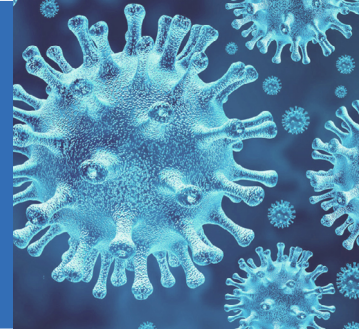


# Occupational safety and health in Germany during the Corona crisis



baua: report brief

German companies had to face up to a number of organisational and economic challenges as a result of the Coronavirus pandemic. At the same time, new regulations have been introduced relating to safety and health at work. A company survey commissioned by the German Federal Institute for Occupational Safety and Health (BAuA) and the Institute for Employment Research (IAB) shows that occupational safety and infection protection are of high importance during the Coronavirus crisis. For example, in 98% of companies that have introduced specific occupational safety and health (OSH) measures, the senior management team has been involved in their development and implementation. Companies have adopted a large number of the recommended measures from central government's SARS-CoV-2 occupational health and safety regulation.

## Higher requirements for occupational safety and health as well as infection protection due to SARS-CoV-2

The spread of the novel SARS-CoV-2 and the increasing incidence of Covid-19 pose enormous challenges for companies and policy-makers. In order to contain the spread of the virus at the same time as ensuring that everyday operations continue to function properly, many companies had to adapt their occupational safety and health procedures to the new circumstances. Working in collaboration with the German Federal Institute for Occupational Safety and Health (BAuA), the Institute for Employment Research (IAB) of the German Federal Employment Agency is conducting a series of company surveys aimed at identifying the current challenges companies must face. Every three weeks, more than 1,500 company representatives are asked about how the Corona crisis is affecting them and how they are dealing with it. Respondents from 1,556 companies in Germany took part in the second survey, providing information on the current implementation of occupational safety and infection control measures at work (Bellmann et al., 2020).

## The role of safety and health at work and infection control in the Corona crisis

The extrapolated results of the company survey are representative for Germany. They indicate that measures of infection control currently play a major role for the majority of companies. Almost 80% of the companies are implementing special regulations on occupational safety and health during the Coronavirus crisis. Just under three quarters of the respondents state that their companies have also formulated and issued these regulations in writing. Half of all respondents confirmed that, their companies

had stepped up hygiene controls significantly or very significantly compared with before the crisis began. Only 16% of companies replied that they have implemented little or no change. The most frequently cited reason given by those companies who reported little or no increase in precautions against infection was that the existing occupational safety and health as well as infection protection measures were considered sufficient.

## Occupational safety and health and infection protection in the Corona crisis is a matter for the boss

The high importance attached to infection protection is apparent from the fact that in 98% of the companies that have adopted specific measures for the control of the virus, the senior management has been involved in drawing up and implementing the new regulations. This applies almost equally to all sizes of company (98%) and all sectors of the economy (92-100%). Previous research showed that support of the management proved to be an important driver for the introduction and implementation of occupational safety and health measures at the legally required quality level (Elke et al., 2015).

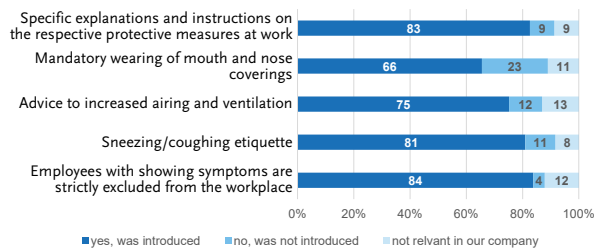
The respondents mention other groups of individuals contributing to the implementation of regulations on occupational safety and health much less frequently. Other members of staff with responsibility for occupational safety and health, such as OSH professionals or company physicians, were included in the decision-making and implementation of protective measures by around 44% of companies. 18% of companies brought in external consultants. The involvement of employee representatives was confirmed by 15% of the companies.

**Implementation of occupational safety and health as well as infection protection measures**

With the SARS-CoV-2 occupational health and safety standard and the subsequently introduced SARS-CoV-2 occupational safety and health regulation, the German government provided a guideline for companies regarding occupational protective measures to mitigate the Corona-virus crisis. The regulations specify measures for all areas of working life designed to reduce the risk of infection for employees and keep it at a low level (BMAS, 2020).

Respondents stated that their companies had, on average, introduced almost 8 of the 14 protective measures listed in the survey. The measures are not equally applicable for all companies but must be selected against the background of a risk assessment carried out on site. The aim of the survey was therefore to gain insights into which of the recommended protective measures have been or are being implemented by companies. The following section presents the results for the measures introduced, grouped as follows: 1. General rules of conduct; 2. Hygiene and cleaning; 3. Contact reduction; 4. Design of the working environment. The SARS-CoV-2 regulations state that all four of these factors should be taken into account in the formulation of occupational safety and health measures (BMAS, 2020).

