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## SARS-CoV-2 occupational health and safety rule

This SARS-CoV-2 occupational health and safety rule supports the occupational health and safety requirements relating to SARS-CoV-2 for the duration of the epidemic situation of national importance (henceforth referred to as the epidemic) as determined pursuant to Section 5 of the German Protection Against Infection Act (IfSG).

The SARS-CoV-2 occupational health and safety rule is defined or adapted by the advisory occupational health and safety committees at the Federal Ministry of Labour and Social Affairs (BMAS) in tandem with the Federal Institute for Occupational Safety and Health (BAuA) and published by BMAS in the Joint Ministerial Gazette.

The SARS-CoV-2 occupational health and safety rule further specifies the requirements of the ordinances pursuant to the German Safety and Health at Work Act (ArbSchG). By complying with these detailed provisions, the employer can assume that it will have met the requirements of the ordinances. If the employer opts for another solution, he or she must ensure at least the same level of safety and health protection for employees. Other potential solutions may be prioritised where the federal states (*Länder*) have different legal provisions governing the protection of employees. In terms of the level of protection afforded by these legal provisions, it is recommended that the requirements set forth in this government rule be taken as the basis.

The rule furthermore reflects the state of the art in technology, occupational healthcare and hygiene as well as other reliable ergonomic findings which the employer must take into account in the occupational health and safety measures pursuant to Section 4(3) ArbSchG during the epidemic. The physician within the meaning of Section 7 of the Ordinance on Preventive Occupational Healthcare (ArbMedVV) must take the SARS-CoV-2 occupational health and safety rule duly into account as a rule reflecting the state of the art in occupational healthcare (Section 6(1) Sentence 1 ArbMedVV).

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# 1 Scope of application

- (1) This SARS-CoV-2 occupational health and safety rule supports the Federal Ministry of Labour and Social Affair's [1] SARS-CoV-2 occupational health and safety standard on the basis of the German Safety and Health at Work Act (ArbSchG) and the ordinances relating thereto (occupational health and safety ordinances).
- (2) This rule's objective is to safeguard the health of employees effectively during the SARS-CoV-2 epidemic by means of occupational health and safety measures. Implementing these measures at plants, facilities and offices will also contribute to protecting the general population by interrupting chains of infection.
- (3) The temporal scope of application of the SARS-CoV-2 occupational health and safety rule is limited to the duration of the epidemic situation of national importance as determined pursuant to Section 5 of the German Protection Against Infection Act. If new scientific findings come to light which impact the requisite protective measures, the rule will be adapted.
- (4) This rule also applies to work and activities which are subject to the Biological Agents Ordinance (BioStoffV), unless they are subject to equivalent or stricter rules (including Technical Rules for Biological Agents (TRBA), recommendations or resolutions) for the protection of employees. The Committee on Biological Agents (ABAS) recommendations relating to the SARS-CoV-2 outbreak must continue to be duly taken into account [2].

### 2 Definitions

#### 2.1 SARS-CoV-2

- (1) The Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) is part of the coronavirus family. Infection with SARS-CoV-2 can lead to the respiratory disease COVID-19. Given its high molecular biology similarity and the data available on the epidemiology and clinical symptoms of the infection, ABAS has classified SARS-CoV-2 as risk group 3, as is also the case for SARS-CoV-1 and the Middle East Respiratory Syndrome Coronavirus (MERS-CoV) [3]. In addition to the lack of a vaccine to prevent the disease, treatment and its efficient spread among the population, the potential seriousness of the illness was specifically taken into account in this classification. Not all those infected went on to suffer serious symptoms, for instance. Furthermore, it is to be assumed that a considerable proportion of those infected with SARS-CoV-2 do not develop any illness or only a mild, cold-like illness.
- (2) SARS-CoV-2 is transmitted primarily and at a high rate of infection via airborne droplets (aerosols) from the respiratory tracts of those infected to other persons. The entry points are exposed mucous membranes of the recipient (mouth, nose, eyes). Transmission takes place first and foremost if a person is in close physical proximity to a virus emitter, for example at or closer than normal talking distance. It has been shown that in enclosed spaces in particular the viruses are transmitted very efficiently from person to person by droplets and aerosols and then spread in the population. Transmission from contaminated surfaces and hands is also possible, albeit to a lesser extent, and must also be taken into account.
- (3) Not only those who have contracted COVID-19 but also people who have been infected but do not have any symptoms can transmit the virus. The virus can already be transmitted one or two days before symptoms start. The risk of infection increases with the number and length of unprotected contacts with people infected with SARS-CoV-2.

