

evidence-based and cost-effective preventive policies and actions, ultimately contributing to reducing the burden of NCDs. This presentation will present the EPHOR design and approach as well as some developments so far.

S-136 OMEGA-NET INVENTORY OF OCCUPATIONAL COHORTS

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10.1136/OEM-2021-EPI.412

Introduction Existing cohort studies in Europe capturing some type of occupational information enrol tens of millions of persons. There are few large-scale analyses systematically combining cohorts from this extraordinary resource, and a systematic approach to facilitate the use of cohorts across research groups and countries is needed.

Objectives As part of the ongoing OMEGA-NET COST Action, we created an online inventory of cohorts (<https://occupationalcohorts.net/>) with occupational information in Europe and worldwide and implemented an interactive search tool with detailed information on these cohorts. The inventory aims to collect information that facilitates collaboration across cohorts to explore occupation, work related exposures and health relationships.

Methods The inventory includes prospective or retrospective cohorts, case-control studies nested within cohorts and intervention studies that: (i) are active or can substantiate that their data are potentially accessible; (ii) collect data on occupation and/or industry or at least one occupational exposure; and (iii) have at least one follow-up either already conducted or planned. The inventory only incorporates cohort meta-data. Researchers enter information regarding their cohort using a web-based OMEGA-NET inventory questionnaire. The published version of the inventory is stored in a searchable web database.

Results To-date the inventory includes information on > 130 cohorts in more than 20 countries. Information is collected on: (i) Identification and basic description; (ii) Follow-up; (iii) Occupational exposures (dusts and fibres, solvents, pesticides, metals and metal oxides, other chemicals, engineered nanoparticles, biological factors, physical agents, ergonomics, physical workload and injury, psychosocial domains, organisation of work and working time); (iv) Outcomes evaluated; (v) Biological samples and analysis; (vi) Other information e.g. sociodemographic.

Conclusion The OMEGA-NET inventory will continue to identify and invite cohorts and seeks to capture the majority of available active cohorts with information on occupational exposures, many of them being non-occupational in their primary aim.

S-141 OCCUPATION AND COVID-19 MORTALITY IN ENGLAND: A NATIONAL LINKED DATA STUDY OF 14.3 MILLION ADULTS

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10.1136/OEM-2021-EPI.413

Introduction The coronavirus pandemic has been particularly severe in the UK, with high infection and death rates, including among working age population.

Objective To estimate occupational differences in COVID-19 mortality, taking into account confounding factors, such as regional differences, ethnicity, education, deprivation and pre-pandemic health.

Methods We used data on 14,295,900 individuals who completed the UK Census in 2011, who were alive on 24 January 2020, were employed and aged 31–55 years in 2011. Data were linked to death and other health records. We examined differences between occupational groups in the risk of COVID-19 death from 24 January to 28 December 2020. We estimated age-standardised mortality rates per 100,000 person-years at risk stratified by sex and occupations. To estimate the effect of occupation due to work-related exposures, we used Cox proportional hazard models to adjust for confounding factors.

Results There is wide variation between occupations in COVID-19 mortality. Several occupations, particularly those involving contact with patients or the public, show three- or four-fold risks. These elevated risks were greatly attenuated after adjustment for confounding and mediating factors. For example, the hazard ratio (HR) for men working as taxi and cab drivers or chauffeurs changed from 4.60 [95%CI 3.62–5.84] to 1.47 [1.14–1.89] after adjustment. The overall HR for men working in essential occupations compared with men in non-essential occupations changed from 1.45 [1.34 - 1.56] to 1.22 [1.13 - 1.32] after adjustment. For most occupations, confounding and other mediating factors explained about 70% to 80% of the age-adjusted hazard ratios.

Conclusions Working conditions are likely to play a role in COVID-19 mortality, particularly in occupations involving contact with COVID-19 patients or the public. However, there is also a substantial contribution from non-workplace factors, including regional factors, socio-demographic factors, and pre-pandemic health.

S-143 RISK OF ASTHMA AMONG PROFESSIONAL CLEANERS IN DENMARK – RESULTS FROM A MATCHED REGISTER-BASED COHORT STUDY

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10.1136/OEM-2021-EPI.414

Introduction Epidemiological studies indicate an increased asthma prevalence among cleaning professionals compared to other jobs.

Objectives In a multi-disciplinary project in Denmark on spray cleaning products we investigated the risk of asthma among professional cleaners in a nationwide population-based register study.

Methods In a register-based matched cohort study, 16–50 year-old professional cleaners were identified according to yearly assigned job and industrial codes for cleaning. The references was workers with other manual jobs/service workers. Asthma was defined from national registers on hospitalisation and prescribed asthma medication (person years: cleaners = 1,014,893; references = 2,777,052). The associations between recent (previous year) and preceding cumulated