

We agree that the finding that some skin cancer incidence rates are beginning to plateau in younger age cohorts correlates with an environmental change some years ago. Since most evidence supports the importance of episodic excessive sun exposure in childhood for the later development of melanoma³ (commonly diagnosed at 40–50 years), then an environmental change occurring not 50 years ago, but more like 30 years ago, could be driving the incidence rate plateau. This would be consistent with the initial concerns about ozone depletion and a resulting increased risk of skin cancers starting in the early 1970s.⁴ Sun awareness and protection messages developed soon after this, particularly in those same countries in which plateauing melanoma incidence rates are now being observed.

Further evidence for sun exposure playing a role in melanoma comes from the consideration of changing incidence rates for cutaneous malignant melanoma, on sun-exposed compared to non-sun-exposed sites.⁵ Individual-level work on the role of EMF will be required to clarify its role in the causation of skin cancers, particularly cutaneous malignant melanoma. ■

Robyn M Lucas^b

References

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Authors' response

We thank Dr Hallberg for his comments on our paper "Is the current public health message on UV exposure correct?" We are aware of the research on EMF and melanoma; however, the weight of evidence supports a primary role for excessive UVR exposure in the causation of skin cancers.¹ Clearly other factors are important, including skin pigmentation and genetic susceptibility, for example defects in DNA repair seen in people with xeroderma pigmentosa.² Ecological studies support an hypothesis of a role for EMF in melanoma with hypothesized biological plausibility for a causative association via impaired cell repair and apoptosis — if individual-level studies support that hypothesis, UVR exposure remains of primary importance as the cause of the cell damage that requires repair.

^b National Centre for Epidemiology and Population Health, The Australian National University, Canberra, ACT 0200, Australia. Correspondence to Robyn M Lucas (e-mail: robyn.lucas@anu.edu.au).