

Mental health at work after the COVID-19 pandemic – What European figures reveal

Summary

Authors: Nico Dragano, Krisztina Gerö, Morten Sten Wahrendorf - Institute of Medical Sociology, Centre for Health and Society, University Hospital and Medical Faculty, University of Düsseldorf, Germany.

Project management: Sarah Copsey, Maurizio Curtarelli - European Agency for Safety and Health at Work (EU-OSHA).

This summary was commissioned by the European Agency for Safety and Health at Work (EU-OSHA). Its contents, including any opinions and/or conclusions expressed, are those of the author alone and do not necessarily reflect the views of EU-OSHA or of the workplaces where the author is employed.

Neither the European Agency for Safety and Health at Work nor any person acting on behalf of the agency is responsible for the use that might be made of the following information.

© European Agency for Safety and Health at Work, 2024

Reproduction is authorised provided the source is acknowledged.

For any use or reproduction of photos or other material that is not under the copyright of the European Agency for Safety and Health at Work, permission must be sought directly from the copyright holders.

In the spring of 2022, the European Agency for Safety and Health at Work (EU-OSHA) commissioned a Flash Eurobarometer survey (OSH Pulse survey 2022¹). Over 27,000 employed workers were interviewed on the phone across all EU Member States, plus Iceland and Norway. The aim was to gain insights into the state of occupational safety and health (OSH) in post-pandemic workplaces. A further analysis was made of data on work-related mental health from the OSH Pulse survey and from other European surveys² on working conditions and occupational risks that are repeated over time to provide a picture of the situation regarding the mental health of workers before, during and in the ending phase of the COVID-19 pandemic. The aims were to:

- provide a detailed description of the state of work-related mental health in Europe at the end of the pandemic; and
- generate evidence to inform the discussion about the immediate and possible long-term consequences of the pandemic for work-related mental health.

The key findings are given below.³

Extent of work-related stress and mental ill health in the 2022 OSH Pulse survey

Prevalence of work-related stress and mental health problems: A relatively high level of self-reported work-related stress and mental health problems⁴ was found in both the OSH Pulse (26.8% of respondents reporting stress, depression or anxiety caused or made worse by work and 44% reporting that their work stress had increased as a result of the pandemic) and the analysis of the two other studies on mental wellbeing (European Working Conditions Surveys (EWCS) and the European Survey of Enterprises on New and Emerging Risks (ESENER)). For example, poor mental health was reported by 22.4% of the 2021 European Working Conditions Telephone Survey (EWCTS) survey respondents. This is in line with other self-reported work-related stress and mental health problems in the working population pre-pandemic (Eurostat, 2022⁵; GBD 2019 Mental Disorders Collaborators, 2022⁶) and other studies on the mental health of workers during the pandemic (e.g. Hvide and Johnsen, 2022⁷).

The analysis showed that it was already important to address psychosocial risks and work-related mental health within OSH before 2020; however, the pandemic has made this more pressing.

Association between work-related psychosocial risk factors and reported work-related mental health problems: As expected, individual workloads and workplace openness and measures to address stress were associated with employees' mental health in the OSH Pulse survey. All factors studied (exposure to psychosocial risk factors, risk factors related to digital work, lack of measures to address work-related stress) were significantly associated with the presence of poor work-related mental health. The risk factor with the strongest link to mental health was severe time pressure or work overload. This risk factor was also the most reported in the OSH Pulse survey (by 46% of respondents) and appears to be a particular problem in the current world of work. In the ESENER 2019 survey, 45% of establishments

¹ OSH Pulse 2022 survey: <https://osha.europa.eu/en/facts-and-figures/osh-pulse-occupational-safety-and-health-post-pandemic-workplaces>

See also: <https://osha.europa.eu/en/publications/osh-pulse-occupational-safety-and-health-post-pandemic-workplaces>

² European Working Conditions Surveys (EWCS) and European Working Conditions Telephone Survey (EWCTS): <https://www.eurofound.europa.eu/en/surveys/european-working-conditions-surveys-ewcs>

Living, working and COVID-19 e-survey (LWCOVID-19): <https://www.eurofound.europa.eu/en/surveys/european-quality-life-surveys-eqls>

European Survey of Enterprises on New and Emerging Risks (ESENER), ESENER 2019 survey: <https://osha.europa.eu/en/facts-and-figures/esener>

ESENER 2019 Overview report: <https://osha.europa.eu/en/publications/esener-2019-overview-report-how-european-workplaces-manage-safety-and-health>

³ The methodology and its limitations are given in the full report.

