



**COST Action TD1206 Early Stage Researchers' Forum on
"The challenge of occupational skin diseases: Basic translational and applied research"
29 July 2015, Munich, Germany**

ABSTRACT

Title: Self-reported occupational exposure to chemical and physical factors and risk of skin problems: a 3-year follow-up study of the general working population of Norway

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Please be aware that the article corresponding to this abstract has recently been accepted for publication in Acta Dermato-Venereologica

Background: Skin conditions are among the most frequent work-related conditions worldwide. Epidemiological studies at the population level are sparse, but essential for primary prevention.

Objective: To investigate prospectively the impact of self-reported occupational exposure to chemicals and physical factors on the risk of self-reported skin problems.

Methods: Randomly drawn from the general working-age population in Norway, the cohort comprised respondents registered with an active employee relationship in 2006 and 2009 (n = 6,745). Exposure to nine chemical and physical hazards at work was regressed on skin problems at follow-up (2009) using the following designs: (i) prospective analyses with exposure measured at the baseline (2006) and (ii) prospective analyses with exposure measured at both the baseline and follow-up.

Results: At the 3-year follow-up, 11.7% of the employees reported skin problems within the previous month. Indoor dry air (odds ratio (OR), 1.3; 95% confidence interval (CI) 1.1–1.6) was a significant baseline predictor of skin problems at follow-up, whereas exposure to cleaning products (OR, 1.7; 95% CI, 1.2–2.5), water (OR, 1.4; 95% CI, 1.1–1.9) and indoor dry air (OR, 1.6; 95% CI, 1.1–2.1) at both measurement time points was significantly associated with skin problems. The population risk that was attributable to these factors in the latter design was 16%.

Conclusions: Prevention efforts should focus on reducing occupational exposure to indoor dry air, cleaning products and water, as they appear to be the most consistent occupational predictors of skin problems in the general working population of Norway.

Keywords: general working population, skin problems, occupational factors, population – attributable risk, epidemiology.