

occupation stated at interview were used as an indicator of occupational exposure. Odds ratios (OR) and 95% confidence intervals (CI) were estimated using unconditional logistic regression and attributable fraction (AF) by Miettinen's formula, adjusted for smoking pack years, HIV status and domestic fuel type use.

Results The mean age of cases and controls was 56.0 and 57.1. Among men, adjusted OR for lung cancer was 3.0 (95% CI 1.4–6.4) in miners and 1.7 (95% CI 1.3–3.2) in transport occupations. In women, the adjusted OR in domestic workers was 7.3 (95% CI 1.7–11.3) whereas working in the food and beverage industry was 4.9 (95% CI 1.4–26.8). Occupation resulted in an AF of 14% in men and 26% in women.

Conclusions Occupational risk factors for lung cancer in South Africa are gender-specific, having more impact in women than in men. Further studies are needed to assess possible specific exposures in the mining and transport industries for men, and food industry and private homes for women.

0343 MESOTHELIOMA RATES IN SOUTH AFRICA: TRENDS 1995–2008

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Objectives Mesothelioma is a rare neoplasm which is caused by asbestos exposure. South Africa has mined and refined all three types of asbestos since 19th century with the peak of production in 1940–1980s. At present asbestos use and production is banned in South Africa. Trend 1995–2008 in mesothelioma rate was assessed to determine burden of asbestos related deaths due to mesothelioma by year and gender.

Method Death certificates with underlying cause of death stated as C45 were selected for the study in 1995–2008. For each year of study, age and gender distribution was obtained from the national statistical releases. Mesothelioma rates, 95% confidence interval were calculated for each year and sex, and for age groups and sex. Poisson regression was used to test for trend.

Results In total 2497 cases were identified of deaths due to mesothelioma, 1919 in men and 578 in women in the study period. There was 3:1 male to female ratio. The trend was stable and constant over time for both men and women cases. Mortality rate in men was 8–16 per million and in women 2–5 per million.

Conclusions If mortality rate remains at current estimates we can expect 2134 cases until 2020. However, it is authors opinion that mortality rate is underestimated due to the competing causes of death, and shortened longevity. Just looking at other countries and their diagnosed cases, such as Great Britain, major consumer of asbestos from South Africa, it becomes apparent how little mesothelioma cases are diagnosed in our country.

0370 OCCUPATIONAL ACCIDENTS AND DISEASES AMONG COMMUNITY HEALTH AGENTS IN THE MUNICIPALITY OF CARAGUATATUBA/SP

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Objectives Identify and analyse of the occupational accidents and diseases occurred with the community health agents in the municipality of Caraguatatuba/SP.

Method This descriptive, exploratory, cross-sectional field study with a quantitative approach had the purposes of identifying and analysing of the occupational accidents and diseases occurred with the community health agents in the municipality of Caraguatatuba/SP. The data were collected from 137 workers by means of a questionnaire and an interview.

Results The data related to occupational accidents reveal that less than half (59; 43.07%) of the workers had occupational accidents, most of them (44; 74.59%) having reported one; the total of accidents reported was 80, and the most frequent were biker trauma in traffic accidents (43; 53.75%), followed by dog bites (13; 16.25%) and falls (12; 15.00%); the most frequent type of occupational accident was the typical (64; 80.00%), followed by road accidents (13; 16.25%) and occupational disease (3; 3.75%). Besides, 22.63% reported diseases as osteomuscular system and of the connective tissue (13; 30.96%), diseases of the circulatory system (7; 16.68%), the respiratory system, mental and behavioural disorders, skin and subcutaneous tissue diseases (4; 9.52%, respectively).

Conclusions The data point to the importance for an investment in the health community health agents in the municipality of Caraguatatuba/SP with training program.

0372 PATIENTS' VIEWS AND EXPECTATIONS ON SOCIAL WORK SERVICES IN THE OCCUPATIONAL MEDICINE CLINIC IN THE MACCABI HEALTH SERVICE ORGANISATION

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Objectives To explore patients' expectations regarding the social work service and to determine their satisfaction level with the care provided to them so far by the social worker in the framework of the occupational clinic.

Method This is a cross-sectional study which consists of Maccabi members of working age that visited occupational medicine departments between September 2011 and July 2012 for the purpose of fitness-for-work evaluation who were referred to and met with a social worker. These members filled out an expectation and satisfaction questionnaire after meeting with the social worker.

Results A total of 203 questionnaire were filled out. Most of the patients were interested in receiving information about their benefits (85%). A smaller number of patients (39.2%) were interested in receiving help dealing with a family members' distress due to the loss of work ability of the patient. A very high percentage of the patients (97%) were satisfied with the social worker session. A correlation was found between the patients' expectations and their satisfaction with the amount of information they received ($p > 0.01$).

Conclusions This is a first study of this kind addressing social work services in a public occupational medicine services. The study shows the positive advantage of this service and a high patient satisfaction level with the social work service. The satisfaction level was high even though the patients' health status

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.