also result in reduced quality of life and employment opportunities for the worker. Despite this considerable burden, there is little understanding of occupational noise exposure on a national scale. Recognition of occupational noise exposure is particularly important for small businesses which employ the majority of workers, and are less likely to monitor occupational health concerns.

We undertook a national phone survey of nearly 5000 workers in Australia using our validated online application, OccIDEAS. In order to mirror a dosimeter survey, each person was asked about their last working day. Each worker was allocated one of 52 job-specific modules which contained questions about relevant tools, tasks and the time spent on each tool/task. The answers were linked to a custom database containing typical noise levels for each tool/task. Partial noise exposures were calculated, added and normalised to an eight hour shift.

On their previous working day, 16% of respondents (23% of males and 7% of females) had an estimated exposure (LAeq,8h) equal to or over the recommended exposure limit of 85 dB. Of those exposed above the limit, 80% were males. A substantial proportion of those exposed above the exposure limit reported that they did not wear hearing protection at all during the day.

These results can be used to target interventions at particular occupational and demographic groups to reduce the incidence of NIHL in the future.

Oral Presentation

Exposure Assessment

0352 DOES THE SIZE OF A COMPANY MAKE A DIFFERENCE TO THE PREVALENCE OF EXPOSURE?

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About two-thirds of workers in high-income countries work in micro (<5 employees) small (5–20 employees) and medium (20–200 employees) sized companies. Nevertheless, regulatory bodies and many research projects predominantly work with large companies (>200 employees) perhaps because they are more convenient to study. For example, a survey of exposure to silica in the UK undertook 44 site visits, with none of the visits involving sole-trader or micro companies.

We undertook a national population-based survey of nearly 5000 Australian workers to examine the occupational prevalence of exposure to 27 asthmagens. Seventy percent worked in companies with <200 workers and nearly 20% worked in micro-companies. The overall prevalence of any exposure showed no trend with company size. However, there was considerable variation by agent. For example, flour exposure was most common in medium and small companies,

while epoxy and isocyanate exposures were most common in micro companies. The prevalence of exposure was highest in large companies for only 5/27 asthmagens and, except for industrial cleaning and sterilising agents, these were relatively rare exposures (medications, ethylene oxide, reactive dyes, and flowers).

Our study shows that taking a population-based approach in studies describing exposure is likely to give a better overall picture of where the majority of people are exposed to the hazards. This approach permits the targeting of prevention to the places where we can benefit the greatest number of workers. Nationally-representative studies are needed to ensure that our understanding of occupational exposure is based on evidence, not convenience.

Poster Presentation

Cancer

0353 NAVIGATING CANCER AT SEA – AN EXTENDED FOLLOW-UP ON CANCER INCIDENCE IN A DANISH COHORT OF SEAFARERS

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Objective As the traditional perils at sea counting shipwrecks, accidents, piracy and infectious diseases have subsided at least for ships embarking from the Western world, the burden of cancer among seafarers has emerged as a focus point for further health improvements. Even aboard modern ships, occupational hazards are numerous and the aim of this study is to offer updated information on the incidence of specific cancers among both male and female Danish seafarers.

Method All seafarers employed on Danish ships during 1986–1999 were identified through records from the Danish Seafarer Registry providing a cohort of 33 340 men and 11 291 women. Using the unique Danish personal identification number, information on cancer and vital status was linked to cohort members from the Danish Cancer Registry and the Danish Civil Registration System. Standardised incidence ratios for specific cancers were estimated using national rates.

Results Compared to the general population, the overall incidence of cancer was increased for both male and female seafarers (SIR 1.16, 95% CI 1.13–1.20 and SIR 1.12, 95% CI 1.05–1.20). This excess was primarily driven by increases in gastrointestinal, respiratory and urinary cancers among the men, while the women also had increases in cervical and ovarian cancer. The SIR for melanoma of the skin and lip cancer was increased for women and men respectively, while an excess of pleural cancer only affected the men.

Conclusion Cancer among Danish seafarers continue to be primarily lifestyle-related. However, occupational exposure to UV-radiation, asbestos and other chemicals may affect the morbidity pattern as well.