to the Act proposed by the Ministry of Health and currently under development. Policy work would be undertaken not only on the content of any potential future standard, but also on the necessary consultation procedures to be followed in developing standards, penalties, enforcement mechanisms and implementing agency.

Overseas comparisons

81. All Australian States and Territories, Austria, Belgium, the United Kingdom, France, Germany, Iceland, Italy, Portugal, Spain, California and Norway, among others, all ban the provision of artificial UV tanning services to those aged under 18 years.
82. For those jurisdictions that regulate commercial tanning, South Australia provides a good example of a comprehensive regulatory scheme, with adoption of the majority of the provisions contained in AS/NZS2635:2002. South Australia and Victoria ban the provision of artificial UV tanning services to those with skin Type 1. South Australia, the United Kingdom and California require the wearing of protective goggles during sunbed use. Finland requires operators to provide certain information. Ontario, Canada is currently considering draft legislation to, among other matters, require the provision of information to users.

Assessment of Option 3a

83. Table 4 summarises how Option 3a aligns with the objectives set out in paras 55-56 of this RIS. Further analysis is included below.

Table 4: Summary of assessment of Option 3a against stated objectives

| Objective | Level of alignment with policy objectives |
|--|--|
| Helps reduce the risks to the public, particularly young people, from harm from devices that artificially tan skin through the use of UV light | Option 3a would reduce access by those aged under 18 to artificial UV tanning devices. It would not address wider problems with the artificial UV tanning industry, including non-compliance with other best practice measures for reducing risks for users of artificial UV tanning devices (including exclusion of those with high risk skin types, better informed consent procedures, education of users, warning notices, etc.). |
| Option is risk- and evidence based, and consistent with good international practice | Option 3a addresses risks for a section of those at greater risk from artificial UV tanning devices (those aged under 18). Studies suggest, however, that people aged under 35 and people with high risk skin types are also at a heightened risk, and therefore significant risks would remain for those who continue to access artificial UV tanning devices, often without informed consent. International best practice is for wider regulation of solarium beyond age limits as described in para 81 of this RIS. This option does not provide for this regulation. |
| Be appropriate to protect health and safety, while still enabling the use of medical UV devices for the treatment of certain skin conditions under qualified medical supervision in approved medical clinics | Option 3a does not interfere with medical treatment options. The option advances public health in terms of those aged under 18 years, but not for other groups of heightened risk, or the wider public. |
| Not impose any unnecessary or unjustified compliance costs, or unnecessarily restrict access to services desired by well informed adults, unless there is good reason. | Imposes limited compliance costs. Does not restrict access by adults unless individual operators choose to do so (for example, in relation to those with high risk skin types). |

Industry view on an under 18 ban

84. Direct engagement was undertaken with a sample (only) of solarium operators in Auckland and Christchurch for the purpose of developing this RIS. The results of this engagement are presented under *Consultation* below. In relation to the proposed ban on the provision of solarium services to those aged under 18 years, feedback was that all operators observed the voluntary ban on supplying artificial UV tanning services to those aged under 18 years.
85. INTANZ states, in relation to calls for a ban on the supply of artificial UV tanning services to those aged under 18 years that it "...has always said we support this restriction, indeed good sunbed operators will already be enforcing this restriction".²³

²³ <http://intanz-indoortanning.blogspot.co.nz/2013/04/government-restricting-sunbed-use.html>

Costs, benefits and risks

86. The ban on the provision of commercial artificial UV tanning services to those aged under 18 years would impact on those young people who value access to artificial UV tanning devices. The number of people who fall into this category is unknown. There is a strong argument for protecting young people from the increased risk they experience from long term skin cancer from use of artificial UV tanning devices. There is a counter argument that suggests young people could be supported to make their own choice, through informed consent procedures. There is a body of evidence and experience that adolescents are more vulnerable to poor decision-making and risk taking behaviour and are more sensitive to reward inducing stimuli such as peer pressure, drugs and alcohol. Some of the literature in this regard was recently summarised in the Prime Minister's Chief Science Adviser's report *Improving the Transition*²⁴. Banning youth access to harmful substances and potentially hazardous practices is a feature of a broad range of other legislation featuring harmful and potentially harmful products, services and activities, for example, tobacco and alcohol, gambling, driving, and pornography.
87. It is noted that there is some evidence that use of a sunbed before the age of 35 almost doubles the risk of melanoma compared with people who never used sunbeds (see para 37). However, an age limit of 18 years is proposed because this is consistent with other legislation, including the Smoke-free Environments Act 1990 and the Sale and Supply of Liquor Act 2012, that recognises 18 as an age at which people are capable of making their own choices.
88. The cost to Government of this option is likely to be minimal. Public health units would continue to undertake visits to solarium for the purpose of education on the voluntary Australia/New Zealand Standard and could monitor compliance as part of those visits. In addition, controlled purchase operations (CPOs) using underage volunteers would be undertaken to test operators' compliance with the ban on the provision of artificial UV tanning services to those aged under 18 years. CPOs would be undertaken either locally by public health units or by Ministry of Health enforcement personnel. The costs of these visits and any resultant prosecutions, are estimated at no more than \$20,000-\$50,000 per annum. These costs would be absorbed within baseline (through prioritisation and staging of enforcement efforts more widely).
89. It is likely that there would be minimal impact on solarium as a result of a ban on the provision of artificial UV tanning services to persons aged under 18 years as those aged under 18 are expected to comprise a small percentage of the client base. Some solarium operators already voluntarily exclude those aged under 18 years.