# 2.2 Working from home as a form of mobile work

- (1) Mobile work is a form of work that is not performed at a workplace as defined under Section 2(1) German Workplace Ordinance (ArbStättV) or at a telework station installed permanently in the employee's private sphere as per Section 2(7) ArbStättV, but where employees work at any other location (e.g. at the customer, on transport, in a home).
- (2) Electronic or non-electronic work equipment is used to perform mobile work.
- (3) Working from home is a form of mobile working. It enables employees to work temporarily for the employer in their private sphere, for example using portable IT systems (e.g. notebooks) or data carriers, after prior agreement with the employer.
- (4) This is without prejudice to teleworking provisions.

# 2.3 Mouth and nose coverings

Mouth and nose coverings (MNCs) are textile garments that cover at least the nose and mouth and are suited to significantly reducing the speed of respiratory flow or the ejection of saliva/mucous/droplets. MNCs protect others against infection. They constitute neither medical devices nor personal protective equipment (PPE).

# 2.4 Mouth and nose protection/medical face masks (for example in accordance with the DIN EN 14683 standard)

Mouth and nose protection (MNP)/medical face masks are medical devices and are therefore subject to medical devices legislation. They protect others from exposure to potentially infectious droplets coming from the person wearing the MNP. Medical face masks are required to have undergone an approval procedure.

# 2.5 Filtering half-face masks (for example in accordance with the DIN EN 149 standard)

- (1) Filtering half-face masks (e.g. FFP) are protective respiratory masks. They are PPE, protecting the wearer from droplets and aerosols. Filtering half-face masks are differentiated between *inter alia* by their filtering capacity, allowing them to be categorised into different equipment classes as their filtering capacity increases. Filtering half-face masks are required to have undergone an approval procedure.
- (2) Filtering half-face masks with an exhalation valve only protect the wearer (self-protection), so are not suitable for mutual infection protection (protection of others).

# 2.6 Protective respirators with a replaceable particle filter (for example in accordance with standard DIN EN 140 and in combination with DIN EN 143)

Protective respirators with a replaceable particle filter constitute personal protective equipment. The air flows through the particle filters into the respirator. The exhaled air flows through exhalation valves or other fittings into the surrounding atmosphere. This means the protective respirator has no protective effect for others. Protective respirators with replaceable particle filters protect the wearer from droplets and aerosols. Respirators with a replaceable particle filter are required to have undergone an approval procedure.

# 2.7 Face protectors (for example in accordance with the DIN EN 166 standard)

Face protectors (face shields/visors) constitute personal protective equipment. They usually consist of a suitable headband, forehead guard, helmet/head guard, protective hood or other suitable fixing. Face protectors are designed to protect the wearer from external hazards such as drips and splashes. Face protectors are required to have undergone an approval procedure.

## 2.8 Distancing rule/minimum distance

A distance of at least 1.5 m between employees or between employees and other people (e.g. customers, suppliers, other employers' employees) reduces the risk of SARS-CoV-2 transmission. For certain types of work generating higher aerosol emissions, such as professional singing, larger distances may be required.

## 2.9 Brief contacts/Brief encounters

The guidance on contact tracing for respiratory diseases resulting from SARS-CoV-2 provided by the Robert Koch Institute (RKI) defines brief contacts or encounters as face-to-face contacts between people lasting cumulatively less than 15 minutes. Only a low risk of infection is to be expected from these types of contact based on current findings.