The results of the company survey show that measures addressing general rules of conduct were considered highly relevant and were introduced by the clear majority of the companies.

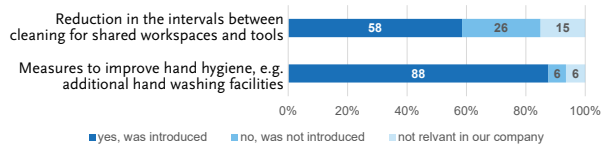


**Fig. 1** Measures: General rules of conduct (extrapolated figures, rounding errors possible; N<sub>unw</sub> = 1550–1553)

The codes of conduct included specific explanations and instructions on protective measures, sneezing and coughing etiquette as well as exclusion from the workplace if symptoms are showing. More than 80% of the respondents stated that they have introduced these measures. Advice to increased airing and ventilation is reported by three quarters of companies and the mandatory wearing of mouth and nose coverings by two thirds (see Fig. 1).

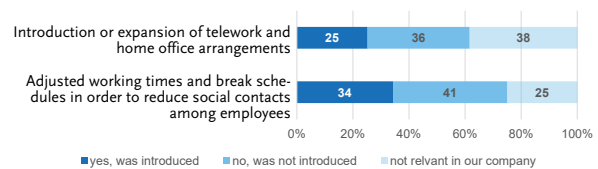
Further protective measures are aimed at appropriate levels of hygiene and cleaning. These measures have also been implemented by a large proportion of companies in Germany (see Fig. 2). However, significantly more companies' respondents report having introduced measures to

improve hand hygiene (88%), while intensified cleaning of surfaces and additional adjustments of cleaning intervals is much less frequently reported (58%).



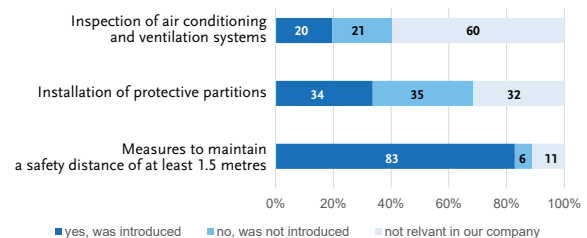
**Fig. 2** Measures: Hygiene and cleaning (extrapolated figures, rounding errors possible; N<sub>unw</sub> = 1547–1554)

Another set of protective measures refers to organisational measures to reduce the frequency of social contacts. According to the survey data, about a third of the companies introduced adjustments in working hours and break schedules in order to reduce social contacts among employees (see Fig. 3). Introducing or extending telework and home office arrangements has been reported by a quarter of the companies. Overall, however, organisational measures are implemented less often or deemed less relevant.



**Fig. 3** Measures: reducing social contacts among employees (extrapolated figures, rounding errors possible; N<sub>unw</sub> = 1550–1554)

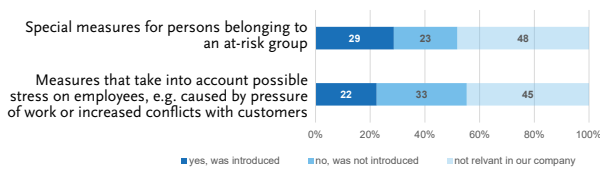
Another set of measures which companies can introduce to protect employees and which comes under the heading of technical occupational safety and health relates to the design of the working environment. The majority of the companies (83%) have taken steps to maintain a safety distance of at least 1.5 metres (see Fig. 4). The installation of partitions (34%) is less common. The inspection of air conditioning and ventilation systems is not considered relevant by 60% of respondents.<sup>1</sup>



**Fig. 4** Measures: Design of the working environment (extrapolated figures, rounding errors possible; N<sub>unw</sub> = 1532–1552)

<sup>1</sup> Results correspond with the proportion of companies indicating not having airing or ventilation systems. According to BAUA's inquiries, about 36% of companies in Germany are equipped with these systems. For further information see: [www.bmas.de/DE/Service/Presse/Pressemitteilungen/2020/empfehlungen-zum-infektionsschutzgerechten-lueften.html](http://www.bmas.de/DE/Service/Presse/Pressemitteilungen/2020/empfehlungen-zum-infektionsschutzgerechten-lueften.html)

In addition to the above-mentioned aspects, government regulations explicitly mention the protection of particularly vulnerable employees and due consideration to be given to employees suffering from mental stress as a result of the epidemic (BMAS, 2020; Committee on Occupational Medicine - AfaMed, 2020). Special measures to mitigate increased work pressures on the individual and concomitant stress have been introduced by 22% of respondents (see Fig. 5). But for approximately twice as many companies, additional measures in this regard are not considered relevant. Similar percentages emerge for measures to help dealing with employees who require special protection, which are applied in 29% of participating companies.