Assessment of Option 3b

90. Table 5 summarises how Option 3b aligns with the objectives set out in paras 55-56 of this RIS. Further analysis is included below.

Table 5: Summary of assessment of Option 3b against stated objectives

| Objective | Level of alignment with policy objectives |
|--|--|
| Helps reduce the risks to the public, particularly young people, from harm from devices that artificially tan skin through the use of UV light | If implemented in association with Option 3a, this option would provide the solarium industry with clear (enforceable) direction for reducing the risks to users of artificial UV tanning devices. |
| Option is risk- and evidence based, and consistent with good international practice | Option 3b is an evidence-based approach, consistent with international best practice. While it does not remove risk (as Options 4 and 5 do), it imposes a set of clear operational requirements on solarium to minimise risk as far as is possible without banning the use of artificial UV tanning devices. |
| Be appropriate to protect health and safety, | Option 3b does not interfere with medical treatment options. |

²⁴ Gluckman P. 2011. *Improving the Transition: Reducing Social and Psychological Morbidity During Adolescence. A report from the Prime Minister's Chief Science Advisor.* Available at: <http://www.pmcsa.org.nz/wp-content/uploads/2011/06/Improving-the-Transition-report.pdf>

| Objective | Level of alignment with policy objectives |
|--|---|
| while still enabling the use of medical UV devices for the treatment of certain skin conditions under qualified medical supervision in approved medical clinics | The option is an appropriate regulatory response to a hazardous but legal practice. |
| Not impose any unnecessary or unjustified compliance costs, or unnecessarily restrict access to services desired by well informed adults, unless there is good reason. | Imposes greater compliance costs than Options 1, 2 and 3a but significantly less compliance costs than Options 4 and 5. It does not unnecessarily restrict access. Well informed adults could still access artificial UV tanning services after a consenting process. |

Costs, benefits and risks

91. The majority of solarium operators approached to provide comment on the possible scope of a standard (see section on *Consultation* below) advised that they did not consider that the controls proposed would have a negative impact on the industry (in terms of any effect on business revenue) because many operators complied already. The majority of those consulted considered that costs to comply would not be high, with the possible exception of any controls on UV lamp strengths. Those consulted were only a sample of the industry, and many others that were approached did not respond or refused to provide comment. There is also evidence (as discussed in paras 43-45) that many solarium operators do not comply with all of the controls in the voluntary Australia/New Zealand Standard. The findings from consultation may, therefore, not be entirely representative of the industry as a whole.

92. This option has no direct impacts for importers, manufacturers or sellers of artificial UV tanning devices. However, the existing gradual decline in solarium services is likely to be accelerated under this option. This would result in reduced demand for these devices over time.

93. Depending on its content, the introduction of a mandatory standard, is likely to result in an immediate exit from the provision of solarium services by a number of small solarium operators who would find compliance with the standard difficult or who are likely to not consider it worth the effort. Based on data the Ministry of Health has on the number of solarium operators in New Zealand, and its understanding from surveys undertaken by public health units, the Ministry considers it reasonable to assume that the majority (estimated 70 percent nationwide) of operators have only one or two artificial UV tanning devices. If the Consumer New Zealand estimate of 260 solarium operators nationally is correct, and assuming 25 to 50 percent of operators with one or two devices exit the provision of solarium services, this would see between 45 and 90 operators exit and up to (based on Auckland data only on the proportion of premises with one or two devices) an estimated 120 artificial UV tanning devices becoming surplus to requirements.

94. While some existing solarium operators may seek to expand and purchase those surplus tanning devices, it is possible that some will be sold to members of the public through online auctions and other mechanisms. This could increase the number of artificial UV tanning devices entering private ownership and use, although it may reduce the number of people using each bed. It is likely these devices would also be used by family and friends of the owners. As the use of artificial UV tanning devices in the private setting is difficult to monitor, if the number of privately-owned devices increases, then it will be more difficult to reach users with public health messages. Further, if privately-owned devices are not maintained or operated properly this may also increase risk for some people. For example, it may result in increased use by young people or those with high risk skin types, too frequent tanning sessions, or modified devices delivering a greater than expected UV output (e.g., if old lamps are replaced with lamps with a higher UV output).

95. If this option is adopted, controls would need to be included to ensure that any sale of artificial UV tanning devices is done in a manner that protects public health and safety

(e.g., by requiring that suitable documentation on reducing risks, maintenance of devices, etc. is provided to the buyer).

