was relatively low. We recommend expanding the service beyond Maccabi onto other health service organisations.

0381 ADJUSTMENT FOR MULTIPLE COMPARISONS IN A JOB AND INDUSTRY-TITLE ANALYSIS OF A CASE-CONTROL STUDY OF PROSTATE CANCER

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Objectives To evaluate the impacts of empirical Bayes (EB) and semi-Bayes (SB) adjustment to account for multiple testing in a hypothesis-generating study of prostate cancer (PCa) risk by occupation and industry.

Method The study population comprises 1937 PCa cases and 1995 population controls aged 40–75 years, all residing in Montreal. Odds ratios (OR) and 95% confidence intervals (CI) of PCa risk for ever employment in an occupation and industry were estimated using unconditional logistic regression models adjusted for age, ancestry, and family history of PCa. EB and SB adjustment was applied to the estimates, with prior variances of 0.15, 0.25 and 0.35 selected for SB. Occupation and industry effects were considered mutually exchangeable, with the risk estimates shrunk towards their respective global mean.

Results 5 of the 89 occupations and 3 of the 63 industries had a significantly elevated PCa risk prior to EB/SB adjustment, compared to an expected 2 and 1.5 categories due to random chance. The only positive association remaining significant following EB was for subjects ever employed in government (OR=1.4, 95% CI 1.1–1.5). The remaining elevated PCa risks with SB were found for employment in social science occupations (OR=1.5, 95% CI 1.1–2.0) and for forestry workers (OR=1.7, 95% CI 1.1–2.6), in addition to government (OR=1.4, 95% CI 1.1–1.7). The choice of prior variance had a negligible impact on the estimates.

Conclusions The use of EB and SB reduced the number of positive associations compared to the unadjusted estimates. The elevated PCa risk observed for employment in government remained consistent across the adjustment approaches.

0387 SMOKING AND ALLERGIC CONTACT DERMATITIS: CAUSATION OR CORRELATION?

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Objectives Contact dermatitis (CD) is the most common occupational skin disease and includes both irritant and allergic forms (ICD and ACD). Smoking has been associated with all of CD, hand eczema and sensitisation in previous studies, but never explored in relation to work-related ACD and ICD specifically. This abstract describes differences in patients who have a work-related diagnosis of ICD, ACD or both ICD and ACD.

Method Data from a study of patients with possible work-related skin or respiratory disease were used. Data included demographics, symptoms, smoking history and physician diagnoses. Differences between diagnosis groups (ICD, ACD, both) were investigated using chi square and ANOVA.

Results In total 163 subjects were diagnosed with work-related CD. Of these, 44% were female, approximately half (51%) were ever smokers and 30% were atopic; the mean age was 44.9 years. ICD was diagnosed in 57% of subjects, ACD in 43% and both ICD and ACD in 14%. Current smoking was more common among subjects with ACD (40%) and those with both ACD and ICD (35%) compared to those with ICD (17%) (p = 0.02); no difference in pack-years was observed.

Conclusions The rate of smoking in this sample was similar to the Canadian population. Age, sex and atopy did not differ between diagnosis groups. Current smokers were more common among those with ACD and those with ACD and ICD. The mechanism by which smoking may be related to the development of allergic skin disease remains unclear (e.g., systemic inflammation, contact, behavioural differences) but deserves further attention.

0388 AN UPDATE OF MORTALITY AND CANCER INCIDENCE AMONG ONTARIO URANIUM MINERS EXPOSED TO RADON PROGENY

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Objectives Underground uranium mining and milling was conducted in Northern Ontario from 1955 to 1996. The Ontario uranium miner's cohort was created to study the health effects of radon and other occupational exposures. Study objectives include providing updated estimates of cancer incidence and mortality for miners exposed to radon daughters, a project funded by the Canadian Nuclear Safety Commission.

Method The cohort of mine and mill workers was created using data from the National Dose Registry (Canada's ionising radiation exposure registry), and the Ontario Mining Master File (containing work history information collected during annual chest x-rays) data. The cohort consists of men who worked for at least one week between 1954 and 2004. Follow-up was recently extended from 1986 to 2007 for mortality and included follow-up for cancer incidence from 1969–2005. Standardised mortality ratios (SMRs), standardised incidence ratios (SIRs) and their 95% confidence intervals (CIs) will be calculated based on Canadian national reference rates.

Results The final cohort consisted of 28 546 miners. The mean age of the miners at entry into the study was 28.8 years. Miners in the cohort had a mean cumulative exposure of 21.0 WLM over an average of 5.3 years of total exposure. Between 1954 and 2007, a total of 8572 deaths were observed, and of these 2809 were due to cancer, including 1246 lung cancer deaths. There were 4151 incident cancers, including 1285 lung cancers, observed.

Conclusions The Ontario uranium miner's cohort study continues to be a valuable source of assessing uranium miners risk of cancer mortality and incidence.