

Public opinion on councils' role to provide shade in public places

Background

Excessive sun exposure has been identified as the main modifiable risk factor for developing skin cancer, contributing to 95% of melanomas and 99% of other skin cancers (Armstrong, 2004). New Zealand has one of the highest rates of melanoma in the world (Erdmann et al., 2013). In New Zealand, melanoma is the fourth most commonly diagnosed cancer and was the cause of 359 deaths in 2011 (Ministry of Health, 2014). By avoiding excessive sun exposure, many of these deaths are preventable.

The Health Promotion Agency's (HPA's) SunSmart programme encourages New Zealanders to reduce excessive sun exposure by staying in the shade, as well as adopting other sun protection behaviours (SunSmart, 2015). In addition to promoting individual responsibility for sun protection, HPA also works to encourage sun-safe environments. Councils have the opportunity to consider shade provision for the "local recreational facilities and community amenities" that they manage (Local Government Act 2002, Amendment Act 2014, 2015). Approximately half (49.2%) of New Zealand council staff members agree that their council has the responsibility to promote sun protection for the general public (Kruse & Walton, 2013). However, little is known about community members' opinions on this topic.

The Sun Exposure Survey (SES) asks New Zealanders about their expectations of their councils to provide shade. This fact sheet relates to data collected in the 2013 survey.

Methodology

Respondents aged 18 or older were asked two questions about their opinion on their council's role in providing shade. First, they were asked how much they agree with the statement "I expect local councils to use money from rates to provide shade in public places such as beaches, pools, parks and gardens". They were then asked

how much they agree with the statement "I would pay (\$10/\$20/\$30) more on my annual rates or rent if it meant that local councils could provide more shade in public places". The dollar amount included in the question was randomised so that approximately a third of the sample was asked \$10, a third was asked \$20, and the remaining third was asked if they would pay \$30. This method allows comparisons to be made about how much respondents are willing to pay to have shade provided in their community.

Response options to both questions include "strongly agree", "somewhat agree", "neither/nor", "somewhat disagree", "strongly disagree", and "don't know". To examine differences in agreement by different subgroups (ie, age, gender, skin type, tanning attitudes, and whether the respondent was sunburnt the weekend prior to interview), responses were grouped into "agree" (strongly agree and somewhat agree) or "not in agreement" (neither/nor, somewhat disagree, strongly disagree). "Don't know" responses were removed from the subgroup analyses. The Fitzpatrick Scale was adapted to classify skin type into one of the following three categories- "Just burn, and not tan afterwards", "Burn first, then tan afterwards", and "Not burn at all, just tan" (Fitzpatrick, 1988). Tanning attitudes were assessed by agreement with the statement "A suntan makes me feel better about myself". Responses were grouped using the same method as above ("agree" or "not in agreement").

Agreement that councils are expected to use money from rates to provide shade

Table 1 shows that more than three-quarters of respondents (78%) strongly agree or somewhat agree that they expect their council to use money from rates to provide shade in public places. About one in seven respondents (14.5%) somewhat disagrees or strongly disagrees and approximately 1 in 14 (7%) neither agrees nor disagrees.



Table 1. Agreement with councils' use of rates to provide shade

	n	%
Strongly agree	489	39.6
Somewhat agree	465	38.0
Neither/nor	91	6.9
Somewhat disagree	121	8.6
Strongly disagree	74	5.9
Don't know	10	0.7

The following groups were more likely to agree that they expect councils to use rates to provide shade in their community:

- Females (80%) compared with males (72%).

- Respondents in the younger age groups (18 to 24-year-olds and 25 to 34-year-olds) (81% and 83%, respectively) compared with 45 to 54-year-olds (72%).

There were no differences by skin type, tanning attitudes, or sunburn status.

Amount willing to pay for councils to provide shade

When participants were asked their agreement with paying \$10, \$20, or \$30 more in their rates or rent for their council to provide shade, there was lower agreement to pay \$30 (55%) compared with agreement to pay \$10 extra (65%). There was no statistically significant difference between the level of agreement to pay \$20 (59.5%) compared with \$10 or \$30. There are also no differences in level of agreement by age group, gender, skin type, tanning attitudes, or sunburn status.