96. If a standard were introduced, there would be compliance costs for solarium operators associated with becoming familiar with the new requirements. Other implementation costs would include developing processes for assessing skin types and securing informed consent, etc. These could increase staffing requirements and result in further costs for operators. There would also be ongoing implementation costs for operators including information and record keeping, and display of signage requirements. It should be noted that the requirements in any eventual standard are likely to be similar in scope to the current voluntary requirements under the joint Australia New Zealand Standard, which has been well publicised and promoted, and with which some operators already comply, at least in part.
97. The impacts, including costs and lost revenue for importers, manufacturers and sellers of artificial UV tanning devices, and for solarium operators arising from the introduction of a standard, have not been able to be quantified for this RIS. The scope of potential controls will not be clear until a standard is drafted and consulted upon. At that time, a further RIS would need to be produced to provide a more detailed assessment of the impacts on affected parties. Consultation on any proposed standard would need to explore the impacts of the likely reduced demand for artificial UV tanning devices on importers, manufacturers, sellers and rental providers of these devices. Direct consultation with solarium operators would also be required to secure more detailed information on the impacts and costs to them. The additional RIS would also need to assess the scale of artificial UV tanning devices that could potentially enter private ownership, the impact of this on public health, and policy interventions to address those impacts.
98. If clear expectations of operators were introduced by mandatory standard(s), it is expected that this would increase their compliance with best practice operating procedures. INTANZ would be expected to take a role in supporting its members to comply. The majority of regulatory requirements (signage, goggle use, informed consenting procedures, ban on provision of services to those with high risk skin types, etc.) are able to be readily monitored through occasional compliance checks. As a result, it is expected that the public would benefit from increased safety standards and improved practice in the industry. The proposed exclusion of high risk individuals from solarium services would be a particularly important area for compliance monitoring, and training and support for operators, and of all the proposed controls, has the greatest potential to improve public health. It is not possible to quantify any expected reductions in skin cancers, years of life saved, improved quality of life, or reduced costs to the health system as a result of the intervention.
99. The costs to Government would include costs for designing the regulations and standard, and consultation and policy work in support of the Government in agreeing a final standard. There would also be education costs, and implementation costs including monitoring and enforcement costs. It is possible that these costs might be recovered through fees for registration of solarium.

Option 4: Ban the operation of solarium

100. Option 4 proposes a ban of the operation of solarium (this would include a person who owns an artificial UV tanning device privately but who allows others to use it in exchange for payment or other consideration). It is based on NSW legislation, which bans all commercial UV tanning services for cosmetic purposes from December 2014, and similar proposals in Victoria, South Australia and Queensland.
101. In NSW, the government is providing assistance to industry to dispose of unwanted artificial UV tanning devices safely. The scheme includes a waste contractor collecting and disposing of artificial UV tanning devices after recyclable materials are recovered,

and a A\$1,000 payment per artificial UV tanning device registered with the Environment Protection Authority for disposal. Such an approach is likely to be promoted by industry if this option was advanced in New Zealand.

102. Table 6 summarises how Option 4 aligns with the objectives set out in paras 55-56 of this RIS. Further analysis is included below.

Table 6: Summary of assessment of Option 4 against stated objectives

| Objective | Level of alignment with policy objectives |
|--|--|
| Helps reduce the risks to the public, particularly young people, from harm from devices that artificially tan skin through the use of UV light | Option 4 would be an effective option for significantly reducing access by the public to artificial UV tanning, and thus the risks to the public from that tanning. |
| Option is risk- and evidence based, and consistent with good international practice | Artificial UV tanning poses a risk to all users, and a particularly high risk to young people (those aged under 35) and those with high risk skin types. Banning the commercial supply of artificial UV tanning services is, therefore, arguably an effective response to an identified public health threat. While international best practice appears focussed to date on interventions consistent with Option 3a + 3b, there is a move in some jurisdictions to ban solaria completely (see para 99 of this RIS). |
| Be appropriate to protect health and safety, while still enabling the use of medical UV devices for the treatment of certain skin conditions under qualified medical supervision in approved medical clinics | The option does not need to interfere with medical treatment options, as these could be explicitly exempted from a ban. This option has a far greater potential to improve public health than a combination of Options 3a + 3b, particularly if implemented in association with Option 5. |
| Not impose any unnecessary or unjustified compliance costs, or unnecessarily restrict access to services desired by well informed adults, unless there is good reason. | The option imposes significant costs on existing businesses. It would result in a number of businesses having to close down. The option also prevents access by adults to solaria services (but would not prevent individuals from purchasing their own tanning devices for private use). |

Costs, benefits and risks

103. The benefit of this option, assuming active enforcement and compliance, is that all solaria would have to cease operation. This would significantly reduce the public's exposure to artificial UV tanning and have public health benefits including a likely reduction in skin cancer incidence, and subsequent cost reductions to the public health system (see section above titled *Costs of skin cancer to New Zealand* for estimates of harms and costs that could be avoided). People who would have otherwise suffered skin cancer would potentially avoid anxiety from a cancer diagnosis, as well as illness and premature death. It is not possible to quantify these latter benefits.
104. This option fails at least one of the key objectives listed in paras 55-56 for a public health intervention in this area. Most significantly, it would prevent access to solarium services by adults who are well informed and choose to take the risk of artificial UV tanning for cosmetic purposes.
105. Businesses that provide solarium services as only a portion of their business would suffer some revenue loss. Businesses that are primarily or exclusively solarium service providers would be forced to close or change the services that they provide. Business closure would result in a number of employees being made redundant. It is not possible to quantify these impacts at this time as there has been no consultation on this option.
106. It is expected that solarium operators, as well as importers, manufacturers and sellers of artificial UV tanning devices would strongly oppose this option. It is likely that there would be demands for compensation as existing livelihoods and businesses would immediately be no longer viable.

