

Occupation and ovarian cancer

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Our Nordic Occupational Cancer (NOCCA) study investigates cancer risk by occupation in the five Nordic countries. Information on occupation on 15 million inhabitants aged 30 to 64 was collected from census 1960-1990. Follow-up for cancer incidence was obtained through linkages with national cancer registries through 2002-2005. There were 79,664 cases of ovarian cancer and 9,085 borderline tumours. Results are presented as standardized incidence ratios (SIRs), with entire national population as the reference.

There was somewhat increased risk of ovarian cancer among printers SIR 1.25 (95% confidence interval 1.11-1.41) and hairdressers (1.16, 1.05-1.27). For borderline ovarian tumours, highest SIRs were observed among women working as printers (1.50, 1.09-2.01), mechanics (1.40, 1.10-1.75), postal workers (1.24, 1.07-1.44), and cooks and stewards (1.21, 1.01-1.44). Lowest SIRs were found among physicians (0.45, 0.19-0.89), laboratory assistants (0.59, 0.36-1.91), and gardeners (0.80, 0.70-0.92).

Previous studies have found indications of elevated risks associated with aromatic hydrocarbon solvents, leather dust, man-made vitreous fibres, asbestos, diesel, gasoline, and engine exhausts. In the present study, markedly larger than any of the earlier similar ones, the occupational variation of ovarian cancer incidence was small. Our findings rather suggest that occupational risk factors that have been linked for ovarian cancer may have stronger association with borderline tumours.