Results In men, partitioning the attributable fraction by SEP showed that the burden largely concentrated among less qualified and lower SEP groups, even after adjusting for smoking. Based on socio-occupational group, the combined AF (for 3 occupational carcinogens) was as high as 26.7% (95% CI 22.5;30.8) for blue-collar workers and as low as 0.2% (95% CI -1.35;1.64) for managers. The disparities were also large based on education, occupational social prestige and occupational trajectory. The exposure profiles of women did not allow to make reliable estimates.

Conclusions While attempting to quantify the burden of avoidable lung cancer, it is useful to complement population-wide approaches with a focus on specific sub-groups defined by SEP, as the modifiable exposures (behavioural, work-related and others) are not evenly distributed.

Psychosocial exposures

**LEADERSHIP AT THE WORKPLACE AND EMPLOYEES RISK OF HOSPITAL TREATMENT FOR DEPRESSION OR ANXIETY – A PROSPECTIVE STUDY OF 69,099 EMPLOYEES**

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**0-82 MENTAL HEALTH AND LIFE SATISFACTION AMONG CANADIAN PARAMEDICS DURING THE COVID-19 PANDEMIC: AN UPDATE**

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**Introduction** There is a consensus in the literature that leadership at work can be associated with well-being, productivity and performance of employees. Few studies, however, have investigated whether absence of leadership is associated with risk of clinical mental disorders, such as depression or anxiety.

**Material and Methods** We linked information on leadership, obtained from the nationwide Work Environment and Health survey in Denmark survey, with data on hospital treatment for depression and anxiety, obtained from a national register. The survey data was collected in four waves between 2012 and 2018. We included participants that worked, had a leader, had no missing and were never registered with treatment for any mental disorder at a psychiatric hospital before baseline. The study population consisted of 69,099 participants. We used eight items on leadership behaviours that align with providing resources for the employee, and dichotomized the sum score in absence and presence of leadership, by using the middle-score of the scale as a cutoff. Depression was defined as ICD-10 codes F32 or F33, and anxiety as F41. We used Cox proportional hazards regression, with calendar time as the underlying time scale. Mean follow-up time was 20.6 months. We adjusted for sex, age, educational level, cohabitant, child under age 7, and sampling method.

**Results** Preliminary results show that 28.6% of the participants reported absence of leadership behaviours. We identified 216 cases of treatment for depression and 87 cases for anxiety. When we compared absence of the leadership behaviours to presence, the hazard ratios were 1.79 [95%-CI,1.36;2.35] and 1.15 [95%-CI, 0.73;1.82] for depression and anxiety, respectively.

**Conclusion** Absence of leadership behaviours at work was associated with an increased risk of hospital treatment for depression among employees. We did not find a statistically significant association between leadership behaviours and risk of treatment for anxiety disorder.

**Psychological hazards/Health**

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**Introduction** Previous results suggest that COVID-19 adversely impacted a number of health and coping measures among Canadian paramedics, particularly females. Estimated prevalence for meeting screening criteria for mental health disorders and suicidal thoughts were higher than previously reported.

**Objectives** To provide an update on the impact of the COVID-19 pandemic on the wellbeing of Canadian paramedics with the inclusion of an additional year of participant data.

**Methods** Self-reported questionnaire data was collected from paramedics across five Canadian provinces as part of the COVID-19 Occupational Risks, Seroprevalence and Immunity among Paramedics (CORSIP) project. Validated psychological assessment tools were used to screen for major depressive disorder (MDD, PHQ-9 questionnaire) and probable post-traumatic stress disorder (PTSD, PC-PTSD-5 questionnaire). Satisfaction with life (SWL) scores were adapted from validated Canadian Census questions and confirmed by reliability analysis. All measures were compared before versus during the pandemic using Wilcoxon signed-ranked, Cliff’s d, and differences in proportions tests where appropriate.

**Results** Questionnaires from an additional 1662 recruited paramedics were included, now totaling 3568 participants. Prevalence meeting screening criteria remained similar for MDD (31.6%) and PTSD (41.4%), with PTSD risk continuing to not be impacted by COVID-19. Paramedics continued to report higher median SWL scores (20 vs. 17, p<.001) prior to the pandemic, with a large effect size (d=0.58) that suggests a greater probability of reporting higher SWL prior to COVID-19. Suicidal ideation (i.e., ‘thoughts that you would be better off dead, or of hurting yourself in some way’) was reported by 9.0% of paramedics, which was consistent with original findings.

**Conclusion** Original findings appear stable with the addition of another year of participant data. Future analyses will be employed to investigate whether health and satisfaction measures differed between the original cohort and added participants by adjusting for questionnaire responses with respect to the pandemic timeline.