**Exposure assessment**

**0-174 FORMATION OF THE INTERNATIONAL PARTNERSHIP ON AUTOMATIC OCCUPATION CODING – CALL FOR PARTNERS AND COLLABORATION**

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**Introduction** Job coding is important for occupational epidemiology. Occupational classifications, such as the ILO’s International Standard Classification of Occupations (ISCO), are often used in job-exposure matrices (JEMs) and other models for exposure assessment in population-based studies. In these studies, assignment of job codes is often performed manually. This work is labourious, costly, and limited in reliability. Tools for automatic assignment of job codes are available for select coding systems and languages; however, their application in occupational epidemiology is limited mainly due to uncertainties around tool performance and how their use might impact exposure assessment.

**Material and Methods** Following discussions held during and after EPICOH 2021, the International Partnership on Automatic Occupation Coding (IPAOC) was formed by a group of occupational exposure assessment scientists and epidemiologists. Aiming to promote knowledge sharing and collaborations on the development of automatic coding algorithms and software, IPAOC met regularly and actively sought new partners in 2022 while defining its research agenda.

**Results and Conclusions** As of November 2022, IPAOC includes more than 40 members from six countries. The partnership is diverse and multidisciplinary; research areas represented include computer and data science, labour economics, occupational medicine, occupational health, official statistics, statistics, and sociology. Member interests in automatic job coding also span across a number of languages and occupation classifications systems, including in English (Coding: ISCO, US SOC and Canadian NOC), French (PCS), German (KldB), and Dutch (ISCO). For 2023, IPAOC’s goals are to address two main challenges for developing better automatic job coding tools: siloed development in separate projects/countries and low training data availability. Specifically, IPAOC will 1) apply for funding for a week-long workshop meeting to facilitate knowledge sharing and cooperation in the Lorentz Center in Leiden, the Netherlands; and 2) develop a shared benchmarking dataset for coding algorithm development.

**Psychological hazards/Health**

**0-175 WORK-FAMILY CONFLICT, WORK-FAMILY BOUNDARY AND SATISFACTION WITH FAMILY LIFE ONE YEAR AFTER COVID-19 LOCKDOWN: GENDER DIFFERENCES IN THE PORTUGUESE POPULATION**

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**Introduction** Work-family conflict is a public health concern due to the effects it has on the health of family members and on the work life and performance. During the COVID-19 pandemic work-family boundary management was a challenge for workers, with important consequences to the conflict between both domains, and was crucial for well-being at work and for a full and healthy experience of family life. This study aims to understand the relationship between work-family boundary management and work-family conflict and how they influence satisfaction with family life in both genders.

**Material and Methods** Data was collected in mixed mode on a survey of the ECOS (At Home we Observe Health) panel carried out by the Portuguese National Institute of Health in 2021, one year after the first COVID-19 lockdown period. The questionnaire included scales referring to work-family conflict (WFC), work-family border management (WFBM), satisfaction with family life (FLS) and sociodemographic variables. The sample, with a probabilistic and multi-stage design, was selected to represent the population of the Portuguese NUTS II regions, having a participation rate of 71%. Statistical analysis of the working people subsample was performed using a structural equation modelling approach with the R software packages lavaan and lavaan-survey, with weighting for age, sex, region and sample design.

**Results and Conclusions** All the models have a good fit. In the baseline model, WFBM significantly inversely influences the WFC but not the FLS. The WFC inversely influences the FLS. Considering both sexes, they behave very differently: while for women the WFBM significantly inversely influences the WFC and directly the FLS; in men’s case only the WFC significantly and inversely affects FLS. WFBM seems to be a very important factor for Portuguese working women’s relation with both WFC and FLS, but nor for working men.

**Exposure assessment**

**0-178 OCCUPATIONAL RADON EXPOSURE IN CANADA**

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**Introduction** Radon is an established lung carcinogen concentrating in indoor environments with importance for many workers worldwide. However, a systematic assessment of radon levels faced by all workers, not just those with direct uranium or radon exposure, has not previously been completed. The objective of this study was to estimate the prevalence of workers exposed to radon, and the level of exposure (>100–200 Bq/m3, 200–400 Bq/m3, 400–800 Bq/m3, and >800 Bq/m3) in a highly exposed country (Canada).

**Materials and Methods** Exposures among underground workers were assessed using the CAREX Canada approach. Radon concentrations in indoor workplaces, obtained from two Canadian surveys, were modelled using lognormal distributions. Distributions were then applied to the susceptible indoor worker population to yield the number of exposed workers, by occupation, industry, province, and sex. CAREX Canada received an exemption from ethics approval for this study since all no personal data was used; all data on human subjects was publicly available.