



Melanoma Network of Canada Sun Safety Council

Recommended Use of High SPF Sunscreen for Prevention of Skin Cancer, Melanoma

Position

Use of high-SPF sunscreen (sunscreens labelled with SPF values higher than 50), provides greater protection against sunburn and UV induced skin cell damageⁱ over sunscreens with low SPF values. Use of sunscreen over the long term is estimated to reduce incidence of skin cancer by 50% to 75%.^{ii iii} There is well documented research that the general public frequently fails to apply sunscreen effectively or does not use sufficient quantity of sunscreen to reach the level of SPF of the product.

The Sun Safety Council and the Melanoma Network of Canada recommends the use of high SPF sunscreens whenever possible over lower level SPF sunscreens.

Background

Skin cancer is the most commonly diagnosed cancer in Canada. Although skin provides a level of protection against injury, infection, and damage from ultraviolet (uv) sunlight, ambient sunlight remains the most significant source of uv radiation, which in turn increases the risk of a variety of cutaneous malignancies, including basal cell carcinoma, squamous cell carcinoma, and melanoma.

Melanoma accounts for only 4% of all skin cancer cases diagnosed, but it is the most dangerous form of cutaneous malignancy^{iv}. It is responsible for 80% of skin cancer deaths, and it is the seventh most commonly diagnosed cancer in Canada^v. The incidence of skin cancers in Canada is growing at an alarming rate, having increased by 38.4% between the years 1992 and 2012. In 2017 alone, approximately 7300 new cases of melanoma were diagnosed, and over 1250 deaths were caused by melanoma, which compares with 2400 new cases and 500 deaths in 1989. Thus, melanoma is one of the few cancer types that is increasing in incidence in the Canadian population. The current estimated lifetime probability of developing melanoma is 1 in 74 for women and 1 in 56 for men^{vi}.

Risk factors—such as family history, childhood sunburn exposure, and age—play a significant role in an individual’s likelihood to develop melanoma. Ultraviolet radiation exposure is the most modifiable variable in melanoma causation. It is therefore important for the general public, in particular the country’s youth, to understand the consequences of lifestyle choices—including indoor tanning bed use and outdoor sun tanning. Many of these issues are not being



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addressed fully at either the national or the provincial level, with Canadian efforts trailing those of other nations facing similar challenges. Canada also has healthcare access issues, with an inadequate distribution and number of physicians who can detect and treat melanoma at an early curative stage. With proper education and public awareness, reduction in incidence rates and an increase in early detection of melanoma can be an achievable goal in Canada.

High SPF Sunscreen Recommended as a Tool for Prevention of Melanoma and Skin Cancers

It has long been recognized that broad spectrum sunscreens have a significant role to play in skin cancer and melanoma prevention. Use of high-SPF sunscreen provides enhanced protection against sunburn, and UV induced skin cell damage. A recent study in 2018, reported in the *Journal of the American Academy of Dermatology* '*SPF 100+ sunscreen is more protective against sunburn than SPF 50+ in actual use: Results of a randomized, double-blind, split-face, natural sunlight exposure clinical trial*' points to the fact that higher SPF sunscreen provides greater protection against UV radiation for the population.

To provide another avenue in the fight against increasing incidence rates of melanoma and skin cancers, MNC and the Sun Safety Council of Canada are recommending usage of high SPF sunscreen. The study points to the fact that sunscreens are often not used to their full benefit and that the added value of higher SPF sunscreen over lower value SPF sunscreen has a significant tool in the long term reduction of skin cancers.

It has long been recognized that broad spectrum sunscreens have a significant role to play in skin cancer and melanoma prevention. Use of high-SPF sunscreen provides enhanced protection against sunburn, and UV induced skin cell damage. A recent study in 2018, published in the *Journal of the American Academy of Dermatology* '*SPF 100+ sunscreen is more protective against sunburn than SPF 50+ in actual use: Results of a randomized, double-blind, split-face, natural sunlight exposure clinical trial*'^{vii} demonstrated that sunscreen with SPF 100+ provides significantly greater protection against UV radiation than a sunscreen with SPF 50+ in people with all skin types. Reapplication of sunscreen is needed to maintain the SPF value, but many consumers often do not reapply as indicated on the label or do not apply adequate amounts of sunscreen. Studies show that high SPF sunscreen use can compensate for inadequate or inappropriate application of sunscreen. Studies also show that high SPF sunscreen provides greater protection from sunburn than low SPF sunscreen.

To aid in the fight against increasing incidence rates of melanoma and skin cancers, MNC and the Sun Safety Council of Canada are recommending usage of high SPF (greater than SPF 50) sunscreen.



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REFERENCES:

ⁱ [Joshua D. Williams, P.Maitra, E. Atillasoy, M. Wu, A. Farberg, D.Rigel](#), *SPF 100+ sunscreen is more protective against sunburn than SPF 50+ in actual use: Results of a randomized, double-blind, split-face, natural sunlight exposure clinical trial*: 2018 [Available online at: <https://doi.org/10.1016/j.jaad.2017.12.062> cited October 21, 2018]

ⁱⁱ [Green AC, Williams GM, Logan V, Strutton GM](#). *Reduced melanoma after regular sunscreen use: randomized trial follow-up*: Journal of Clinical Oncology 2011 [Available online at: <https://www.ncbi.nlm.nih.gov/pubmed/21135266>, cited October 18, 2018]

ⁱⁱⁱ Caroline G. Watts, M. Drummond, C. Goumas, *Sunscreen Use and Melanoma Risk Among Young Australian Adults*, JAMA Dermatology 2018 [Available online at: <https://jamanetwork.com/journals/jamadermatology/article-abstract/2687549>, cited October 2018]

^{iv} Krueger H, Williams D, Chomiak M, Trenaman L. *The Economic Burden of Skin Cancer in Canada: Current and Projected*. Toronto, ON: Canadian Partnership Against Cancer; 2010. [Available online at: <http://www.krueger.ca/downloads/skincancer.pdf>; cited October 18, 2018]

^vCanadian Cancer Society's Steering Committee on Cancer Statistics. *Canadian Cancer Statistics 2012*. Toronto, ON: Canadian Cancer Society; 2012. [Available online at: <http://www.cancer.ca/~media/cancer.ca/CW/cancer%20information/cancer%20101/Canadian%20cancer%20statistics/Canadian-Cancer-Statistics-2017-EN.pdf> cited October 18, 2018]

^{vi} Canadian Cancer Society's Steering Committee on Cancer Statistics. *Canadian Cancer Statistics 2012*. Toronto, ON: Canadian Cancer Society; 2012. [Available online at: <http://www.cancer.ca/~media/cancer.ca/CW/cancer%20information/cancer%20101/Canadian%20cancer%20statistics/Canadian-Cancer-Statistics-2017-EN.pdf> cited October 18, 2018]

^{vii} [Joshua D. Williams, P.Maitra, E. Atillasoy, M. Wu, A. Farberg, D.Rigel](#), *SPF 100+ sunscreen is more protective against sunburn than SPF 50+ in actual use: Results of a randomized, double-blind, split-face, natural sunlight exposure clinical trial*: 2018 [Available online at: <https://doi.org/10.1016/j.jaad.2017.12.062> cited October 21, 2018]