107. Notwithstanding a ban, it is likely that non-compliance with the legislation, particularly with any controls on the sale or disposal of existing artificial UV tanning devices, would be high given the significant impact on some operators' livelihoods. The initial cost of enforcement is likely to be substantially higher for this option than Option 3. However, over time it is expected that enforcement costs would be negligible with only occasional investigation of complaints required as illegal operations come to light. A buy-back scheme for artificial UV tanning devices (as has been implemented in NSW) could be contemplated to reduce sales of artificial UV tanning devices into private ownership, and as a means of partial compensation for lost business. The scheme is estimated to cost NSW a minimum of A\$210,000 (based on an advised 210 units having been registered to date). The cost of operating such a buy-back scheme in New Zealand is not known.
108. Future cost savings to agencies such as the Ministry of Health and public health units from not having to survey and encourage compliance with the current voluntary controls, and for organisations such as the Cancer Society who promote avoidance of sunbeds would apply. The net savings for Government are not expected to be large, perhaps in the order of \$50,000 to \$100,000 per annum.
109. The cost of this option to Government, in terms of its design and implementation (excepting enforcement and any buy-back scheme), is likely to be similar to Option 3.
110. On balance, government agencies do not support this option. In comparison to other options it is perceived to be overly intrusive on public freedoms and not risk-based. The options of reducing population health risks through exclusion of those under 18 years of age or with high risk skin types, through better practices in solariums, and through informed consent practices, are perceived to be less intrusive.
111. If consideration were to be given to this option in the future, detailed policy work would need to be undertaken on the impact a ban on solarium services could have on the privately-owned use of tanning devices.

Option 5: Ban the importation, manufacture, sale and rental of artificial UV tanning devices for commercial, and possibly private use

112. Under this option the importation, manufacture, sale and rental of artificial UV tanning devices would be prohibited in New Zealand. The resale of artificial UV tanning devices within New Zealand might also be banned, including to private citizens. It is possible that restrictions, rather than a total ban, may need to be placed on UV tubes to ensure that UV tubes used for a variety of other purposes (sterilisation, water treatment, curing polymers, in printing, checking banknotes, clinical UV treatments, etc.) are not captured by the regulation.
113. Officials have considered legislative options for implementing this option.

Import Prohibition Order

114. The New Zealand Customs Service has advised that an importation ban could conceivably be implemented by way of a Customs Prohibition Order, made under section 54 of the Customs and Excise Act 1996. This would prohibit the importation of all, or certain classes, of artificial UV tanning devices. Such an order would not prevent the domestic manufacture of artificial UV tanning devices in New Zealand, however.
115. The Prohibition Order would be enforced by the New Zealand Customs Service at the border and the Ministry of Health would act as the "competent authority" for the controls, including managing the policy issues and operating an efficient system to authorise appropriate importations (e.g., UV treatment devices for hospitals). As artificial UV tanning devices are almost always valued over \$400, they would require an import entry and thus tariff-based alerts could operate. It is likely that imports of

artificial UV tanning devices would be infrequent and are physically larger and more distinctive than other illegal imports. If made illegal, it is unlikely they would be a criminally-attractive item, given they are unlikely to provide a large financial return from illicit sales.

116. A Prohibition Order would not guarantee that all imports of artificial UV tanning devices would be identified and intercepted at the border. The Order's effectiveness will depend on a range of factors, such as how many tanning devices are imported, how consignments are classified, and how many consignments are inspected. However, for the reasons listed in para 114, compliance monitoring would be likely to be relatively effective and efficient, compared with some other illegal imports.
117. This option is unlikely to have any international trade issues under the World Trade Organization system, provided domestic manufacturers of tanning devices are also subject to a ban on the sale of tanning devices. The World Trade Organization allows countries to control imports of products to meet public health and other domestic policy objectives if the measures taken are non-discriminatory and reasonable.

Stand-alone legislation to ban the import, manufacture, sale and rental of artificial UV tanning devices

118. Under the Fair Trading Act 1986 the Minister of Consumer Affairs has power to ban or regulate a product if that product will, or may, cause injury. New Zealand's approach to regulation of products under the Fair Trading Act 1986, however, prioritises, through evidence- and risk-based practice, the regulation of products that are inherently harmful rather than products that are only harmful if misused. For this reason, officials do not consider that a ban on artificial UV tanning devices under the Fair Trading Act 1986 should be contemplated.
119. As an alternative to a Customs Prohibition Order, legislation could be developed to explicitly ban importing, manufacturing, selling or renting artificial UV tanning devices in New Zealand. This would be best implemented through stand-alone legislation, as the scope of the Health Act 1956 does not align well with the banning of devices.

Banning the supply of solarium services

120. The Ministry of Business, Innovation and Employment has advised that it considers that the Fair Trading Act 1986 is not suitable for controlling the supply of artificial UV tanning services. As discussed above, the thrust of controls under this Act is on goods that are inherently unsafe (e.g., because they are a choking hazard or are made of hazardous materials, etc.), as opposed to goods that are made unsafe through misuse.
121. The provision of solarium services could be explicitly banned. The most appropriate legislative vehicle would need to be considered further. It is likely that stand-alone legislation would be required.

Assessment of Option 5

122. Table 7 summarises how Option 5 aligns with the objectives set out in paras 55-56 of this RIS. Further analysis is included below.