⁴ No diagnostic data were collected in any of the studies used here, and only short indicator questions were asked. Therefore, the prevalence found must be interpreted with caution and by no means as the prevalence of clinically significant mental illnesses.

⁵ Eurostat, EU LFS ad hoc module on accidents at work and work-related health problems 2020: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Self-reported_work-related_health_problems_and_risk_factors_-_key_statistics#Exposure_to_mental_risk_factors_at_work

⁶ See: <https://pubmed.ncbi.nlm.nih.gov/35026139/>

⁷ Hvide, H. K., and Johnsen, J., 'COVID-19 and mental health: a longitudinal population study from Norway', *European Journal of Epidemiology*, 2022, Vol. 37, No 2, pp. 167–172.

reported the presence of time pressure as a risk factor.⁸ Other factors, such as experiencing harassment, bullying or violence at work, were also associated with considerable poor mental health in the OSH Pulse survey.

Association between increase in stress during the pandemic and exposure to psychosocial risk factors: While nearly 45% of respondents answered that the pandemic increased their stress at work, reporting an increase was significantly more likely among those exposed to poor communication and cooperation, lack of autonomy or influence over work, or time pressure or high workload compared to no exposure to these risk factors. This finding suggests that there may have been a simultaneous increase in different psychosocial risk factors during the pandemic.

Effect of digitalisation: Exposure to psychosocial risk factors related to the use of digitalisation (increased workload, reduced autonomy) showed somewhat weaker associations with poor reported work-related mental health, although they were statistically significant and point to the importance of decent digital work for mental wellbeing. Also, those reporting that the use of digital technologies increased their workload or reduced their work autonomy were more likely to report that work stress increased due to the pandemic than those who answered no to either of these factors (see below).

Positive impact of being able to speak about mental health and workplace measures to address stress at work: Respondents whose workplaces had an open climate for dealing with mental problems (feeling comfortable speaking with managers about mental health), provided information and training on work stress, and consulted on stressful aspects of work had significantly better mental health than respondents whose workplaces did not have these things.

Positive impact of good occupational health and safety measures: The general quality of OSH was particularly important. Respondents with good OSH measures in place in their workplaces reported significantly better mental health than workers reporting that their workplaces did not have good measures to protect health. They were also less likely to report that their work stress had increased during the pandemic. The same positive effect was seen for workplaces that dealt with safety problems promptly.

Country differences in OSH: The additional country comparison showed that employees were less likely to report an increase in work stress due to the pandemic in countries with a higher proportion of companies carrying out OSH risk assessments. Likewise, employees were less likely to report an increase in work stress due to the pandemic in countries with high proportions of workers who reported that they were comfortable to speak about mental health, that their employers provided information and training related to mental health and work stress, or their workplaces had good measures to protect health at work. These results again underscore that it is possible to protect employees from stress if the employer has implemented protective and supportive measures even in the time of a global health crisis. From this perspective, the consistent implementation of OSH regulations is an important element in strengthening the psychological resilience of employees regarding possible future crisis events.

The possible impact of the COVID-19 pandemic on work-related psychosocial factors and mental health

The mental ill health of many workers, which has been known for many decades, persisted or increased during the pandemic. However, the extent to which changes occurred compared to before the pandemic, what the causes were, and whether these changes are likely to remain post-pandemic is another question.

Subjective increase in work stress due to the pandemic and stringency of COVID-19 policy measures: Almost half of the respondents (44%) to the OSH Pulse 2022 survey stated that their work stress had increased because of the pandemic and analysis showed that this increase in stress was associated with poorer mental health. To investigate whether the impact on individual workers' work-related stress was also greater in countries where measures to contain COVID-19 were stricter, the responses by country to the question about an increase in work stress due to the pandemic were compared to the strictness of policy measures in different countries to contain the pandemic using the Stringency index. The Stringency index integrates measures such as the extent of workplace closures, economic data

⁸ ESENER 2019 Overview report: <https://osha.europa.eu/en/publications/esener-2019-overview-report-how-european-workplaces-manage-safety-and-health>

and working from home rules.⁹ The results indicated that the strictness of a country's COVID-19 policy measures did have an impact on perceptions of work-related stress. However, this is only a correlation that cannot be interpreted causally. Ultimately, reliable statements about changes over time can only be made on the basis of longitudinal data, where information is available on the individual level at different measurement points in time.

The presence of work-related psychosocial factors and an increase in work stress due to the pandemic: As expected, there was a clear association between the presence of work-related psychosocial factors (e.g. high work demands, lack of control over work or workplace bullying) and an increase in work stress levels due to the pandemic. It is not known to what extent respondents were exposed to these risk factors before the pandemic or if exposure increased during the pandemic. However, workers experience stress when they are under excessive pressure and do not have physical and mental resources to cope with all the demands on them,¹⁰ and workplaces where work overload, bullying, or poor communication and cooperation were already present are unlikely to have been in a good position to manage the unexpected and increased demands brought by the pandemic.

