

industry (difference: 9 jobs). The use of MRS allowed us to identify job characteristics that are associated with lower agreement between experts and to quantify the potential benefit of using multiple raters.

## Poster Presentation

### Cancer

#### 0304 TEMPORO-SPATIAL ANALYSIS OF MORTALITY FROM PLEURAL MESOTHELIOMA FROM 1975 TO 2012 IN ÎLE-DE-FRANCE

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**Context** Pleural mesothelioma surveillance, a marker of asbestos exposure, improves early detection and helps improving compensation of the disease. Few epidemiological data exist at a sub-district level in France.

**Objectives** This study presents an analysis of mortality in Île-de-France region from pleural mesothelioma from 1975 to 2012, by sex, district and "cantons-villes" residence.

**Material and methods** Pleural mesothelioma deaths from 1975 to 2012 were provided by the CepiDc and the corresponding population numbers by INSEE. Mortality rates stratified by age were reported for the region and its districts. Standardised mortality ratios were calculated using the Île-de-France population as a reference at "canton-villes" level. A ranking algorithm to order the mortality by "canton-ville" over the period was developed and applied.

**Results** The epidemic peaked in the mid-90s. Among men the lowest standardised rate was observed for Paris (3.4 per 100,000) and the highest in Seine-et-Marne and Seine-Saint-Denis (5.1 per 100,000). Among women the lowest mortality was observed in Paris and in the Val d'Oise (1.3 per 100,000) and the higher in the Seine-Saint-Denis (1.8 per 100,000). The temporo-spatial representation shows high mortality areas consisting of neighbouring "cantons-villes" in Seine-et-Marne (Perthes) and Seine-Saint-Denis (Aulnay-sous-Bois), in contrast with areas of low mortality localised mainly in Paris and the Val-d'Oise. The epidemic timeline differed among "canton-ville".

**Conclusion** Epidemic of pleural mesothelioma can be characterised at a fine scale over a long period. This territorial knowledge can be an aid to targeted education of health professionals and the populations concerned.

## Oral Presentation

### Cardiovascular Disease

#### 0305 OCCUPATIONAL EXPOSURE TO RESPIRABLE QUARTZ AND RADON AND THE RISK OF ACUTE MYOCARDIAL INFARCTION

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**Objectives** The aim of this study is to investigate the effect of occupational exposure to radon and respirable quartz (RQ) on the risk of acute myocardial infarction.

**Methods** This individually matched case-control-study is nested into the Wismut cohort of former uranium miners. Acute myocardial infarction (AMI) was ascertained from hospital discharge diagnoses coded in ICD-10 and validated according to WHO criteria (1979) by patient records. Exposure to RQ, radon, long-lived radionuclides, Gamma-radiation, and arsenic was estimated by a corresponding job-exposure-matrix. Information on silicosis was included in the dataset to reduce a possible Healthy-worker-effect. To exclude effects of possible exposures before hire in uranium mining, a second analysis was performed limited to miners born after 1930. Conditional logistic regression was used for risk modelling.

**Results** In total, 467 cases of AMI and 467 controls, matched by year of birth, were ascertained. The analysis of the full dataset shows only a weak increase of AMI-risk with increasing exposure to RQ. But the second analysis, based on 126 matched pairs, revealed a positive dose-response relationship with RQ. The odds ratio for the highest quintile (>15 mg/m<sup>3</sup>·year) was 4.91 (95%CI: 1.43–16.8). Including RQ as a linear term yields OR=1.05 per mg/m<sup>3</sup>·year. The analysis of the cumulative radon exposure produced similar findings.

**Conclusions** This study shows elevated risk of AMI due to radon and RQ exposure. Because of the high correlation between both exposures, a differentiation between the corresponding effects is not possible.

## Oral Presentation

### Exposure Assessment

#### 0306 USING DATA FROM EXPOSURE DATABANKS: COMPARING MEASUREMENT LEVELS IN LIMS (QUEBEC, CANADA) AND IMIS (USA)

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