Table 7: Summary of assessment of Option 5 against stated objectives

| Objective | Level of alignment with policy objectives |
|--|---|
| Helps reduce the risks to the public, particularly young people, from harm from devices that artificially tan skin through the use of UV light | In combination with Option 4, and assuming effective implementation and enforcement, this option would see near elimination of access to artificial UV tanning devices. This option, with Option 4, would therefore have the most significant positive impact on population health of all the options considered. It would be likely that individuals who own or access artificial UV tanning devices clandestinely would be at a heightened risk from poorly-maintained devices. |
| Option is risk- and evidence based, and | This option, in combination with Option 4, would be a comprehensive |

| Objective | Level of alignment with policy objectives |
|--|---|
| consistent with good international practice | approach to addressing the public health risks posed to all users of artificial UV tanning devices. However, international best practice appears focussed to date on interventions consistent with Option 3a + 3b, with some jurisdictions implementing Option 4. Officials are not aware of any jurisdictions that have adopted controls consistent with Option 5. |
| Be appropriate to protect health and safety, while still enabling the use of medical UV devices for the treatment of certain skin conditions under qualified medical supervision in approved medical clinics | The option does not need to interfere with medical treatment options as an explicit exemption could be made for those devices. |
| Not impose any unnecessary or unjustified compliance costs, or unnecessarily restrict access to services desired by well informed adults, unless there is good reason. | The option imposes significant costs on existing businesses, including those who manufacture and import artificial UV tanning devices for private use. This option would see a number of businesses having to close down. The option would also prevent (well informed or not) adults from accessing commercial or privately-owned artificial UV tanning devices. |

123. It is assumed this option would only be implemented in combination with, or following the adoption of, Option 4.

Costs, benefits and risks

124. The primary benefit of this option is that, in combination with Option 4, it would result in near elimination of access to artificial UV tanning devices. Of all the options considered, it would thus have the most significant positive impact on population health. The section of this RIS titled *Costs of skin cancer in New Zealand* attempted to quantify the morbidity, mortality and health care costs in New Zealand resulting from artificial UV tanning. Options 4 and 5, implemented together, would have the greatest impact in terms of reducing those costs to near zero.
125. The option would significantly affect importers, manufactures, sellers and renters of artificial UV tanning devices. Importers, manufacturers and sellers/renters of artificial UV tanning devices would no longer have a market in New Zealand. Solarium operators and private citizens who own artificial UV tanning devices would not be able to sell the devices domestically, and in many cases may have to dump them or settle for reduced value by selling offshore and incurring the cost of transport. Disposal of any lamps with heavy metals would be subject to environmental waste disposal requirements. As with Option 4, it is considered likely that industry groups would demand compensation for businesses.
126. Similarly to Option 4, it is likely that there would be non-compliance with the legislation, particularly with the ban on the sale of existing artificial UV tanning devices. Any sales would have to be done clandestinely, meaning that devices may be more likely to be sold without guidance on their use and safe maintenance, and without public health messages about the risks of UV exposure. The initial cost of enforcement is likely to be substantially higher for this option than Option 3, but only marginally greater than Option 4. As Option 4 involves a ban on commercial artificial UV tanning services, it would significantly reduce the demand for sales of artificial UV tanning devices, subsequently reducing the need for enforcement of the ban of such sales under Option 5.
127. The cost of this option to Government, in terms of its design and implementation (excepting enforcement), is likely to be similar in scale to Option 4.
128. Officials consider this option difficult to justify at this time. If a ban on the provision of commercial artificial UV tanning services (Option 4) was contemplated in the future, then it would be worth considering whether a ban on the import, manufacture, sale or rental of artificial UV tanning devices might also be warranted (Option 5). It is

noteworthy that NSW has implemented a ban on the provision of commercial artificial UV tanning services, but considered an import, manufacture, sale and rental ban to be unnecessary.