## 3 Risk assessment

- (1) In light of the epidemic and the publication of the BMAS SARS-CoV-2 occupational health and safety standard, Sections 5 and 6 ArbSchG require the employer to review and, where necessary, update the existing risk assessment and occupational health and safety measures defined to include any additional measures required for protection against infection at work. The detailed sector-specific provisions set out by the statutory occupational accident insurance schemes for protecting against SARS-CoV-2 can serve as an aid here [4].
- (2) The employer should involve the occupational health and safety specialist and the occupational physician when reviewing and updating the risk assessment and subsequently defining specific measures to prevent infection. Furthermore, the process must be implemented in a participatory manner involving the employee representatives or, if these are not in place, with the employees. Suitable bodies for exchange and coordination are the occupational health and safety committee or any epidemic or crisis management teams put in place.
- (3) During the risk assessment, the design and structuring of work tasks, working times and the integration of employees working from home into work processes as well as the additional psychological stress factors to be considered as a result of the epidemic situation must be duly taken into account. Managers have a special role to play here.
- (4) Under Section 15 ArbSchG, employees have a duty to cooperate. As their cooperation is required for the implementation of and compliance with behaviour-related measures, they need to develop and maintain a safety awareness. The same applies to employees from external companies, temporary workers and employees working under contracts for specific services or work (*Dienst- oder Werkverträge*).

- (5) If work is performed with a special risk of SARS-CoV-2 infection (e.g. work involving direct personal contact with persons suspected of being or known to be infected, work in laboratories), the relevant provisions on risk assessment under BioStoffV and TRBA apply.
- (6) In addition to collective measures, it must be examined whether and to what extent individual measures need to be taken for particularly sensible employees to protect them from being infected by employees or customers. In relation to the protection of pregnant women, please refer to Section 10 of the German Act on the Protection of Working Mothers which stipulates the inclusion of protection for working mothers in the general risk assessment under Section 5 ArbSchG and the new individual risk assessment once the employer is informed of a pregnancy [5].
- (7) How the measures may impact or be impacted by other occupational health and safety measures and any conflicts of aims must be duly taken into account (e.g. problems from wearing MNCs or medical face masks under climatically difficult room conditions).

#### 4 Protective measures

The 17 items of the BMAS SARS-CoV-2 occupational health and safety standard ("C-ASS") are spelt out here in greater detail based on the state of the art in technology, occupational healthcare, hygiene and other reliable ergonomic findings as well as government rules. The 14 overarching points ("C-ASS" 1-3, 6-16) are described in the section on protective measures, the comments for construction sites, agriculture and forestry, field and delivery services, transportation and travel at the workplace, public transport and accommodation ("C-ASS" 4 and 5) are described in the Annex, and the comments on preventive occupational healthcare ("C-ASS" 17) under point 5.

#### 4.1 Basic measures

- (1) The order of priority applying to the protective measures based on the principles set out under Section 4 ArbSchG also applies to measures to protect people against infection at work, with technical measures having priority over organisational measures, and these in turn having priority over personal measures this is known as the TOP principle. The various measures must be properly dovetailed (Section 4(4) ArbSchG). Which of these measures make sense and are appropriate in the specific work setting depends on the assessment of the risks that exist on site.
- (2) The employer must especially take measures to reduce the number of unprotected contacts between people (including indirect contact via surfaces) and the concentration of airborne viruses in the working environment as far as possible. Suitable measures for this are, for example, compliance with the physical distancing rule, working in set teams, technical measures to separate people's breathing areas, using remote contact possibilities, increased ventilation or airing, isolating sick people, increased cleaning of surfaces and additional hand hygiene.
- (3) If the nature of the work means the distancing rule cannot be complied with and technical measures such as partitions between workstations are not practicable, employees must wear at least mouth and nose coverings for their mutual protection. If warranted by the level of the risk of infection established by the risk assessment, filtering half-face masks (at least FFP2 or comparable [6]) are required as personal protective equipment. The same applies if, in a direct

interaction, one of the parties involved cannot wear an MNC. The MNCs and filtering half-face masks must be provided by the employer.

- (4) The following aspects in particular must be taken into account for the basic, technical, organisational and personal occupational health and safety measures:
  - Design and structuring of the working environment, e.g. the arrangement of workstations to ensure distancing, sufficient airing or ventilation, apparatuses such as partitions, barriers and, where appropriate, the definition of internal circulation routes,
  - 2. Reducing contact, e.g. by using digital communications, forming and maintaining working groups, how working hours are organised, working from home,
  - Hygiene and cleaning, e.g. washing hands regularly and thoroughly; if this is not possible, providing suitable and rehydrating hand disinfectants, adjusting cleaning intervals.
  - 4. General rules of conduct, e.g. keeping one's distance; refraining from forms of greeting involving direct physical contact; coughing and sneezing into the crook of one's arm or into a paper handkerchief; staying at home in the case of symptoms of illness.