Protective effect of good OSH measures on work-related stress during the pandemic: While the data do not allow firm conclusions to be drawn about the role of good OSH in protecting workers from an increase in work-related stress and mental ill health during the pandemic, they suggest that those working in workplaces with good OSH measures in place and who dealt with OSH problems promptly were less likely to experience an increase in stress during the pandemic. This hypothesis is strengthened by the correlation seen between countries having a lower reported increase in stress (OSH Pulse survey 2022) and companies in those countries being more likely to report having made a comprehensive risk assessment (ESENER 2019).

Changes over time: Nearly 45% of respondents answered that the pandemic increased their stress at work. However, it is not clear from the literature to date what trends actually existed before, during and, as a prediction, after the pandemic. To gain more insight, data from other large-scale European surveys that are repeated over time were used to provide a picture of the situation before, during and in the ending phase of the COVID-19 pandemic. Due to methodological differences between the surveys,¹¹ only a few indicators that were partially comparable could be identified. Statements about the time before the COVID-19 pandemic were possible using the two waves of the EWCS from 2010 and 2015. Another wave in 2021 (EWCTS) using a different survey methodology, which limits direct comparison, was also examined. The data suggest that there was a higher prevalence of poor (general) mental health during the pandemic than in the previous period. Moreover, most of the work stressors measured were relatively stable before the pandemic, then in the 2021 wave, the prevalence of working at high speed was above those of the pre-pandemic survey waves. On the contrary, a lower prevalence was observed for poor cooperation with colleagues. Little change is seen for all parameters between the waves of the Living, working and COVID-19 (LWCOVID-19) survey carried out between 2020 and 2022, but this study did not have a pre-pandemic measurement.

In summary, there were no clear patterns observable in this analysis that would indicate a pandemic effect. The most likely pattern seems to be continuity, suggesting an evolutionary development rather than a disruptive increase (or decrease) in mental workload, with the exception of certain sectors of work (see below). Regarding the post-pandemic world of work, this would mean that the long-known problem of psychosocial risk factors for the mental health of employees still exists and is an apparently unresolved problem.

⁹ Hale, T., Angrist, N., Goldszmidt, R., Kira, B., Petherick, A., Phillips, T., Webster, S., Cameron-Blake, E., Hallas, L., Majumdar, S., and Tatlow, H., 'A global panel database of pandemic policies (Oxford COVID-19 Government Response Tracker)', *Nature Human Behaviour*, 2021, Vol. 5, No 4, pp. 529–538.

¹⁰ EU-OSHA – European Agency for Safety and Health at Work, *Healthy workers, thriving companies - a practical guide to wellbeing at work*, 2018. Available at: <https://osha.europa.eu/en/publications/healthy-workers-thriving-companies-practical-guide-wellbeing-work>

¹¹ It is important to keep in mind that comparability between the surveys included and of each survey wave was limited. On the one hand, due to the rapid spread of the COVID-19 pandemic, changes in the questionnaire (removed questions compared to preceding waves), mode of data collection (from face-to-face interviews to telephone surveys) and sampling method were made in the latest EWCS wave conducted in 2021. On the other hand, the COVID-19 surveys were distributed online applying non-probability sampling methods, asking respondents about their most recent work experiences (within the last two to four weeks), resulting in generally low comparability with other surveys, including the EWCS. Therefore, we aimed to explore the mental health and psychosocial working conditions of European workers at different time points instead of conducting a trend analysis over time.

Differential findings for different sociodemographic and economic subgroups of workers: As expected, the analyses of the OSH Pulse data revealed that the mental health in some sectors was disproportionately affected by the pandemic. The evaluation of the OSH Pulse data showed a high burden of low mental health in the health and social care sector and a high number of employees indicating that their stress increased due to the pandemic. Furthermore, a high level of work-stress and poor mental health was observed in the education sector, which can be linked to changes such as home-schooling and the related process of rapid digitalisation (e.g. Kotowski et al., 2022¹²). Comparable differences by sectors were also found in the analysis of the 2021 wave of the EWCTS. Special attention must be paid to mental health in the sectors particularly affected. Separate initiatives may be needed to prevent the high level of mental stress in the health and education sectors from becoming entrenched post-pandemic.

