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Introduction: COVID-19 pandemic affected health and safety of workers worldwide showing several types of working conditions at risk of infection. A methodology to assess the risk of SARS-CoV-2 infection in the workplace, has been developed in Italy and adopted by the Government authorities to guide the National prevention strategies.

Material and Methods: A model that includes the analysis of proximity between employees and potential exposure while they work, has been integrated with social aggregation, a specific factor connected to the job due to the involvement of third parties in work processes. The comparative analysis between risk levels and insurance claims for occupational injuries by sector, supported the model validation. The estimated risk class and the incidence of compensation claims were used also as quantitative indicators to prioritize the vaccination campaign in workplaces.

Results: According to the NACE classification, the activity sectors have been classified into four levels of risk (high, medium-high, medium-low, low). By June 2021, the economic sectors at high or medium-high risk of COVID-19 infection (i.e. ‘Human health and social work activities’ and ‘Public administration’) included 75% of applications with occupational origin.

Conclusions: This methodological approach guided the modular reopening of work activities for a safe reactivation of businesses. The prioritization of the workplace vaccination strategy taking into account the risk by different productive sectors, may contribute to the fastest achievement of the whole population immunity as progressive “exit strategy” from Covid-19 pandemic.

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Psychological stress of teachers during the SARS-CoV-2 pandemic - Results of a nationwide survey in Germany

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Introduction: The SARS-CoV-2 pandemic fundamentally changed school life as well as the professional life of teachers (TE). For example, organizational processes changed (e.g., increase in workload), pedagogical challenges emerged (e.g., distance learning) and hygiene plans had to be implemented and realized. The leading question was: did psychological stress in TE increase during the pandemic? If so, what sociodemographic and work-related variables were associated with this stress?

Material and Methods: TE throughout Germany were surveyed online in March 2021. Data on psychological stress and strains were assessed using established (e.g., PHQ-4) and specially developed (e.g., corona-associated anxiety) instruments. After data cleaning, 31,090 participants were included in the analysis. Descriptive and inferential statistics were used to analyze the relationship between psychological stress (e.g., depressiveness) and sociodemographic (e.g., gender) and work-related variables (e.g., work schedule). Results: A significant increase in likely stress induced psychological symptoms was found compared to pre-SARS-CoV-2 pandemic samples. Analyses are currently in progress. Results will be presented at the ICHOF conference in 2022.

Conclusions: The observed increase in psychological stress of TE during the SARS-CoV-2 pandemic represents a call for interventions especially for highly stressed subgroups of TE. These stress reactions in TE have to be interpreted against the background of a likewise increased mental stress in the general population and their relative changes have to be identified in order to provide demand-oriented help.

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Covid-19 presentation among symptomatic healthcare workers in Ireland: a case control study

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Introduction: It is recognized that healthcare workers are at high risk of contracting Covid-19. The aims of the study were to describe the presenting symptoms of healthcare workers who developed Covid-19 in Ireland, & to estimate the odds of specific symptoms being associated with a positive Covid-19 polymerase chain reaction result.

Methods: A retrospective chart review of symptomatic healthcare workers who self-presented for Covid-19 testing in Cork from March-May 2020 was conducted. A sex-matched case-control study was carried out to compare presenting features among those who tested positive compared to those who tested negative. Univariate & multivariable-adjusted conditional logistic regression models were run using Stata 15.0 to identify the symptoms associated with positive Covid-19 swab results.

Results: 306 healthcare workers were included in the study: 102 cases & 204 controls. Common presenting features among cases & controls were fever/chills (55%), cough (44%) & headache (35%). The symptoms which were significantly associated with a positive Covid-19 swab result were loss of taste/smell (adjusted odds ratio [aOR] 12.15, 95% confidence interval [CI] 1.36–108.79), myalgia (aOR 2.36, 95% CI 1.27–4.38), fatigue (aOR 2.31, 95% CI 1.12–4.74), headache (aOR 2.11, 95% CI 1.19–3.74) & fever/chills (aOR 1.88, 95% CI 1.12–3.15).

Conclusions: Fever, fatigue, myalgia, loss of taste/smell & headache were associated with increased odds of a Covid-19 diagnosis among symptomatic self-referred healthcare workers compared with those who had negative swab results. Testing criteria should reflect the broad range of possible symptoms of Covid-19.