# 4.2 Protective measures in the key areas of the occupational health and safety standard

- 4.2.1 Workstation design ("C-ASS" item 1)
- (1) Areas for movement must always be provided at workstations in accordance with Annex No. 3.1 of the German Workplace Ordinance (ArbStättV). The Technical Rule for Workplaces (ASR) "Room dimensions and movement areas" A1.2 further specifies these basic requirements for movement areas. This notwithstanding, workstations at workplaces should be arranged in such a way that a distance of at least 1.5 m can be maintained between the employees present to perform work tasks in compliance with the distancing rule. The following measures in particular may be implemented to achieve this:
  - 1. Changing furniture or how it is arranged,
  - 2. Use of other areas and rooms suitable for the work.
- (2) If the distancing rule between workstations cannot be observed for operational reasons and if individual contact is necessary not only for a brief time between persons employed at these workstations to perform the work, partitions must be installed as a technical measure. Partitions made of transparent material are preferable to ensure the necessary eye contact and adequate lighting conditions.
- (3) Partitions must not cause additional risks. For example, sufficient stability must be ensured and sharp corners or sharp edges must be avoided.
- (4) Partitions are used to separate breathing areas between employees or between employees and customers (e.g. at cashier workstations or service counters). The upper edge of the partition must end at least 1.5 m above the floor for seated workstations, and at least 2 m above the floor for standing workstations and for seated workstations with standing customers. The partition may if necessary have openings outside the breathing area (e.g. for payment to be made or for operation of a card reader, or for handing over goods). Both sides of the partition must be cleaned each working day with a standard cleaning agent.

# 4.2.2 Sanitary facilities, canteens and break rooms ("C-ASS" item 2)

- (1) General requirements applying to the installation and operation of sanitary facilities and break rooms at workplaces are laid down in Annex 4.1 and 4.2 ArbStättV. These are spelled out in detail in ASR A4.1 "Sanitary facilities" and A4.2 "Break and stand-by rooms". The arrangements laid down in this technical rule (ASR) are at present not sufficient to duly protect employees against infection with SARS-CoV-2 in accordance with the current state of occupational healthcare and hygiene. Therefore, in addition to the requirements specified therein, measures have to be taken to ensure compliance with the distancing rule when using facilities.
- (2) To implement hand hygiene, easily accessible washing facilities with running water, sufficient liquid soap that is gentle on the skin and facilities for hygienic drying of hands (disposable paper or textile towels) must be provided. Suitable skin protection and skin care products must be provided if determined necessary in the risk assessment. The use of warm air dryers should be avoided. The rules for washing hands must be displayed.
- (3) Hygienic hand cleaning and drying must also be ensured at mobile and remote workstations, for example by providing hand-washing stations or canisters of water, liquid soap and disposable towels or suitable hand disinfectants. Towels used by several people are not permitted under ASR A4.1 and do not meet hygienic requirements.

# Sanitary facilities

- (4) In changing rooms and washrooms, technical and organisational measures must be taken to ensure that employees have sufficient space to comply with the distancing rule, for example by means of distance markings on floors, limiting the number of people or use being staggered over time.
- (5) Sanitary facilities must be cleaned at least once every working day.

### Break rooms

- (6) Compliance with the distancing rule must be ensured in break rooms and areas, tea kitchens and cooking facilities as well as in stand-by rooms and areas. Measures include in particular the adjustment of seating arrangements, the application of floor markings and the staggered organisation of working and break times with the aim of reducing the occupancy rate.
- (7) Hand hygiene facilities must be provided before entering and using break rooms and areas.