Impacts

129. A summary of each option and its likely impacts is provided in table 8 below.

Table 8: Impacts of the options

| Option | Positive impacts | Negative impacts |
|--|---|--|
| Option 1 (non-regulatory): Status quo: promotion of voluntary Australia/New Zealand Standard | <ul style="list-style-type: none"> • Minimal cost to Government to implement and enforce • No costs for Government to develop a new regulatory scheme • No compliance costs for manufacturers, importers or sellers of artificial UV tanning devices • No impact on solarium operators (unless they chose to comply with the voluntary Standard) • The number of solarium operators is expected to gradually reduce over time • No restrictions on consumers who want to purchase products or services • Avoids concerns of Government intrusion into private choices • Based on experience to date, unlikely to have much positive impact on mortality, morbidity and health care costs arising from UV tanning devices. | <ul style="list-style-type: none"> • Compliance with the voluntary Australia/New Zealand Standard is low, meaning a continuing high public health risk, including for young people and individuals with high risk skin types • Continuing cost to the health system of increased skin cancers • Allows for the continued provision of, and access to, solarium services for cosmetic purposes: a hazardous activity • Potential for criticism of Government for not doing enough • Inconsistent with moves to regulate internationally |
| Option 2 (non-regulatory): Active campaign to discourage the use of artificial UV tanning devices | <ul style="list-style-type: none"> • Will raise public awareness of health risks • No costs for Government to develop a new regulatory scheme • No compliance cost for industry • Current and potential future consumers would be provided with more comprehensive safety information and guidance which might translate into informed choice • Industry would receive a clear message that their services are considered harmful • It may encourage smaller solarium operators to exit from the industry, depending on public and consumer response • Likely to have some impact in terms of reduced mortality, morbidity and healthcare costs, but difficult to predict scale of this impact | <ul style="list-style-type: none"> • Allows for the continued provision of, and access to, solarium services for cosmetic purposes: a hazardous activity • Strong likelihood the Government will receive criticism of 'over-reacting'. • Potentially high ongoing cost to Government for media campaigns • Risk of legal action • No certainty that it will actually work (no guarantee of behaviour change by operators or consumers) • If it does work, businesses will fail • Could potentially heighten knowledge of commercial artificial UV tanning and increase public interest as a result • Inconsistent with moves to regulate internationally |
| Option 3a (proposed option): Ban the supply of solarium services to those aged under 18 years | <ul style="list-style-type: none"> • Restricts access to artificial UV tanning devices for those aged under 18 years, a group at high risk from exposure to UV light through artificial UV tanning devices • Not overly resource intensive for Government to implement compared with Option 2 • Low compliance costs for operators • Low implementation costs (operators advise that most do not provide artificial UV tanning services to those aged under 18 already) • Low costs for Government of designing and implementing controls, and monitoring compliance • Introduces a key factor of recommended regulation, supported by the World Health | <ul style="list-style-type: none"> • Allows for the continued provision of, and access to, solarium services for cosmetic purposes for all those aged 18 and above: a hazardous activity, without any real controls • Could result in artificial UV tanning devices in private ownership being used more by those aged under 18 years, reducing the ability of public health messages to reach users • Removal of choice for those aged under 18 years |

| Option | Positive impacts | Negative impacts |
|---|--|---|
| | <p>Organization and other bodies</p> <ul style="list-style-type: none"> • Can be implemented speedily on its own • Likely to be supported by the public as age-related controls are consistent with a number of other statutes • Places no restrictions on adult consumers who want to purchase products or services • Would have some positive impact in terms of reduced mortality, morbidity and health care costs associated with artificial tanning | |
| <p>Option 3b: Develop a standard to control the provision and promotion of solarium services</p> | <ul style="list-style-type: none"> • Depending on the standard's content, it is likely to restrict access to artificial UV tanning devices by those with high risk skin types • Depending on its content, would introduce best practice controls. and if complied with, would improve public health, reduce skin cancer rates and the morbidity, mortality and costs associated with those cancers, although not to as great a level as Options 4 and 5 • Allows for greater ability to target public health information and ensure informed consent of users (i.e., it addresses current information asymmetry) • Not overly resource intensive for Government to implement compared with Option 2 • Consistent with controls recently introduced by other countries and recommended by the World Health Organization and other bodies | <ul style="list-style-type: none"> • Allows for the continued provision of, and access to, solarium services for cosmetic purposes: a hazardous activity • Increased compliance and implementation costs for solarium operators (these costs are greater than those posed by Option 3a, but significantly less than Option 4) • Could shrink the market, reducing revenue for importers, manufacturers and sellers of artificial UV tanning devices, and solarium operators • Could result in artificial UV tanning devices moving to private ownership, and potentially shared use by family and friends, reducing the ability of public health messages to reach users • Removal of choice for those with high risk skin types • Costs to Government of designing and implementing regulatory controls • Compliance monitoring and enforcement costs for Government • Provides potential for criticism of Government for imposing costs on industry and for regulating the market • The proposed ban on private owners allowing others to use their sunbeds or other artificial UV tanning devices in exchange for payment would be difficult to enforce |
| <p>Option 4: Ban the operation of solaria</p> | <ul style="list-style-type: none"> • Would dramatically reduce the supply of solarium services to those aged under 18 years and those with high risk skin types (however, this would be mitigated to some extent by likely illegal service establishment) • Would significantly reduce the supply of solarium services immediately, improving public health, reducing cancers and costs to the health system • In time, compliance monitoring and enforcement costs would be less than Option 3 • There would be a cost saving for Government in surveying and educating operators on best practice operating procedures • There would be a cost saving for Government and other agencies as there would be less need for consumer education about the risks of solaria • Almost as high impact as Option 5 in reducing costs (mortality, morbidity and health care costs) | <ul style="list-style-type: none"> • There would be a net cost for Government to develop and implement the regulations • There would be strong opposition, including non-compliance, especially at first • There would be an immediate and dramatic impact on businesses, including business failures, as a result of the change • There is a high likelihood of adverse media, business and public commentary over the move • There is a high potential of legal challenges • Artificial UV tanning devices may flood the market, likely ending up in private ownership and potentially, in clandestine solarium operations • As the provision of solarium services would be driven into the black market, it would be difficult to target public health messages to users, or to encourage operators to comply with recommended best practices • There would be a high initial cost for compliance monitoring and enforcement • It removes choice from those who are well informed, and consenting adults |

| Option | Positive impacts | Negative impacts |
|---|--|--|
| Option 5: Option 4 AND Ban the importation, manufacture and sale of artificial UV tanning devices for commercial, and possibly private use | See Option 4, and: <ul style="list-style-type: none"> Provides a mechanism for reducing the supply of artificial UV tanning devices to the New Zealand market which, if effectively enforced, would reduce the black market provision of solarium services, as well as address private use of artificial UV tanning devices and the harms they pose Greatest impact in reducing costs (mortality, morbidity and health care costs) | See Option 4, and: <ul style="list-style-type: none"> Additional compliance and enforcement costs for ensuring the manufacture, import and sales ban on artificial UV tanning devices is in place and as effective as possible Monitoring and enforcement is likely to be difficult given the location of the artificial UV tanning devices is not known or reported |

