

approach identified occupational exposures and social determinants of health associated with the risk of prostate cancer across a lifetime.

Objectives To assess the risk of prostate cancer among men employed in manual occupations compared to the risk of those in non-manual occupations. Using three time points of exposure, we tested the accumulation, critical period and trajectory models.

Methods Histologically-confirmed prostate cancer cases (n=1229), aged 40 to 75, were identified across 11 French hospitals in Montreal. Population controls (n=1307) were identified from the French provincial electoral list in the same areas of residence as the cases, and frequency-matched to cases by age (± 5 years). Information on socio-demographic, lifestyle characteristics, and detailed occupational history, was collected through face-to-face interviews. Using the British Registrar General's classification of occupations, jobs held at age 25 and 55, and father's occupation at birth, were categorised as manual or non-manual. Logistic regression models were applied.

Results Men with exposure to manual occupations at the three time points were more likely to have had an unfavourable financial situation during childhood, a lower education level and a lower family income at diagnosis or interview. Based on the accumulation model, men who held only manual occupations were at 23% excess risk of prostate cancer [OR=1.23, 95%CI 1.00–1.51] compared to those who did not after controlling for other socioeconomic factors. Using the trajectory model, a decreased risk of prostate cancer [OR=0.79, 95%CI 0.59–1.05] was observed among men moving from manual to non-manual occupations during adulthood. The critical period model did not identify any risk differences when exposures occurred specifically at one of the three time points.

Conclusion Although life-course models are difficult to disentangle, the observed associations between manual occupations and prostate cancer risk are consistent with both accumulation and trajectory models. Highest risks were observed with prolonged exposure to manual occupations. Conversely, moving from manual to non-manual occupations appeared to be protective against prostate cancer.

OP-009 **LIFECOURSE ANALYSIS OF MANUAL OCCUPATIONS AND RISK OF PROSTATE CANCER IN MONTREAL, CANADA: A CASE-CONTROL STUDY**

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10.1136/jech-2013-203098.18

Introduction Cancer risk factors accumulate over time or affect the body at specific moments of development. Our lifecourse