### Canteens

- (8) Compliance with the distancing rule is to be ensured by arranging or reducing the number of tables and seats as well as by other technical measures, e.g. distance markings on the floor or the installation of barrier tapes at the food dispensing point, tray return point and at the cashier's desk, and by means of organisational measures, such as limiting the number of persons or extending the canteen and food dispensing times to avoid queues or a staff member to instruct and organise canteen-goers. Cutlery and crockery should be handed out by the canteen staff.
- (9) Hand hygiene facilities must be made available before entering and using the canteen.

# 4.2.3 Airing and ventilation ("C-ASS" item 3)

- (1) In the rooms of workplaces, sufficient healthy respiratory air must be available in accordance with Annex 3.6 ArbStättV. ASR A3.6 "Airing and ventilation" specifies the basic requirements applying to airing and ventilation in detail.
- (2) Increased airing and ventilation can reduce the concentration of any aerosols carrying virus present in room air. Airing and ventilation can be increased in particular by increasing the frequency at which rooms are aired, by extending airing or ventilation times or by increasing the amount of air flowing.
- (3) The quality of airing and ventilation can be checked by measuring CO<sub>2</sub>. Under ASR A3.6, anything up to a CO<sub>2</sub> concentration of 1,000 ppm is acceptable. During the epidemic, the actual concentration must be kept below this level if possible.
- (4) The simplest form of ventilation is airing out a space by opening windows. Rooms are to be aired out using windows at the start of work and thereafter at regular intervals. ASR A3.6 recommends a time interval for airing of every 60 minutes in offices, for example, and every 20 minutes in meeting rooms. This frequency should be increased if possible during the epidemic. Brief, intensive airing by fully opening the windows should be performed. An airing-out period of 3 to 10 minutes is recommended.
- (5) Meeting rooms must additionally be aired out before use, especially if other people have previously been in them.
- (6) The risk of transmission of SARS-CoV-2 via ventilation and air-conditioning systems can be classified as low overall if these have suitable filters or supply a high proportion of fresh air. Air conditioners should not be switched off during operating or working hours, as this may lead to an increase in the concentration of viruses in room air and in turn to an increased risk of infection. If air conditioners are not operated continuously, their operating times must be extended before and after rooms are used.
- (7) The recirculation of air from air conditioning systems that do not have a suitable filtration system must be avoided to the extent that this is technically and technologically possible, so that aerosols that may contain viruses are not channelled back into the room. High Efficiency Particulate Air/HEPA filters [7] are suitable filters, for example. When operating systems with a fresh air component, their operation should be stepped up in order to reduce the concentration of aerosols that may contain viruses in the room to the greatest possible extent.
- (8) Air-conditioning systems in sanitary facilities should be operated continuously during working hours at the workplace.
- (9) The use of devices in recirculation mode, such as fans (e.g. standing floor fans), personal cooling systems (e.g. mobile air conditioners and split air-conditioning systems) or heating devices (e.g. fan heaters) is generally only permitted in rooms with individual occupancy, because in recirculation mode they generally do not supply fresh air to lower aerosol concentrations and the air flow contributes to the circulation of aerosols in the room.

# 4.2.4 Working from home ("C-ASS" item 6)

(1) Working from home as a form of mobile work is a way to reduce the number of employees present at the workplace at the same time and to support compliance with distancing rules. This is particularly true if office space would otherwise have to be used by multiple employees not observing the distancing rule.

- (2) The ArbSchG and the Working Hours Act (*Arbeitszeitgesetz*) also apply to working from home. Arrangements regarding working hours and availability should be defined. Employees must be briefed regarding the working hours to be observed, breaks, the necessary documentation thereof, ergonomic workplace design and the use of work equipment, e.g. correct position of the computer screen, separate keyboard and mouse if possible, correct and alternating sitting posture and movement breaks.
- (3) The employer must organise work in such a way to ensure that employees who do not currently have access to the appropriate technical facilities for working from home are able to carry out their work and have sufficient access to work communications and information, taking into account point 4.2.12.

