personal contact with the public, studies in this job category on COVID-19 risk are scarce.

**Material and Methods** We aimed to fill in this knowledge gap by investigating a cohort of over 2,000 employees of the Regional public transport sector in Sardinia, Italy. Incident COVID-19 cases were identified between 1 September 2020 – 6 May 2021 by real-time reverse transcription-polymerase chain reaction tests performed on nasopharyngeal swabs during periodic occupational health surveillance. We applied the age- and gender-specific COVID-19 incidence rates in the regional population at the same time frame to the correspondent strata of the study cohort to calculate the expected COVID-19 events. Age- and gender-adjusted relative risks (RRs) of COVID-19 and relative 95% confidence intervals (95% CIs) were estimated as the ratio between the observed and the expected events for the overall cohort and in two sub-cohorts: bus drivers and the rest of the workers (including administrative staff).

**Results** Male bus drivers showed an increased COVID-19 risk (RR = 1.4, 95% C.I. 1.07 – 1.79). There was no excess risk among the rest of the personnel. Women were too few to allow reliable risk estimates.

**Conclusions** Our study suggests an excess risk of COVID-19 among bus drivers even in a relatively low incidence area, which could imply inadequacy of occupational preventive measures. Further larger studies, with detailed information on occupational and personal determinants, are warranted to disentangle the underlying causal factors and focus preventive strategies.

### Health disparities

**CONTRIBUTION OF OCCUPATIONAL RISK FACTORS TO LIFESPAN INEQUALITIES ACROSS SOCIO-OCCUPATIONAL GROUPS IN FRANCE**

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**Introduction and Objective** Occupational risk factors can mediate the effect of socioeconomic status on mortality; however, the reduction in social disparities in mortality that could be achieved by modifying employment and working conditions has been under-studied. Our aim was to quantify the role of occupational risk factors (lack of job control, job insecurity, and unemployment) and personal contact with the public, studies in this job category on COVID-19 risk are scarce. We used the Health and Career Path survey (SIP-2006) to estimate differential exposures in each French socio-occupational group (SOG) by sex. Then, using the life tables published by The French Institute of Statistics and Economic Studies and developing a method based on population attributable fractions, we estimated loss in life expectancy attributed to workplace exposures by SOG and sex.

**Results** Based on life expectancy estimated at age 35 and depending on SOG, from one to three years of life lost for men, and from 0.6 to two years for women are attributed to a combination of high OPA, low job control, job insecurity, and unemployment compared to those who had low OPA, high job control, no concerns about job loss and were employed. The difference in life expectancy at age 35 between senior executives and manual workers would have been reduced from 6.3 to 4.4 years for men and from 3.2 to 2.2 years for women if socio-occupational exposures had been set at the theoretical minimum level for the four risk factors.

**Conclusions** Our results, although based on a limited number of workplace factors due to large data gaps, show that improving employment and working conditions would substantially lessen social inequalities in life expectancies.

## Occupational epidemiology in unorganised sectors: agriculture, construction, service sectors

**7-YEAR FOLLOW UP IN A YOUNG ADULT POPULATION AT RISK OF MESOAMERICAN NEPHROPATHY**

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**Introduction** Mesoamerican Nephropathy is a leading contributor to premature mortality in Central America, but the primary cause remains unclear. Early disease is challenging to identify given variation in eGFR both within and between healthy individuals and absence of haematuria or proteinuria. We explored the incidence of CKD (stage 3–5) as well as evidence of early kidney injury in the at-risk population from Northwest Nicaragua.

**Method** We conducted a community-based longitudinal study of two cohorts of adults aged 18–30 (n=351 and 420) over 7- and 3-years respectively. We estimated the time point of departure from a healthy eGFR distribution to indirectly capture timing of early kidney injury. We then examined exposure associations with (i) time to CKD and (ii) early kidney injury.

**Result** CKD occurred in men only (male incidence rates of 0.8%/year and 0.6%/year in the two cohorts). 53 men (14%) and 8 women (3%) developed early kidney injury. Cumulative time in sugarcane work and symptoms of excess occupational sun exposure associated with incident CKD. Measured and self-reported weight loss, nausea, vomiting and cramps along with excess occupational sun exposure and non-steroidal anti-inflammatory use associated with early kidney injury.

**Conclusion** The burden of CKD in this population is high and risk factors for established disease are occupational. A clinical syndrome suggesting an alternative exposure is associated with...