Oral Presentation

Respiratory

0174 MORTALITY DUE TO ASBESTOSIS IN A COHORT OF FORMER ASBESTOS TEXTILE WORKERS

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10.1136/oemed-2017-104636.141

Background Knowledge on the role of the temporal pattern of exposure to asbestos in determining mortality from asbestosis is limited. We aim at investigating how the risk of death due to asbestosis changes according to the duration of employment and the time since the last employment (TSLE).

Methods An historical cohort of workers from a former asbestos textile factory (active between 1946 and 84) was followed up until November 2013. For each subjects, we collected information on duration of the employment, TSLE, age and year of first employment, and sex. We estimated hazard ratios (HR) and 95% confidence intervals (CI) of death from asbestosis by fitting multivariable Cox regression models with age specified as the main temporal axis.

Results We identified 51 deaths from asbestosis that occurred among 1823 workers (incidence rate of 74 cases per 1 00 000 person-years). The risk of death from asbestosis increased with increasing exposure duration (HR 3.0 [95%CI 1.3–7.6] for duration of employment ≥ 15 years compared to duration < 5 years) and declined with TSLE (HR 0.3 [95%CI 0.1–0.9] for TSLE ≥ 25 compared to TSLE < 5 years). We observed a strong decline of mortality due to asbestosis among workers firstly employed after 1968.

Conclusions Information on the temporal pattern of exposure to asbestos is fundamental to estimate the individual risk of asbestosis. On the opposite of what overserved in ecological studies, the risk of death due to asbestosis declines steadily after cessation of exposure to asbestos.

Oral Presentation

Occupational Medicine (SCOM/Modernet)

0175 DIFFERENT APPROACHES FOR EARLY RECOGNITION AND PREVENTION OF NEW AND EMERGING WORK-RELATED DISEASES

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10.1136/oemed-2017-104636.142

Rapid changes in working conditions constantly give rise to new occupational health risks and work-related diseases (WRDs). Monitoring these new WRDs is essential from the aspects of early recognition and prevention. In addition, it requires a comprehensive approach, using several complementary methods. One of these methods are early warning systems designed to collect information on health effects in order to trigger interventions and prevention. These systems differ in characteristics, their ability to capture new WRDs and their link with prevention. Therefore, the aim of this study is to identify sentinel and alert systems for detecting new and emerging WRDs, describe their main characteristics, and set up a basic typology. In the first phase, we conducted an extensive scientific and grey literature review and we identified 75 surveillance systems covering 26 different countries. We set up a basic typology of these systems dividing them into four main groups: compensation-based systems (21), non-compensation related comprehensive systems (38), sentinel systems (12) and public health surveillance systems aimed at workers and non-workers (7). These systems further differed in type of WRDs, coverage, data collection, evaluation of work-relatedness; follow up of new/emerging risks, link with prevention etc. In the second phase, we chose a representative selection of 12 good practise examples to be described in-depth. Through a desk research and interviews with stakeholders, we gained additional insight into drivers and obstacles regarding these systems and usage of collected data for identification of WRDs, prevention and policy recommendations.

Oral Presentation

Cancer

0176 SINONASAL CANCER FOLLOWING OCCUPATIONAL STYRENE EXPOSURE: A NEW SIGNAL OF HUMAN CARCINOGENESIS?

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10.1136/oemed-2017-104636.143

Objective We recently suggested an increased risk of sinonasal cancer following occupational styrene exposure. The objective of the current study is to explore this finding further by including information on quantitative measures of styrene exposure and histological information on sinonasal cancer subcategories.

Methods We followed 73 092 workers employed in 456 small and medium sized Danish reinforced plastics companies from 1968 to 2011. Incident cases of sinonasal cancer were identified by linkage with the national Danish Cancer Registry. We modelled cumulative styrene exposure level from historical styrene measurements, company information, and survey data and estimated rate ratios (RR) of overall sinonasal cancer and histological subcategories. Due to few cases, these analyses were performed with no adjustment. To account for potential confounding from age, gender and employment in wood