Letter to the Editor in response to “When to apply sunscreen: a consensus statement for Australia and New Zealand”

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Whiteman et al (2019) highlighted the need for daily sunscreen application as a key component of effective skin cancer prevention, in the article “When to apply sunscreen: a consensus statement for Australia and New Zealand.” This letter seeks to add to the work of the Sunscreen Summit Policy Group by reporting on a desktop review of current sunscreen policies. It assessed consistency in sunscreen recommendations in public-facing policy documents, including which type of sunscreen to use, the amount of sunscreen to apply and when to reapply.

Sunscreen policy documents written in English from Australia and other selected countries were reviewed and assessed for consistency. A policy was defined as a written recommendation, statement, guidance document or policy template for sunscreen aimed at the general public. The documents could be published by government agencies or non-government organisations. The desktop review (October 2017-February 2018) retrieved 75 publicly available sunscreen policies from 54 key organisations involved in public guidance; of these 69 were accessible. Using thematic analysis, all documents were coded by a primary researcher, with 10% of policies independently coded by a second researcher.

We grouped recommendations into five overarching themes: 1) features of sunscreen (how to promote importance of sunscreen); 4) supply of sunscreen (responsibilities of persons or organisations); and 5) storage of sunscreen (how and where to store sunscreen). Within those themes, 10 key sunscreen recommendations (Table 1) were selected from four leading agencies.2-5 The proportion of policies concordant with these 10 recommendations was calculated. We also extracted additional recommendations beyond the 10 key ones, to document variations in the public domain.

Among the 69 policy documents, 56 were Australian, and 13 international. We found reasonably high concordance (62–83%) for five of the 10 key policy recommendations. These were: 1) use sunscreen with an SPF 30+ or higher; 2) broad spectrum; 3) water resistant; 4) apply 20 minutes before sun exposure; and 5) reapply every 2 hours. However, there was considerably lower concordance (27–38%) for the other recommendations including 6) check the use-by date; 7) reapply sunscreen after swimming, sweating or toweling off; and 8) store sunscreen in a cool, dry place. There was inconsistency in the wording, target audience, or completeness of the many other recommendations provided by the policy documents.

For the 69 policies identified, concordance with the 10 key recommendations varied from 27.5% (n=19/69) for recommendations to store sunscreen in a cool, dry place, to 83% (n=57/69) for advice to choose a sunscreen with an SPF 30 or higher. There was also relatively high concordance within the sunscreen ‘features’ theme (including to choose a broad-spectrum product (74%) (n=50/69), a water resistant product (67%) (n=46/69), and the ‘application’ theme, with 67% (n=46/69) of policy documents advising people to reapply sunscreen every two hours. Overall, we found considerable variability in the sunscreen recommendations and formulation of policy statements in the reviewed documents.

In conclusion, the role of policy advice in health promotion is well recognised as a means to translate evidence into actionable guidance that can be used by the general public or specific organisations (e.g. schools, workplaces). Given the findings of this review, and the considerable variation in recommendations to the public regarding how sunscreen should be used, additional work and collaboration between the relevant agencies is needed to ensure increased consistency. This would ideally be convened as part of an international expert workshop to develop a consensus around advice on the public use of sunscreen.

References

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Table 1: Five major themes extracted from sunscreen policy documents covered ten key recommendations.

<table>
<thead>
<tr>
<th>Theme</th>
<th>The Ten Key Recommendations</th>
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<tbody>
<tr>
<td>1. Features</td>
<td>SPF 30+ or higher&lt;br&gt;Broad spectrum&lt;br&gt;Water resistant&lt;br&gt;Check use-by date</td>
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<td>2. Application</td>
<td>Apply 20 minutes before going outside&lt;br&gt;Reapply every 2 hours&lt;br&gt;Reapply more regularly if swimming, sweating, toweling off&lt;br&gt;Apply sunscreen liberally, using at least 35ml (7 teaspoons) for a full body application</td>
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<td>3. Awareness</td>
<td>Use sunscreen in combination with other sun protection methods (hats, clothing etc.)</td>
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<td>4. Supply</td>
<td>No specific recommendations on preferred supply of sunscreen were found (e.g. whether school, parent, workplace, worker etc. should provide it)</td>
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<td>5. Storage</td>
<td>Store sunscreen in a cool, dry place</td>
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Note: *extracted from references 2-5