Spoken sessions

Occupational lung disease

A NEW, EFFICIENT WEB-BASED TOOL TO COLLECT AND CODE LIFETIME JOB HISTORIES IN LARGE POPULATION-BASED STUDIES: THE COPD PROJET IN THE UK BIOBANK CORHINT

Methods The development of airborne chemical exposure JEM (ACE-JEM) involved a four-stage approach; first, exposure (yes/no) to each of the six different airborne pollutants types (vapours, gases, dusts, fumes, fibres and mists; VGDFFM) was assessed for each of the 353 SOC codes, then three levels of exposure estimates (low, medium and high) (L-JEM1) and four levels of proportion exposed (0–4%, 5–9%, 20–49% and >=50%) (P-JEM2) were assigned to the exposed codes and for each pollutant type. The two P and L JEMs were then combined to produce the final ACE-JEM. The estimated exposure of the 6 pollutant types was expanded to include biological dusts, mineral dusts, metals, diesel fumes and ashamagres.

Results For L-JEM1 186 (53%) of the codes were assigned as exposed to at least one type of VGDFFM. The most common exposure was dust (40% of all SOC codes) followed by fumes (26%). Over 68% of all codes were assigned as not being exposed to fibres, gases or mists. The pollutant with the highest proportion in the high exposure group was dusts (13%), and 33% of the codes were assigned as exposed to ashamagres. Overall, 53% of the codes were assigned as exposed to CGDF, with 22% assigned as having medium or high exposure to VGDF.

Discussion An expert assessment derived JEM has been developed, using a strict set of a priori defined rules. This JEM will assist attribution of possible harmful workplace exposures in future epidemiological studies. The ACE-JEM could also be applied to studies to assess risks of other respiratory diseases, including asthma and extrinsic allergic alveolitis.

Development of a Job Exposure Matrix for SOC 2000 Listings to Identify Occupational Causes of COPD

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