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Health care workers during the COVID-19 pandemic: prevalence of adverse skin reactions from using protective equipment

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Introduction: To prevent nosocomial transmission of SARS-CoV-2-Virus, an increased use of personal protective equipment (PPE) by healthcare workers (HCW) has become necessary. The aim of this study is to investigate the prevalence of adverse skin reactions in care staff associated with wearing of PPE in Germany during the COVID-19 pandemic.

Material and Methods: The study follows a mixed methods approach. In November 2020, a moderated focus group with healthcare experts was performed and qualitatively analyzed. In a second step, 15,959 members of the German Nurses Association (DBfK) were invited to participate in an online survey for care staff over the period from May to June 2021.

Results: 1,691 caregivers took part in the survey, included in the analysis were those who were actively working (n = 1,559). The sample consisted predominantly of women. Mean age was 45 years (±12), and mainly nurses (84%) took part. More than half worked full-time (56%), mainly in hospitals (68%). Pre-existing skin diseases were reported by 17%. The prevalence of new adverse skin reactions was 60%. Of those, 94% involved the facial area. Wearing times of >4 hours per shift were stated by 89% of respondents for FFP masks and 64% for surgical facemasks. Participants with wearing times >4 hours of FFP masks were significantly more likely to develop facial skin reactions than participants with less wearing time (OR 1.6, CI 1.1; 2.1).

Conclusion: The prevalence of new skin reactions from PPE, especially from FFP masks, highlight the specific need for preventive measures for HCW during pandemic periods.

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Physician Reported Work-Related COVID-19 cases in Norway 2020 – 2021

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Aims: This study provides a profile of work-related Covid-19 cases reported by physicians to the Norwegian Labour Inspection Authority (NLIAs). Methods: Reported cases of work-related SARS-CoV-2 viral infection by a physician to the NLIAs Registry for Work-Related Diseases (RAS) between February 2020 and June 2021 were included. Descriptive statistics for age, gender, industrial sector, and occupation were calculated. Further, the incidence rates (cases per 100,000 workers) were computed for age, gender, and occupation.

Results: Physicians reported a total of 182 work-related Covid-19 cases during the study period. Sixty-four percent of the cases were females (n = 117) and 36% (n = 65) were males. Eighty-six percent of the cases were reported from the healthcare sector (n = 157). The remaining cases (n = 25) were distributed among other sectors. Doctors and nurses yielded higher incidence rates compared to other occupations in health care as well as non-healthcare occupations. Thirty physicians accounted for the 182 cases reported during the study period.

Conclusions: This study indicates that women in the age group 25-39 and employed in the healthcare sector had the highest reported incidence and numbers of work-related COVID-19 cases. Physician underreporting of work-related Covid-19 cases seems to be prevalent for all occupations. The underreporting of cases is possibly greater for at-risk non-healthcare occupations such as waiters, bartenders, food couriers and taxi drivers compared to occupations in the healthcare sector.

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Workplace Exposure to SARS-CoV-2 among Key Workers and Related Social Inequalities: Evidence from France during the First Lockdown

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Introduction: This study aims to assess potential occupational exposure to SARS-CoV-2 among key workers in France during the first lockdown and describe their socio-demographic profile to identify social inequalities in the occupation of these jobs. Material and Methods: Based on the 2019 edition of the population-based Working Conditions survey, we quantified potential work-related exposure to SARS-CoV-2 as: “exposure to infectious agents,” “face-to-face contact with the public,” and “working with colleagues”. We then used the French list of essential jobs to identify the main groups of key worker occupations. Log-binomial regression models were performed to identify associated occupational and socio-demographic factors.

Results: Compared to other workers, key workers in all groups had greater exposure to infectious agents and more physical contact with others, however, working with colleagues differed among key worker groups. In general, women, employees and manual workers, people working on temporary contracts, those with low levels of education and income, and non-European immigrants were more likely to be key workers. Being female, born outside of metropolitan France, and working as a non-executive professional interacted in increasing the probability of occupying a key job.

Conclusions: Key workers are more likely to have low social status and precarious employment and to be exposed to SARS-CoV-2 through their work. This study contributes to a growing body of research providing evidence of accumulated disadvantages among key workers with regard to social background, geographical origin and exposure to SARS-CoV-2.

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Interview With A Sample Of Occupational Health Physicians About Their Role During The Covid-19 Pandemic

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Introduction. The COVID-19 pandemic legislation integrated the legislation already present in the workplace. The presence of the Occupational Health Physician (OHP) was essential in the company. The OHP, according to the D. Lgs. No 81/2008, is a physician with professional qualifications and requirements, who collaborates in the risk assessment and carries out health surveillance, to protect the health and safety of workers. During the pandemic his work has