and limited case numbers, have reported mixed results, with no consistency in risk estimates. Studies of ionising radiation have perhaps been the strongest, but associations were again unconvincing. The objective of this study is to investigate possible associations between paternal occupational exposure and childhood cancers in Great Britain.

Methods The National Registry of Childhood Tumours provided all cases of cancer diagnosed <15 years in Great Britain 1962–2006. Controls were matched on age, birth year and birth registration district. Father's occupations were assigned to one of 33 exposure groups using an existing method. Social class, derived from father's occupation, was coded following the Registrar General's 1980 classification.

Results 13 543 cases of childhood leukaemia and 9354 cases of CNS cancers were ascertained. For confirmed exposures, one occupational exposure group, social contact, was positively associated with risk of childhood leukaemia (OR 1.13, 1.03–1.23), though this association was not significant when adjusted for social class. Three occupational exposure groups were inversely associated with risk of childhood leukaemia, and two, exposure to animals and exhaust fumes, remained significant after adjustment for social class. For CNS tumours, only exposure to metal fumes was significantly associated after adjustment (OR 0.86, 0.74–0.99).

Conclusions First results from this population-based case control study do not support an association between fathers' membership of an occupational exposure group and increased risk of childhood cancer in their children.

40 CASE-CONTROL STUDY OF PATERNAL OCCUPATION AND RISK OF CHILDHOOD CANCER IN GREAT BRITAIN, 1962–2006

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Objectives Paternal exposure to carcinogens has been proposed as a risk factor for childhood cancer. Previous epidemiological studies, complicated by weak exposure assessments