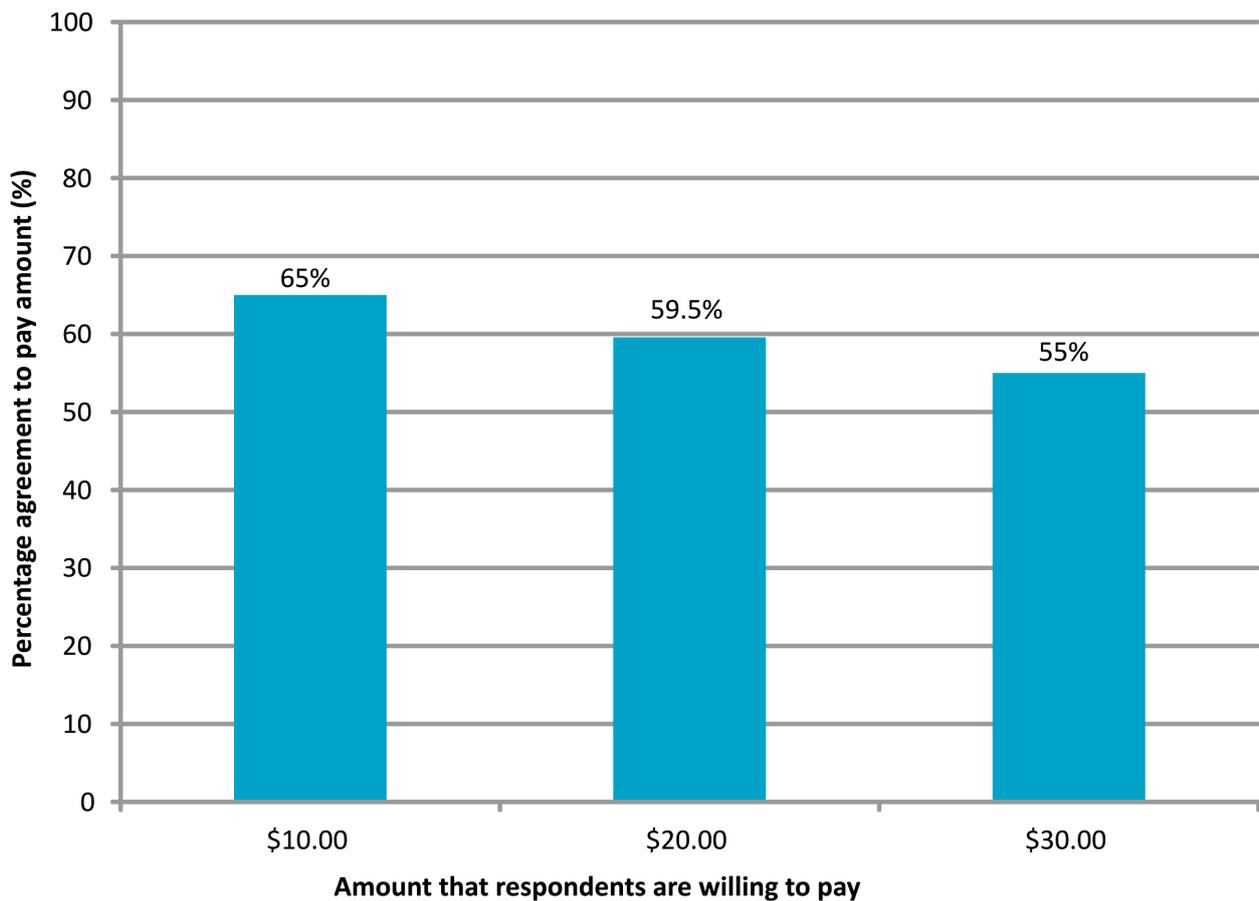


Figure 1. Agreement to pay extra in rates or rent for councils to provide shade

* Amounts (\$10, \$20 and \$30) were randomly assigned to participants. Therefore, the graph represents the percentage in each group that was willing to pay the questioned amount.

