

**Conclusions** These preliminary results suggest that night work does not increase the risk of breast cancer in the general female working population. We currently perform additional analyses on the dose-response relationship.

52 **NIGHT WORK AND BREAST CANCER – RESULTS FROM A LARGE PROSPECTIVE STUDY IN THE DUTCH GENERAL WORKING POPULATION**

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**Objectives** Despite the current debate, few prospective studies on night work and breast cancer have been performed, and the scientific evidence is limited. The aim of this prospective study was to investigate the relation between night work and breast cancer in the general working population.

**Methods** The study population consisted of 285 712 women participating in the Labour Force Survey in the Netherlands (1996–2008). These women were aged 15–64 years, and worked at least 12 h per week. Night work (24:00–6:00), age, education, country of birth, number of children in the household, occupation, contract hours, and years in current work were asked. Data were coupled to the National Medical Registration (1996–2009) and mortality statistics (1996–2009) to identify women that were admitted to hospital or had died due to breast cancer. Logistic regression analysis was applied.

**Results** Night work was performed sometimes by 3.7% and always by 6.7% of the women. In total 2.119 women (0.7%) were admitted to hospital because of breast cancer after participating in the survey, and 455 women (0.2%) died due to breast cancer. In the multivariate analysis, sometimes night work was not related to hospital admission (OR 1.15 (0.93–1.42)), whereas always night work was related to a decreased likelihood of hospital admission (OR 0.76 (0.62–0.94)). A similar pattern was found for mortality, though not significant.