Alignment of options with policy objectives

130. Table 9 provides an assessment of all of the options against the policy objectives from paras 55-56.

Table 9: Level of alignment of options with policy objectives

| Objective | Option 1 (Status Quo) | Option 2 | Option 3a | Option 3b | Option 4 | Option 5 |
|---|--------------------------|------------------|---|--|-----------|-----------------|
| Help reduce the risks to the public, particularly young people, from harm from devices that artificially tan skin through the use of UV light. | Low | Uncertain to low | High (for young people); low for others | High (for young people); moderate for others | High | High |
| Be risk- and evidence-based, and consistent with good international practice | Low | Low | Moderate | High | Moderate | Moderate to low |
| Appropriate to protect health and safety, while still enabling the use of medical UV devices for the treatment of certain skin conditions under qualified medical supervision in approved medical clinics | Low | Low | Moderate | High | Very high | Very high |
| Not impose any unnecessary or unjustified compliance costs, or unnecessarily restrict access to services desired by well-informed adults, unless there is good reason | High | High | Moderate | Moderate | Low | Very low |

Consultation

131. Formal consultation has not been undertaken with solarium operators on the proposals outlined in this RIS.

132. However, in its introductory letter, promoting membership, INTANZ advises that:

"the Ministry of Health ... has been undertaking research into whether the indoor tanning industry is adhering to the Aus/NZ Solaria Standards with the view to possible regulation. The INTANZ steering committee believes regulation is highly likely. Whilst we support good tanning practices, much like those set out in the Standards, we are very concerned about possible negative business aspects such as those in the Standards limiting our ability to promote our business on anything other than cosmetic benefits."

133. To inform this RIS, the Ministry of Health initiated targeted consultation with a subset of solarium operators and approached INTANZ for comment. The consultation focussed on controls akin to options 3a and 3b (only). It is important to note that those consulted were only a sample of the industry and many of those approached did not respond or refused to provide comment. The findings from consultation may therefore not be entirely representative of the industry as a whole.
134. Twenty-eight solarium operators in Auckland and Christchurch either filled in a questionnaire or discussed their views by telephone or in person. Ten of the 28 respondents provided no further commentary except to say they no longer have sunbeds (nine respondents) or will be exiting the provision of artificial UV tanning services soon (one).
135. Of the 18 who provided more detailed comment, 10 said artificial UV tanning services comprised a small (less than 10 percent) or, as in most cases, very small (as little as one percent) portion of their business. Of the remaining eight, artificial UV tanning services comprised between 60 to 100 percent of their business. Three of the 18 provided estimates of their annual revenue from artificial UV tanning services as \$10,000, \$140,000 and \$260,000 per annum.
136. All 18 operators said that they did not provide artificial UV tanning services to those aged under 18 years.
137. Other key themes from their commentary included:
- Eight operators explicitly stated that they comply already with all recommended controls
 - Ten operators said they would not expect to be affected, either from a revenue perspective or compliance cost basis, as a result of the proposed controls. The main reason given was that operators already complied with the recommended controls
 - Five explicitly stated support for the potential controls (as per Option 3 above). Reasons given included keeping people safe and pushing rogue/poor operators out of the market (including those who continue to provide artificial UV tanning services to people aged under 18 years)
 - Some of the operators implied disagreement with some or all the controls. Three operators expressed concern over the inability to present health benefits of artificial UV tanning to clients, with two explicitly opposing such a restriction on the grounds of freedom of expression. One expressed concern should there be controls over lamp strength as this could mean costs to change sunbeds.
138. The Ministry also contacted a business that rents sunbeds. This business advised that the proposed controls (as per Option 3b) would not hinder its business and would force poor operators out of the market, which would be a good thing. If bulb strengths had to change, however, this could have an impact (an estimated one-off cost of \$5,000 for the business).
139. A supplier of sunbeds and lamps advised that it considered a ban on supply of artificial UV tanning services to persons aged under 18 years was unlikely to have any impact on its business. They also expressed the view that there may not be great value in such a restriction as young people would still be able to tan using privately-owned sunbeds, or via the sun, which he argued could cause more harm. The supplier advised that approximately 75 percent of its revenue came from supply of sunbeds, and since 2009 they had noticed a major decline (estimated at 35-45 percent) in both client numbers and revenue. The supplier also stressed that changing sunbed lamp strengths would have a significant impact on the industry, and there should be consultation on any specific proposals in this regard.

140. As discussed in paras 47-51 of this RIS, there have been calls for regulation of solarium services by health groups for some time. While health groups are likely to strongly support a ban on the provision of solarium services to those aged under 18 years, they are likely to prefer a total ban on solarium, or at least the development and enforcement of a mandatory standard.
141. There has been no consultation to date with the public, including young people, about the proposal to ban the supply of artificial tanning services to those aged under 18 years. The Ministry of Youth Development has offered to facilitate engagement of young people with any Select Committee process that considers a Bill banning the supply of artificial UV tanning services to those aged under 18 years.