# 4.2.5 Work trips and meetings ("C-ASS" item 7)

- (1) The number of employees exposed to an additional risk of infection through work trips or meetings (e.g. in regions with high infection rates) must be confined to what is necessary to perform their work. With regard to the epidemic situation on the ground, it must be examined to what extent work trips or meetings can be replaced or reduced using electronic means of communication.
- (2) The minimum distance must also be respected when vehicles are shared on work trips. The number of persons in vehicles must be limited accordingly. If the distancing rule cannot be implemented, partitions must be installed or personal protection measures (mouth and nose covering at least) implemented. If this is not possible for the driver due to legal requirements, for example in the area of traffic law, particle-filtering half masks without exhalation valves must be worn by passengers not complying with the distancing rule while travelling.
- (3) If hand hygiene using water and soap is not ensured during the work trip, alternative measures must be provided for, such as hand disinfectants.
- (4) In the case of meetings, compliance with the distancing rule must be ensured in the meeting room. This can be achieved, for example, by reducing the occupancy rate. On airing and ventilation, see point 4.2.3(4) and (5).

# 4.2.6 Ensuring sufficiently safe distances ("C-ASS" item 8)

- (1) The use of circulation routes should be adapted in such a way that the distancing rule between employees and between employees and other persons can be observed, e.g. by defining and marking additional circulation routes such as one-way routes or setting up special pathways (in accordance with the general requirements of ASR A1.8 "Circulation Routes"), if frequency of use and density of persons indicate that regular encounters can be expected on circulation routes. As an alternative, the need for increased airing or ventilation (see point 4.2.3) should be examined if circulation routes are only used for short periods.
- (2) At waiting and standing areas (e.g. central printing and copying rooms) and in the event of unavoidable crowds of employees and other persons (e.g. customers), the distancing rule must be observed. Adequate ventilation must be provided in these areas.
- (3) Markings must be made to aid compliance with the distancing rule. These can be applied, for example, as floor markings or using barrier tape.

(4) Given their limited airing and ventilation possibilities, the use of lifts is to be restricted in terms of the number of persons and for compliance with the distancing rule. If this is not possible, mouth and nose coverings or medical face masks must be worn.

# 4.2.7 Work equipment/tools ("C-ASS" item 9)

- (1) Generally, work must be organised to ensure that work equipment is used by only one person if possible, e.g. by providing additional work equipment, so as to reduce the risk of smear infections.
- (2) If personal use of work equipment is not possible, it must be cleaned with commercially available (household) cleaning agents before being passed on. In particular, surfaces that have come into contact with employees, for example through droplet emissions from speaking, must be included in cleaning. Such surfaces include e.g. tabletops, IT devices, telephone receivers, steering wheels, gear levers and tools. Control panels of work equipment that has to be used by different employees must be cleaned regularly. Preventive surface disinfection is not considered necessary.

# 4.2.8 Organisation of working time and breaks ("C-ASS" item 10)

- (1) In light of the additional strain caused by the lack of infrastructure to support the home sphere and the general insecurity and associated psychological stress situation faced by many employees, the organisation of working time is of particular importance.
- (2) At the beginning and end of working time and when placing breaks, suitable organisational measures must be taken to avoid, as far as possible, several employees coming into close contact (e.g. in break rooms, canteens, changing rooms, washrooms and showers), difficulties in implementing the distancing rule or considerable delays for employees.
- (3) When drawing up shift schedules and assigning working groups, where possible the same persons should be assigned to the same shifts or working groups in order to further reduce the number of new personal contacts at work. The number of persons on a shift or in a working group should be reduced to the necessary minimum.
- (4) In all measures aiming to lower the concentration of the workforce, any additional risk caused by more difficult working conditions due to the placement of working time (e.g. night work) or the length of working time (e.g. extension of shifts or reduction of rest periods) must be taken into account in the risk assessment. The effectiveness or the consequences of these measures with regard to the health of employees, the occurrence of accidents or hygiene errors must be reviewed and the risk assessment revised if necessary.

# 4.2.9 Storage of work clothing and personal protective equipment ("C-ASS" item 11)

- (1) The exclusive personal use of PPE and work clothing must be ensured. PPE which can be used by several persons without increasing the risk of infection, e.g. fall protection equipment, can be exempt from this. The employer must allow employees to store work clothing and PPE separately from their everyday clothes if separate storage has been deemed to constitute a necessary protective measure in a risk assessment.
- (2) If the personal use of work clothes is not possible, they must be cleaned before being passed on.

