to obtain mortality and cancer registration data for the cohort. The intention is to produce SMRs and SIRs and, where sufficient number of events allow, subanalyses including by cumulative exposure will be undertaken.

Results & Conclusion The international study will be statistically the most powerful study to have examined the carcinogenicity of styrene to date. As well as cohorts from the UK, the updated study will include cohorts from Denmark, Finland, Italy, Norway, Sweden and the USA.

**Musculoskeletal disorders**

**O-21** ASSOCIATION BETWEEN WORK ABILITY INDEX AND LOW BACK PAIN AMONG PRINTING WORKERS

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Introduction and Objectives Low back pain is one of the most common musculoskeletal disorders and important causes of early retirement due to disability in employees in industrialized and developing countries. The present study aimed to determine the work ability index and its relationship with low back pain among employees of Tehran offset printing industry.

Methods A cross-sectional study was performed within six months in 2020. Data from 220 employers working in offset printing industry were collected through survey questionnaire including Nordic Musculoskeletal Questionnaires (NMQ) and Work Ability Index (WAI). Data analysis was performed using SPSS software version 24 with a significance level of P-value <0.05.

Results In generally, more than half of the participants (662.5%) indicated high symptoms of Low Back Pain. Also, the results of Pearson correlation test showed that there is a positive and significant correlation between level of work ability and severity of low back pain (p<0.001).

Conclusion Job analysis and identification and correction of work procedures that put the body position during work in hard and unconventional conditions and impose a lot of workloads on the back area can be effective in preventing low back pain in work environments.

**Exposure assessment**

**O-212** APPLYING SENSORS FOR ASSESSMENT OF OCCUPATIONAL EXPOSURES IN EPIDEMIOLOGICAL STUDIES: EVALUATION OF SENSORS AND PRELIMINARY FINDINGS

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Introduction Low cost sensors have potential for occupational exposure assessment by providing information on exposure profiles rather than time weighted averages (TWA). High resolution exposure data may advance our knowledge on how exposure patterns may affect (acute) health. We aimed to...