Conclusions and recommendations

Preferred approach: immediate implementation of Option 3a, with further development of Option 3b

Table 9 of this RIS sets out the level of alignment of each of the potential policy options with the Ministry of Health's policy objectives. None of the options presented deliver a high level of alignment with all objectives. As with most regulatory interventions, there are trade-offs required between objectives when it comes to selecting the preferred option, the one that delivers the greatest net benefits to society.

While the status quo has a high level of alignment with the policy objective of not imposing compliance costs, the status quo fails as an option as it has very low alignment with policy objectives relating to protection of public health and safety, and consistency with international practice around the management of solarium. Similarly, Option 2 (media campaign against solarium) may not impose compliance costs (at least not directly), but there is considerable uncertainty over the extent of its likely impact in terms of improving public health. At best it may discourage some people from using artificial tanning devices but it is theoretically possible that it could have a perverse impact with young people.

At the other extreme, option 4 (ban solarium) and option 5 (import, manufacture and sale controls on tanning devices), while undoubtedly delivering greater public health benefit, impose significant compliance costs for industry. There are some moves internationally to implement option 4 and officials consider it worthwhile to monitor those moves, with a view to consideration in the future if indicated.

On balance, the Ministry of Health's preference is that the Health Act 1956 be amended to ban the supply of commercial artificial UV tanning services to those aged under 18 years. Those aged under 18 are at particular risk from using artificial UV tanning devices and are of an age that warrants controls being imposed for their protection.

The Ministry is also supporting the development of a standard (Option 3b). This, together with option 3a, provides a comprehensive response to the public health risks posed by artificial UV tanning devices, is consistent with international practice and arguably provides the greatest net benefit of the options considered. The measures to be covered in such a standard would include operational procedures for solarium that are consistent with recommended best practice while still allowing for informed choice by adults. The controls, while imposing some compliance costs, are also reasonable given the public health risks of UV tanning devices. Implementing options 3a and 3b place the solarium industry on notice that if the industry does not take reasonable steps to reduce the adverse health effects of artificial tanning devices on public health, then further measures, including option 4 and/or option 5 may need to be considered in the future.

Implementation, monitoring, evaluation and review

Implementation

142. Standard initiatives would be undertaken to implement the proposed ban on the supply of tanning services to those aged under 18 years.
143. A three month transition period would be built into the Amendment Bill to allow for education of operators of the ban on supply of tanning services to under 18 year olds. The Ministry would work with national bodies (e.g. INTANZ) to publicise the ban. A communications strategy including the use of media releases and direct communications with all known solarium operators (including visits to explain the law) would be developed and implemented. The Ministry of Health would develop written guidance for solarium operators.
144. Compliance would be promoted by health protection officers of PHUs undertaking their ongoing six-monthly visits to solaria. Controlled Purchase Operations (CPOs) whereby underage volunteers are sent into premises to test compliance, could be undertaken in response to complaints or if non-compliance is suspected from routine visits.
145. The Ministry would develop protocols for compliance monitoring and enforcement. All PHUs would be briefed on the law through the Ministry's regular legislation training workshops. Guidance would be issued on preferred means of monitoring compliance and protocols around investigation, including the undertaking of CPOs where necessary. Officers already undertake CPOs for monitoring compliance with the Smoke-free Environments Act 1990 and so it is not expected that there would be any difficulty bring them up to speed on expectations around enforcement of the under 18 restriction on tanning services.
146. All compliance activities would be undertaken within Ministry of Health and PHU baselines. It is not expected that these costs would be much different from the costs already incurred by PHUs visiting premises now for educational purposes. The additional cost is estimated at between \$20,000 and \$50,000 per annum. This will be dependent on the number of prosecutions taken and comprises legal fees. The Ministry and DHBs have budgets for such actions and it will be a matter of prioritising where legal action is taken across the range of public health legislation for which the Ministry and PHUs are responsible for enforcing. This may mean prioritising prosecutions in the first year or two of the ban on provision of tanning services to those aged under 18 years coming into force and reducing prosecutions in other areas.

Monitoring, evaluation and review

147. The Ministry will monitor implementation of the law. This will include identification of any potential consequences of the ban, for example, any increased access of privately owned artificial UV tanning devices and the implications of this.
148. An annual report will be produced, based on a standard reporting template completed by PHUs. This will be provided to the Minister and, if indicated, Cabinet. The effectiveness of the policy approach will be monitored and reviewed as appropriate.
149. If Option 3b is advanced and a mandatory standard is advanced, there would be a review period formally built into that standard. At this time officials consider this should occur after either three or five years. This review would look at such things as:
 - Level of knowledge of the standard, by operators, and by the public
 - Level of compliance with the various aspects of the standard
 - Level of acceptance of the standard

- Any further areas for improved public health and safety (possible amendments to the standard, or other interventions that could be considered instead/as well)
 - any unforeseen impacts of the Standard
150. This information would be used to develop future policy on intervention in the area of reducing harms from exposure to UV tanning devices. The Minister would be briefed on the outcome of this review and, if indicated, a paper would be submitted to Cabinet on any necessary changes to the standard or future interventions.
151. The Ministry would continue to commission Consumer New Zealand to undertake occasional surveys of solarium operator compliance with both the ban on the provision of solarium services to people aged under 18 years and with recommended best practices for the operation of solariums.