

CANCER RISK AMONG MALE FARMERS IN THE NORDIC COUNTRIES

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Introduction: The aim of this presentation is to use the large Nordic Occupational Cancer Study (NOCCA) to describe cancer risk among male farmers in the Nordic countries.

Methods: The NOCCA data comprises 15 million subjects aged 30-64 years in the 1960, 1970, 1980/1981 and/or 1990 censuses in Denmark, Finland, Iceland, Norway and Sweden. These persons were followed for up to 45 years, yielding altogether 385 million person years at risk and 2.8 million cancer cases. Among the 622,440 male farmers, 140,563 cancer cases were observed. The standardised incidence ratio (SIR) was computed as the ratio between observed and expected number of cancer cases calculated from incidence rates for each country for the whole follow-up period and for nine 5 year periods. Assuming Poisson distribution of the cancer cases, 95% confidence intervals (95% CI) were calculated.

Results: Overall cancer risk among male farmers was significantly lower than that of the general population (SIR 0.83, 95% CI 0.82-0.83). The highest excess risk was found for lip cancer (1.57, 1.51-1.62), while the SIR for skin melanoma was lower (0.81, 0.78-0.84). The SIRs for alcohol and smoking related cancers were low, but increasing with time.

Conclusions: While there are specific risk factors in agricultural work which deserve further attention, the general cancer pattern in this group points to work-related lifestyle factors which appear to be protective. The increasing SIRs for alcohol and smoking related cancer suggest that during time, alcohol and smoking habits have become more similar to that of the general population.