Key points

- More than three-quarters of respondents (77.6%) agreed that they expect their council to use money from rates to provide shade in public places.
- Females (80%) are more likely than males (72%) to agree that their council should provide shade in public places.
- Younger age groups (18 to 24 and 25 to 34-year-olds) (81% and 83 %, respectively) are more likely than 45 to 54-year-olds (72%) to agree that councils should provide shade in public places.

References

- Armstrong, B. (2004). How sun exposure causes skin cancer: an epidemiological perspective. In D. Hill, J. M. Elwood, & D. English (Eds.), *Prevention of Skin Cancer* (Vol. 3, pp. 89–116). Springer Netherlands. Retrieved from http://dx.doi.org/10.1007/978-94-017-0511-0_6
- Erdmann, F., Lortet-Tieulent, J., Schüz, J., Zeeb, H., Greinert, R., Breitbart, E. W., & Bray, F. (2013). International trends in the incidence of malignant melanoma 1953–2008—are recent generations at higher or lower risk? *International Journal of Cancer*, *132*(2), 385–400.
- Fitzpatrick, T. (1988). The validity and practicality of sun-reactive skin types I through VI. *Arch Dermatol*, *124*, 669–871.
- Kruse, K., & Walton, D. (2013). *Sun Safety Promotion in Territorial Authorities*. Wellington: Health Promotion Agency Research and Evaluation Unit.
- Local Government Act 2002, Amendment Act 2014. (2014). Retrieved from <http://www.legislation.govt.nz/act/public/2014/0055/latest/DLM5706843.html>
- Ministry of Health. (2014). *Cancer: New registrations and deaths 2011*. Wellington: Ministry of Health.
- SunSmart. (2015). How can I be SunSmart? Retrieved from <http://sunsmart.org.nz/being-sunsmart/how-can-i-be-sunsmart>

Citation

- Dallas, S. & Kruse, K. (2015). *Public opinion on councils' role to provide shade in public places. [In Fact]*. Wellington: Health Promotion Agency Research and Evaluation Unit.

About the Sun Exposure Survey

- The SES is a triennial, nationwide telephone survey conducted with New Zealand households and asks about respondents' weekend activities including time spent outside, sun exposure, sun protection behaviours, attitudes, and knowledge relating to sun safety.
- Household sampling was conducted such that only those respondents who lived in an area of the country that met a set of 'fine weather' criteria for the previous weekend were contacted. This helped to ensure that they had an opportunity for excessive sun exposure if unprotected during the hours of 10am and 4pm. Fine weather eligibility was determined on a weekly basis by analysis of data provided by Meteorological Service of New Zealand and the National Institute of Water and Atmospheric Research (NIWA) on 29 weather stations throughout the country.
- The 2013 SES was conducted with a sample of 504 teens (13 to 17-year-olds) and 1,250 adults (18 to 54-year-olds). Hard and soft quotas were set in order to assist in achieving a sample that was nationally representative according to respondents' geographic region, age, and gender.
- The overall response rate was 27%, which represents a typical response rate for a survey of this type.
- The data have been adjusted (weighted) to ensure they are representative of the population of New Zealanders aged 13 to 54-year-olds.
- For this analysis, proportions and 95% confidence intervals were produced. Odds ratios were undertaken to compare responses between groups. The significance level used for statistical analyses was set to $\alpha=0.05$.

A full description of the 2013 SES methodology can be found at <http://www.hpa.org.nz/research-library/research-publications>.

About HPA

HPA is a Crown entity that leads and delivers innovative, high quality and cost-effective programmes and activities that promote health, wellbeing and healthy lifestyles and prevent disease, illness and injury. HPA also enables environments that support health and wellbeing and healthy lifestyles, and reduce personal, social and economic harm.

Research and Evaluation Unit

Health Promotion Agency, PO Box 2142, Wellington 6140, New Zealand

<http://www.hpa.org.nz/research-library/research-publications>

research@hpa.org.nz

February 2015

ISSN 2350-2991