Gender: Lower work-related mental wellbeing and less favourable psychosocial working conditions were seen among women compared to men. Women, for instance, were more likely to report that their work stress had increased during the pandemic and were less likely to be well protected by measures of OSH. They also reported more violence or verbal abuse at work and had less autonomy overall than their male colleagues. This replicated the findings of other studies in the pandemic that reported an increase in gender inequalities (e.g. Backhaus et al., 2023¹³). It will be important in the future to prevent these differences from becoming further entrenched.

Differences by occupational position: Higher-qualified workers had higher levels of exposure to potentially harmful psychosocial working conditions and lower mental wellbeing. One explanation for this could be that many occupations in the sectors particularly affected by the pandemic, especially in the health and education sectors, tend to be higher-qualified occupations (e.g. doctors, qualified nursing staff, teachers). However, manual workers reported being less well informed about work-related psychosocial risks by their employers. It could be that these workers are less aware about possible psychosocial risks so tend to report existing problems less often.

Digitalisation and flexibility in the workplace: Two other major issues, digitalisation of work and flexibility in the workplace, were further accelerated by the pandemic and it is likely that these two trends will continue in the future¹⁴ (Battisti et al., 2022). The analyses showed that workers in highly digitalised jobs were more stressed during the pandemic than those with less digitalised work. Since a connection between work stress caused by the use of digital technologies at work (increased workload, reduced autonomy) and mental health was also apparent, it is not unlikely that digitalisation in the pandemic may have played a role in increasing mental stress. However, this assumption could not be directly investigated from the available data. Regarding flexibility in place of work, no evidence was found that working from home (telework) was associated with increased (or decreased) work-related stress. Given the benefits of location-flexible working, this finding supports the continued use of teleworking or hybrid working after the pandemic. However, working in public places (e.g. coffee shops) was associated with increased work stress. So, not every form of place or work flexibility can be recommended without hesitation.

Conclusions

Psychosocial risk factors, work-related stress and poor mental health remain a significant problem in Europe's workplaces and there are indications that work-related stress increased during the pandemic. So, while it was already important to address psychosocial risks and work-related mental health within OSH before 2020, the pandemic has made this more pressing. Some sectors such as healthcare and education were particularly affected. Digitalisation of work is also associated with an increase in exposure to risk factors. The risk factor with the strongest link to mental health was severe time pressure or work overload. It was also the most reported risk factor in the OSH Pulse survey and appears to be a particular problem. On the other hand, while the pandemic had a clear impact on work-related stress, organisations with good OSH measures in place appeared better able to cope with work stress during

¹² Kotowski, S. E., Davis, K. G., and Barratt, C. L., 'Teachers feeling the burden of COVID-19: Impact on well-being, stress, and burnout', *Work (Reading, Mass.)*, 2022, Vol. 71, No 2, pp. 407–415.

¹³ Backhaus, I., Hoven, H., Bambra, C., Oksanen, T., Rigó, M., Di Tecco, C., Iavicoli, S., and Dragano, N., 'Changes in work-related stressors before and during the COVID-19 pandemic: differences by gender and parental status', *International Archives of Occupational and Environmental Health*, 2023, Vol. 96, No 3, pp. 421–431.

¹⁴ Battisti, E., Alfiero, S., and Leonidou, E., 'Remote working and digital transformation during the COVID-19 pandemic: Economic-financial impacts and psychological drivers for employees', *Journal of Business Research*, 2022, Vol. 150, pp. 38–50.

the pandemic, as good OSH measures were associated with lower reported increases in work-related stress.

It is not only important to understand what happened during the pandemic and draw conclusions about possible future crises of this kind. It is also crucial to ask which of these changes are permanent and will remain part of the 'normal' post-pandemic world of work, underlining the importance of ongoing monitoring of working conditions together with indicators of mental health, so changes can be recognised at an early stage and forecasts for future developments can be made. This is particularly relevant in times of rapid change such as exists today.

Finally, the data show the importance of addressing work-related psychosocial risks, especially in relation to digitalisation, and the need to integrate addressing work-related psychosocial risks into preparedness plans for future critical events.

The European Agency for Safety and Health at Work (EU-OSHA) contributes to making Europe a safer, healthier and more productive place to work. The Agency researches, develops, and distributes reliable, balanced, and impartial safety and health information and organises pan-European awareness raising campaigns. Set up by the European Union in 1994 and based in Bilbao, Spain, the Agency brings together representatives from the European Commission, Member State governments, employers' and workers' organisations, as well as leading experts in each of the EU Member States and beyond.

European Agency for Safety and Health at Work

Santiago de Compostela 12

48003 Bilbao, Spain

E-mail: information@osha.europa.eu

<https://osha.europa.eu>