1.04–2.41); and cocaine use on more than 10 occasions (OR=1.98, 95% CI: 1.31–2.99).
Conclusions The results demonstrated that construction interventions should be developed to address preventable risk factors. Young construction workers could benefit not only from enhanced work-place injury preventions, but also health behaviour interventions.

0356 TRANSITIONS BETWEEN UPPER EXTREMITY MUSCULOSKELETAL SYMPTOMS AND WORK LIMITATION OUTCOMES: A PROSPECTIVE STUDY

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Objectives Selection of appropriate outcome measures in studies of work-related musculoskeletal disorders (MSDs) directly affects the observed exposure-response relationship. Considering that many different factors might affect different stages of disease severity, we examined disability outcomes that represent a spectrum of disease in a newly hired working population and described the transitions between various states of symptoms and disability.
Method From July 2004 to October 2006, 1107 newly hired workers were recruited to participate in the study. Subjects completed self-reported questionnaires including demographics, medical and work history, and current symptom and work status, nerve conduction studies, and a physical exam. Surveys were repeated at 6, 18, and 36 month follow-up; 827 subjects (75%) completed all follow-ups and were included in the analysis. The outcomes of interest were presence of upper extremity symptoms and limitations in work abilities, productivity, job restrictions, lost time, and job changes due to these symptoms.
Results A majority of workers (72%) reported symptoms at least once during the study, yet less than half (44–46%) reported symptoms within any single follow-up period. Similarly, 31% of workers reported work limitations due to their symptoms at least once during the study, but only 15–16% within any single follow-up period.
Conclusions These results provide evidence for the dynamic nature of both MSD symptoms and work abilities over time, which has been theorised but with few explicit studies. If the risk factors for these outcomes differ, this may explain some of the lack of clarity in the current literature on work-related risk factors and MSD.

0357 THE LIFETIME RISK APPROACH TO ESTIMATING THE BURDEN OF OCCUPATIONAL CANCER

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Objectives The main approaches to estimating the burden of occupational cancer are attributable risk and lifetime risk. In this presentation we will explain why we used the lifetime risk approach.
Method The lifetime risk of cancer is an estimation of an individual's risk of being diagnosed with cancer during their life (without considering occupational exposures). The lifetime risk for the general population (LR_{GP}) is estimated by multiplying cohort person-years-at-risk (from life table data) by age-sex specific incidence rates.

The excess lifetime risk of cancer in a cohort of workers exposed to the carcinogen of interest ($LR_{exposed}$) is a product of the LR_{GP} and the excess relative risk of developing cancer associated with that exposure. $LR_{exposed}$ is multiplied by the prevalence of exposure to obtain the number of cancers attributable to the exposure in the general working population.
Results The lifetime risk approach estimates the number of cancers which would occur over a number of years in the future, due to exposures in a specific year. In contrast, the attributable risk approach estimates the number of cancers which would occur in a specific year due to exposures over a number of years in the past. Because we had exposure prevalence information for a specific year based on a national survey, we determined that the lifetime risk approach was more applicable in our case.
Conclusions The lifetime risk approach is an alternative method for calculating burden of disease when exposure prevalence information is available.

0358 OBTAINING POPULATION ESTIMATES OF THE PREVALENCE OF OCCUPATIONAL EXPOSURE

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Objectives Good occupational health policy requires an overall understanding of the proportion of the working population who are exposed to hazards at work. This is difficult to estimate when nearly three-quarters of the workforce are in small and medium sized companies and so not easily surveyed or monitored. We are undertaking a series of national surveys of the workforce to estimate how many people are exposed to hazards, where those people work, and to identify areas where controls could be used more effectively.
Method A random sample of the working population were invited to participate in a telephone interview regarding carcinogens at work using a web-based application (OccIDEAS). Participants were asked about their job tasks and predefined algorithms were used to automatically assign exposures.
Results Overall, 40.3% of the working population were estimated to be exposed to at least one of the 38 carcinogens we were interested in. Farmers, heavy vehicle drivers and miners were the most likely to be exposed. The most common exposures were solar radiation, diesel engine exhust and environmental tobacco smoke. We are now undertaking similar surveys to estimate the prevalence of occupational exposure to asthmagens, noise and ototoxic chemicals. We are also examining whether migrant workers are more likely to be exposed than the Australian born population.
Conclusions This study demonstrates a practical, web-based approach to collecting population information on occupational exposure prevalence.

0360 CANCER MORBIDITY AND MORTALITY OF INORGANIC LEAD EXPOSED WORKERS IN KOREA

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