Methods This community based programme was conducted in BMC wards A and P-North. Eligible participants were enumerated by done to door survey and informed consent obtained. This was followed by sociodemographic and risk factor assessment and invitation for health education sessions. Screening for oral cavity cancers was conducted by trained primary health workers by Oral Visual Inspection. Screen positives were referred to Nodal Hospital.

Results 256 manual workers were enrolled amongst whom 158 (61.7%) were males and 98 (38.3%) were females. The mean age was 39.665 ± 14.028 years. 247 (96.5%) were tobacco users, 113 (44.1%) alcohol users and 247 both tobacco and alcohol users. 53 (14.1%) used smoking forms. Cigarette smoking was most common [36 (67.9%)] followed by Ganja (marijuana) [6 (11.3%)], 215 (84.0%) consumed smokeless tobacco (SLT). Among 118 (54.9%) male SLT users 74 (62.7%) chewed tobacco followed by Gutka [63 (53.4%)], 97 (99.0%) enrolled women were tobacco users. 59 (60.8%) used masher and 35 (36.1%) chewed tobacco. Main reasons for initiation of tobacco were peer pressure and for time pass. All 256 participants were screened for oral cavity cancers, amongst whom 27 (10.5%) were screen positive and 23 (85.2%) oral pre-cancers were diagnosed. They are now availting treatment at nodal hospital.

Conclusions Prevalence of tobacco use is high among manual labourers. Health awareness, tobacco cessation and control programmes and oral cancer screening should be targeted for this population.

Musculoskeletal disorders

Introduction Motor vehicles contribute to one of the largest sources of pollution in most urban areas. One of the major determinants of health is a person’s occupation. Traffic police, due to their work environment, face multiple occupational health hazards and are vulnerable to develop respiratory morbidities.

Method Study amongst traffic police in Mumbai was initiated in June 2022. Permissions were obtained from senior authorities of Traffic Police Division to screen 3000 traffic police personnel working in Mumbai Traffic Police Division. Screening camps were set up at different Police Chowkis located under the flyovers. Informed consent was obtained, followed by sociodemographic, risk factor assessment and health education sessions. Screening for respiratory morbidities were conducted by trained primary health workers using Spirometry. Screen positive participants were referred to Police hospital for further evaluation. Interim analysis with screening for 749 participants is presented in this abstract.

Results Mean age of participants was 45.24 ± 8.142 years. 305 (40.7%) were smokers. Mean total years of service was 22.12 ± 8.462 and mean duration for working on traffic duty was 3.47 ± 1.531 years. 305 (40.7%) had more than 8 hours of average daily duty. Amongst the 749 screened, 339 (45%) had abnormal spirometry. 244 (32.6%), 14 (1.9%), 6 (0.8%) and 2 (0.3%) had small airway, mild, moderate and severe obstruction; 31 (4.1%) had restrictive and 42 (5.6%) had mixed defect. All screen positives were referred to the police nodal hospital. Smoking history was not found to be a confounding factor for abnormal spirometry (ORR-1.09 [95% CI 0.815 to 1.464] p value-0.55).

Conclusion Traffic Police Personnel are at risk of developing respiratory morbidities irrespective of smoking status. Our study clearly mandates use of protective measures, health education, regular screening and detailed assessment for respiratory morbidities as an on-going measure for all traffic police.
dimensions and operation-subsystem ranking were considered for design modification. Design methods such as concept generation, selection and design development were performed for the intervention. Usability testing on laboratory condition was performed on 5 loco pilots.

**Results**
Greater than 50% of loco pilots reported discomfort in upper back, lower back and neck regions. The control operations involving use of throttle, brake handle and foot switch had ranks 1, 2 and 3 respectively. These operations were found to majorly cause MSDs in most of the body regions, with highest percentage of reports in upper back (67%), followed by lower back (54%), neck (54%), and shoulders (49%) during the operations of brake system (p<0.001), which has high importance, having the highest matrix entries in the control systems. Usability testing on the prototype by 5 loco pilots in control laboratory condition was found to be highly effective.

**Conclusion**
This study reveals poor ergonomic issues in the existing control panel design responsible for MSD and effectiveness of design intervention to overcome the existing problem.

**Return to work/Work capability assessment**

**Introduction**
Musculoskeletal Disorders and Injuries (MSDI) are conditions that affect the locomotor system and are typically characterized by pain and impairment, representing the main cause of years lived with disability. MSDI are the leading cause for grant sickness social security benefit in Brazil. This study aims to analyze factors that influence return to work (RTW) among workers on sickness absence due to MSDI.

**Material and Methods**
A longitudinal study was conducted in São Paulo city, Brazil, from 2022–2021. Participants included 216 workers requiring social security compensation due to MSDI. At baseline, participants filled questionnaires about sociodemographic, health risk behaviours, work characteristics and health conditions. They were followed for 365 days after the first day of sickness absence. A Cox regression was performed to identify factors influencing the first RTW. Results & Conclusions Most participants were males (53.0%), married (50.7%), school education higher than 11 years (60.4%), mean age 39.5 years (sd ± 10.6), BMI 27.9 kg/m² (sd ± 4.9), did not smoke (85.2%), abstemious (52.5%), working less than 05 years (59.4%), morning shifts (73.2%), and underwent physiotherapy (53.9%). RTW occurred for 70.4% participants over 1-year follow up. Mean duration of absence was 192.6 days. The risk factors to remaining absent for a period longer than one year were: 40 years old and older (hazard ratio – HR 0.54; 95% confidence interval – CI 0.39–0.76) and the interaction between the perception of need for improvement in the physical and psychological domains (HR 0.67; 95%CI 0.48–0.94). These findings can contribute to discussion about disability prevention and interventions to assure health care. Companies’ health service professionals should start the process of return to work at the first day of absence, in order to reduce the time of reintegration and to promote a sustainable return.

**Acknowledgments**
CNPq Grants 423231/2018–9, 304375/2017–9, 306963/2021–3.

**Carcinogens/Cancer**

**Objective**
We performed a meta-analysis of epidemiological results for the association between occupational exposure as a firefighter and the occurrence of cancer as part of the broader evidence synthesis work of the IARC Monographs Programme.

**Methods**
A systematic literature search was conducted to identify cohort studies of firefighters followed for cancer incidence and mortality. Studies were rated for the influence of key biases on results. Random-effects meta-analysis models were used to estimate the association between ever and duration of employment as a firefighter and risk of 12 selected cancers. The influence of potential biases was explored in sensitivity analyses, including those related to the use of general, uniformed service, and working population comparison groups.

**Result**
Among the 16 cancer incidence studies that met inclusion criteria for one or more cancer sites, the estimated meta-rate ratio, 95% confidence interval (CI), and heterogeneity statistic (I²) for ever-employment as a predominantly male career firefighter compared mostly to general populations was 1.58 (1.14–2.20, 8%) for mesothelioma, 1.16 (1.08–1.26, 0%) for bladder cancer, 1.21 (1.12–1.32, 81%) for prostate cancer, 1.37 (1.03–1.82, 56%) for testicular cancer, 1.19 (1.07–1.32, 37%) for colon cancer, 1.36 (1.15–1.62, 83%) for melanoma, 1.12 (1.01–1.25, 0%) for non-Hodgkin lymphoma, 1.28 (1.02–1.61, 40%) for thyroid cancer, and 1.09 (0.92–1.29, 55%) for kidney cancer. Ever-employment as a firefighter was not positively associated with lung, nervous system, or stomach cancer. Few cancer