- 4.2.10 Access to workplaces and premises by external persons ("C-ASS" item 12)
- (1) The following measures must be taken to reduce the risk of infection when external persons enter the workplace:
  - Use of electronic media to contact each other wherever possible to complete the work task.
  - 2. Use of partitions if the distancing rule cannot be observed between people (for example transparent partitions if dealing with members of the public).
  - 3. Limiting the number of external persons present at the same time so that the distancing rule can be observed between people (including the distance to employees),
  - 4. Use of mouth and nose coverings or medical face masks if the distancing rule cannot be observed and there is no effective, uninterrupted partitioning of persons.
- (2) In case of longer contacts, external persons must be informed on site by the employer in a suitable manner about special protective measures at the workplace. This must include local conditions as well as possibilities to use sanitary facilities and for hand hygiene for external persons, where appropriate.
- 4.2.11 Instructions for action to be taken in the event of suspected cases ("C-ASS" item 13)

Persons with symptoms of respiratory disease suspected of SARS-CoV-2 infection must stay away from the workplace. If there is a suspicion of SARS-CoV-2 infection, which may arise in particular in the case of fever, coughing and difficulty breathing, the employer must ask the persons concerned to leave the workplace immediately and seek medical treatment, if necessary.

## 4.2.12 Consideration of psychological stress ("C-ASS" item 14)

- (1) In order to protect employees from infection with SARS-CoV-2 to the greatest extent possible, new and redesigned workstations and processes are necessary at many workplaces. In some cases, this involves far-reaching changes in the organisation of work, design and structuring of workstations and working times and the way in which communication and cooperation take place at work, which in turn can lead to psychological stress.
- (2) Other aspects of work having an impact on the psychological strain on employees that need to be taken into account include possible conflicts with customers, high workloads over the long term in system-relevant sectors and the effects of restrictions on contact such as social isolation when working from home.
- (3) These additional psychological strains need to be taken into account when assessing the stress situation faced by employees and, based on this, appropriate measures need to be taken [8].
- (4) Acute consequences of the increase in psychological stress factors can include unsafe behaviour, an increasing risk of accidents and an increasing health risk.
- (5) Managers in particular must be made aware of the need for continuous monitoring of the effects of work processes on health and safety at work. If necessary, occupational health and safety experts, such as occupational health and safety specialists and occupational physicians as well as other competent persons are to be consulted.

- 4.2.13 Mouth and nose coverings and personal protective equipment ("C-ASS" item 15)
- (1) If technical and organisational protective measures cannot minimise the risk of infection at work, individual protective measures, which may also include the use of mouth and nose coverings, medical face masks, filtering half-face masks and face protectors, must be implemented. The respective product-specific instructions for putting on, taking off and cleaning these are to be applied and the persons concerned instructed in such.
- (2) In the case of work where the persons involved are not able to wear mouth and nose coverings, equivalent alternative measures must be devised and implemented as part of the risk assessment. For this purpose, the sector-specific instructions issued by the statutory occupational accident insurance schemes are to be used.
- (3) The use of mouth and nose coverings, medical face masks and filtering half-face masks places greater strain on the wearer (for example, greater breathing resistance due to the filter resistance of filter materials or thermal strain due to the greater thermal insulation of the protective equipment). In this respect, it must be reviewed to what extent wearing times need to be reduced by performing other work or regular breaks. Mouth and nose coverings, medical face masks and filtering half-face masks should be changed at the latest once they are wet through.
- (4) The purpose of a face protector is to protect the wearer against external hazards (self-protection). Proof of protection for others (external protection) is not part of the approval procedure. There is no filtering effect. However, face protectors can be used as PPE for spray protection in accordance with regulations, especially in combination with filtering half-face masks (at least FFP2 or comparable) for aerosol-producing activities, thus supplementing the personal protection of the wearer.
- 4.2.14 Instruction and pro-active communication ("C-ASS" item 16)
- (1) Occupational health and safety instruction under Section 12 ArbSchG and specific occupational health and safety regulations must also be carried out during an epidemic. Corresponding general and special requirements applying to instruction continue to apply as before (e.g. with regard to documentation). In the epidemic situation, instruction can be performed using electronic means of communication. It must be ensured that the instructor tests the comprehension of employees and that questions can be asked at any time.
- (2) If the updated risk assessment shows that there is a risk of infection at the workplace due to the epidemic situation and that additional measures to protect against infection need to be implemented, employees must be instructed in this respect before starting work and at regular intervals thereafter, as well as in the event of significant changes.
- (3) When preparing instruction, the employer can seek advice from the occupational health and safety specialist or the occupational physician. Such advice is particularly necessary if, due to the risk of SARS-CoV-2 infection, special precautions for particularly sensitive employees may be necessary (see point 5.4). In order to counteract uncertainty and fears among employees due to the large amount of partly contradictory information relating to the risk of SARS-CoV-2, pro-active communication on possible health risks and protective measures taken is required as early as possible.
- (4) To ensure protection against work-related risks from SARS-CoV-2, it is important for all persons employed at the place of work to be constantly instructed on transmission risks and

