posttraumatic stress disorder (PTSD) but not alcohol use disorders. Physical health and wellbeing was poorer in those with a musculoskeletal disorder compared to those without (e.g., for veterans, difference in SF-12 PCS medians = -10.49: 95% CI -12.40, -8.57). Mental health and wellbeing was poorer in those with comorbid depression or PTSD compared to those with musculoskeletal disorders alone (e.g., for veterans, difference in SF-12 MCS medians = -20.74: 95% CI -24.3, -17.18). Similar patterns were found for the comparison group.

Conclusions Musculoskeletal disorders in the military were associated with depression and PTSD and poorer physical and mental health and wellbeing. Comorbidity of these conditions has implications for treatment and management and should be considered during assessment.

Session: 6. Intervention studies I

256 IMPACT OF A CAMPAIGN ON THE CORRECT USE OF PROTECTIVE PERSONAL EQUIPMENT IN CAR BODY REPAIR SHOPS

H De Raeve, Vandenbroeck, Godderis. *IDEWE, Leuven, Belgium*

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Introduction Significant exposure to hexamethylene diisocyanate (HDI) might occur during spray painting in car body repair shops. Since HDI induces asthma it should be used in properly designed spray booths wearing appropriate personal protective equipment (PPE), i.e. an air-fed breathing apparatus (BA). A_2P_2 masks may fail to protect without warning. A federal campaign on safe use of chemicals in car body repair shops was set up in 2010. In this study, we assessed the impact of the campaign.

Methods Between September 2011–2012, 135 car body repair shops were screened by trained prevention advisors. Observation of the workplaces were done using a checklist assessing the condition of the spray booths (ventilation, negative pressure, visual leaks, warning systems, position of the operator) as well as the use of air-fed BA or A_2P_2 masks (replacement filters, fit test, storage, audit).

Results Ventilation in the spray booths was sufficient in 75%. Negative pressure was present in 68%. There was no visual leak at the door in 98%. Position of the operator towards the spray booth was correct in 89%. In 52% there was a warning system in case of insufficient ventilation.

The recommended air-fed BA was used in 20% of the car shops. In the other 80% (n = 108), spray painters wore A_2P_2 masks, however without following the guidelines for safe use: no scheduled filter replacement in 61%; no fit test in 81%; no proper storage in 56%, no audit in 77%. Only in 11 of these 108 cases all conditions above were met.

Conclusion Most of the spray booths were in good condition. However, despite the intensive federal campaign, 72% of the spray painters did not use the correct PPE (either air-fed BA or correctly used A_2P_2 masks). We hypothesise that campaigns should be accompanied by a change of safety behaviour program.

257 POSTREFORM CHANGES IN USE OF SICK-DAYS

E A Aaviksoo, Kiivet. *University of Tartu, Tartu, Estonia*

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Objectives To analyse the effect of the reduction of sickness absence compensation, implemented by law on 1st of July 2009, on use of sick-days in employee groups with different education level.

Methods Data from a nationwide survey "Health Behaviour among Estonian Adult Population" in 2004, 2006, 2008 and 2010 was used. Proportions of sickness absence usage and selected descriptive variables were analysed in two population groups: lower (≤12 years of education) and higher educated (≥13 years of education) employees. The difference in use of sick-days before and after the reform was assessed using the chi-squared test.

Results The dataset comprised 7918 employed persons between 18–64 years of age. The overall decline of average sick-days per employee was 21%, from 9.1 to 7.2 days. Decline of the sickness absence users' proportion was significant in both education groups: from 47% to 40% (p = 0.002) in lower and form 44% to 38% (p<0.001) in the higher education group. For lower educated employees the drop was significant in the age group over 50 years (14% vs 11%, p = 0.049) and the users of 1–14 sick-days per year accounted for the decline. For higher educated employees the decline was observed in the age group under 50 years.

The only increase in the use of sick-days was observed (24% vs 30%, p < 0.001) in higher educated employees with higher income.

Conclusions There was a considerable decline in the use of sick-days after the reform, but some employee groups may need more attention to preserve their workability. The decline of sickness leave use among older persons and lower use of short sickness absences by lower educated employees may indicate their uncertainty in the labour market. In the group of higher educated persons with higher income the increased use of sick-days may reflect increasing psychological demands and related health deterioration.

258 HEALTH AND SAFETY IN SMALL AUTO COLLISION REPAIR SHOPS - OUTCOMES OF A 1-YEAR INTERVENTION

[1]A B Bejan, [2]Brosseau, [1]Parker, [1]Skan, [1]Xi. *[1]Park Nicollet Institute, Minneapolis, United States of America; [2]University of Minnesota, Minneapolis, United States of America*

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Objective This study evaluated the effectiveness of a 1-year intervention to assist owners of small collision shops with workplace safety and health improvements.

Methods A comprehensive evaluation containing 92 safety-related questions was conducted by an industrial hygienist at baseline and after one year. Questions addressed safety programs and training, fire safety, personal protective equipment, and shop equipment and were assigned one of four priority ratings. After the baseline evaluation, shop owners received a written report and were asked to commit to correcting at least 30% of the problems identified, with emphasis on the highest priority issues. Participants received quarterly phone calls, written reminders, safety newsletters, and had access to online services and in-person assistance with creating safety programs and respirator fit testing.

Results Forty-nine shops received baseline assessments and 45 were visited for 1-year follow-up. At baseline, shops had 17–49% of items missing (mean = 34.4% items, SD = 7.5%). After one-year, shops had 7–36% of items missing (mean = 19.8% items, SD = 7.6%). Statistically significant improvements (p < 0.03) were identified in seven of the eight survey sections (safety