**Fig. 5** Measures for employees in need of special protection and with regard to individual stress (extrapolated figures, rounding errors possible; N<sub>unw</sub> = 1536–1552)

**How company size relates to the implementation of measures**

The size of the company is a decisive factor in the implementation of measures. The number of protective measures introduced relates to company size: microcompanies (< 10 employees) = 7; small companies (10-49 employees) = 9; medium-sized companies (50-249 employees) = 10; large companies (≥ 250 employees) = 11. In addition, the number of microcompanies, which indicate that protective measures are not relevant to their circumstances, is higher than in the other categories. Differences between size categories are particularly evident in the measures taken to reduce the frequency of contact. While only 19% of microcompanies report having extended or introduced teleworking or home office arrangements, the figures are 40% for small companies, 63% for medium-sized companies and 86% for large companies. Measures to protect vulnerable workers are also more likely to be introduced as size increases (24% of microcompanies as opposed to 67% of large companies). A further striking feature is that measures for observing the distance rules are implemented by a large majority (80-98%) regardless of size. General codes of conduct and measures on hygiene and cleaning are also found in more than half of respondents irrespective of size.

**How economic sector relates to the implementation of measures**

A comparison of the implementation of protective measures between sectors of the economy<sup>2</sup> also reveals differences in the average number and type of safety measures deployed. For example, enterprises operating in the

“Agriculture, Forestry and Fishing; Mining and Quarrying; Electricity, Gas, Steam and Air Conditioning Supply; Water Supply; Sewerage, Waste Management and Remediation Activities“ industries implement an average of five measures, while enterprises in the “Accommodation and Food Service Activities; Arts, Entertainment and Recreation” industries as well as in the “Education” and “Human Health and Social Work Activities” implement an average of nine. Measures implemented by more than half of the companies in all sectors of the economy concern rules of conduct such as sneezing and coughing etiquette, excluding employees showing symptoms from the workplace, the issuing of specific explanations and instructions, measures to improve hand hygiene and measures to maintain distancing rules. As regards the other protective measures, there are, as expected differences in terms of implementation and relevance. For example, the introduction or extension of teleworking and home office arrangements is a coping strategy used most in the “Information and Communication” sector (72%). The adaptation of working hours and break schedules in order to reduce contacts takes place to a large extent in companies in the “Manufacturing” (47%) and “Education” (53%) sectors. More than half of respondents in the “Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles” (57%) and in the “Human Health and Social Work Activities” (52%) report having installed partitions. Those sectors of the economy that necessarily involve contact with the public such as “Human Health and Social Work Activities” (94%) as well as “Accommodation and Food Service Activities; Arts, Entertainment and Recreation” (91%) make particularly frequent use of mandatory mouth and nose coverings as a protective measure. Companies of the sector “Education” (49%) and “Human Health and Social Work Activities” (54%) are especially likely to implement measures for the protection of vulnerable employees.

**Conclusion**

Effective occupational safety and health measures are an essential element in curbing the epidemic. The „Betriebe in der Covid-19 Krise“ company survey on aspects of occupational safety and health and infection protection at work shows that, as a result of the heightened requirements and challenges of the SARS-CoV-2 epidemic, the importance

<sup>2</sup> The German Classification of Economic Activities (WZ 2008) was summarized into 11 economic sectors: 1. Agriculture, Forestry and Fishing; Mining and Quarrying; Electricity, Gas, Steam and Air Conditioning Supply; Water Supply; Sewerage, Waste Management and Remediation Activities, 2. Manufacturing, 3. Construction, 4. Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles, 5. Transportation and Storage, 6. Accommodation and Food Service Activities; Arts, Entertainment and Recreation, 7. Information and Communication, 8. Financial and Insurance Activities; Real Estate Activities; Professional, Scientific and Technical Activities; Administrative and Support Service Activities, 9. Other Service Activities, 10. Education, 11. Human Health and Social Work Activities. Companies from the sector Public Administration and Defence; Compulsory Social Security have not been included in the sample.

of workplace infection protection and the efforts to implement it have increased. The high level of involvement of the senior management in the development and implementation of occupational health and safety measures should also be emphasised – an important signal to the employees. Overall, the companies have adopted a large number of the recommended measures. This applies in particular to measures which establish rules of conduct and are aimed at hygiene and cleaning (e.g. sneezing/coughing etiquette and measures to improve hand hygiene). Other aspects of the SARS-CoV-2 occupational health and safety regulations are applied much less frequently (e.g. the introduction of safety measures for particularly vulnerable employees and measures to mitigate psychological stress of employees). In the light of the above, it is advisable to carry out a risk assessment taking into account mental stress and the requirements of infection protection in order to identify vulnerabilities and to put in place targeted measures.

The results show differences in the implementation of protective measures for companies of different sizes and from different sectors of the economy. This suggests that there is not one single correct approach to occupational safety and health while the Coronavirus crisis continues. Companies can only respond to the factors that are characteristic of their sector, size and individual circumstances and to the concomitant individual risks with a specifically coordinated raft of measures, which must be subject to regular review.

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