

August 2018 Update from the Field: Sun Safety

Different Outdoor Professions Have Different risks – A Cross-Sectional Study Comparing Non-Melanoma Skin Cancer Risk Among Farmers, Gardeners, and Mountain Guides. Zink A, Tizek L, Schielein M, Bohner A, Biedermann T, Wildner M. *Journal of the European Academy of Dermatology and Venereology*. doi: 10.1111/jdv.15052

Background: One of the main risk factors for non-melanoma skin cancer (NMSC), the most common cancer worldwide, is solar ultraviolet radiation (UVR). This has led to the recognition of NMSC as occupational disease for outdoor workers in several countries. However, outdoor professions are a very heterogeneous group with diverse daily activities and associated UVR exposure.

Objective: To compare the prevalence of NMSC and associated risk behaviour in different outdoor professions.

Methods: Cross-sectional study among outdoor workers (farmers, gardeners, mountain guides) and indoor workers (office employees) as control group using a paper-based questionnaire on UVR exposure and protective behaviour followed by a skin examination by a dermatologist.

Results: A total of 563 participants (46.9% women, 46.9 ± 13.8 years) consisting of 348 outdoor workers (38.8% farmer, 35.3% gardener, 25.9% mountain guides) and 215 indoor workers were included in the study between March and September 2017. NMSC incl. actinic keratosis was diagnosed in 33.3% of mountain guides, 27.4% of farmers, 19.5% of gardeners and in 5.6% of indoor workers. Significant differences were seen between the outdoor professions with mountain guides at highest risk compared to farmers (OR = 2.6, 95% CI = 1.2–5.7). Substantial differences between the professions were also seen in skin cancer screening attendance rates (indoor worker 61.4%, mountain guides 57.8%, farmers 31.9%, gardeners 27.6%), daily UVR exposure during work and protective behaviour such as sunscreen use during work.

Conclusion: Different outdoor professions have significant different risks for NMSC and show different risk behaviour. Tailoring prevention efforts to different professions based on their individual needs could be the key to lower the global burden of (occupational) NMSC.

Barriers to Seeking Help for Skin Cancer Detection in Rural Australia. Fennell KM, Martin K, Wilson CJ, Trenerry C, Sharplin G, Dollman J. *Journal of Clinical Medicine*. doi:10.3390/jcm6020019

This study explores rural South Australians' barriers to help-seeking for skin cancer detection. A total of 201 randomly selected rural adults (18–94 years, 66% female) were presented with a skin-cancer-related scenario via telephone and were asked the extent to which various barriers would impede their help-seeking, based on an amended version of the Barriers to Help-Seeking Scale. Older (≥ 63 years) and less educated participants endorsed barriers more strongly than their younger, more educated counterparts in the following domains; “Concrete barriers and distrust of caregivers”, “Emotional control”, “Minimising problem and Normalisation”, “Need for control and self-reliance” (every domain other than “Privacy”). Socioeconomic disadvantage, gender, and farmer status did not predict stronger overall barriers, but some gender and occupation-related differences were detected at the item level. Farmers were also more likely to endorse the “Minimising problem and normalization” domain than their non-farmer working rural counterparts. Widely endorsed barriers included the tendency to minimise the problem, a desire to remain in control/not be influenced by others, reluctance to show emotion or complain, and having concerns about privacy or waiting times.

Implementation of Ultraviolet

Radiation Safety Measures for Outdoor Workers: A Canadian Perspective. Maguire E, Spurr A. *Journal of Cutaneous Medicine and Surgery*. 2017;21(2):117-124.

Ultraviolet radiation (UVR) poses a major risk for outdoor workers, putting them at greater risk for skin cancer. In the general population, the incidence of both melanoma and nonmelanoma skin cancers is increasing. It is estimated that 90% of skin cancers in Canada are directly attributable to UVR exposure, making this cancer largely preventable with the appropriate precautions. A scoping review was conducted on the barriers and facilitators to UVR safety in outdoor workers to elucidate why these precautions are not in use currently. We discuss these results according to the Hierarchy of Controls as a means to outline effective and feasible prevention strategies for outdoor workers. In doing so, this review may be used to inform the design of future workplace interventions for UVR safety in outdoor workers to decrease the risk of skin cancer in this vulnerable population.