possibilities and to participate in the implementation of the measures. An enterprise using temporary workers is directly responsible for their instruction. The relevant contents of the instruction for employees working within the scope of contracts for specific services and work must be agreed by the employer with the employers at the external companies, and implementation of the instruction by the external company must be ensured.

- (5) Protective measures must be explained and made comprehensible by means of information (e.g. signs, notices, floor markings). Instruction must be provided in an understandable form and language.
- (6) In the case of work subject to the Biological Agents Ordinance (BioStoffV), general occupational health advice must also be provided as part of the instruction. The physician responsible for preventive occupational healthcare (as a rule the occupational physician) is to be involved.
- (7) Instruction includes information on the current state of knowledge, the risk of infection and the risk of new illness upon the return of recovered employees who have previously taken ill with COVID-19 (see also point 5.5(5)).

# 5 Preventive occupational healthcare

## 5.1 General preliminary remarks

During the epidemic, requirements applying to population-related infection control overlap with occupational health and safety measures at places of work. Occupational physicians advise employers on the implementation of their obligations in the context of occupational safety and health, and support employers in devising appropriate operational instructions for action, including ways to access tests for SARS-CoV-2.

# **5.2** Preventive occupational healthcare ("C-ASS" item 17)

- 5.2.1 General information on preventive occupational healthcare
- (1) In the epidemic situation, the requirements of the Ordinance on Preventive Occupational Healthcare (ArbMedVV) continue to apply to personal information and advice for employees on individual work-related health risks.
- (2) In addition to the existing tasks of occupational physicians, including the provision of preventive services, elective healthcare plays an important role. This must be made possible for all work activities, unless, based on the assessment of working conditions and the protective measures taken, no damage to health is to be expected. The following can be addressed in this context, for example: risks of infection, pre-existing conditions, as well as anxiety and psychological stress.
- (3) The periods laid down in Occupational Healthcare Rule (AMR) 2.1 "Time periods for initiating/offering preventive occupational healthcare" continue to apply. Preventive healthcare appointments that are postponed for personal or organisational reasons during a SARS-CoV-2 epidemic must be caught up timely and the previous intervals defined for them returned to. If the risk assessment results in multiple preventive measures for employees, the preventive occupational healthcare should be provided during one appointment.
- (4) Preventive occupational healthcare can be performed as a telephone/telemedical interview and consultation on medical history. In order to relieve the occupational physician and in turn avoid possible chains of infection, it is recommended that other medical

consultations which are not required by law be carried out by telephone/telemedical means, if possible or postponed.

- (5) The employer is obligated to provide the physician responsible for preventive occupational healthcare with the necessary information about workplace conditions. In the event of an epidemic, this also includes the epidemic plan for the particular workplace in question. The physician must take into account all working conditions and work-related risks in the work-related anamnesis.
- (6) The occupational physician must evaluate the preventive occupational healthcare at suitable intervals in order to identify particular risks and, if necessary, recommend protective measures
- (7) The general requirements laid down in point 4 of AMR 3.2 "Preventive occupational healthcare" are to be taken into account.
- 5.2.2 Preventive occupational healthcare in connection with work involving a risk of infection by SARS-CoV-2
- (1) Preventive occupational healthcare must be offered for specific work with SARS-CoV-2 in accordance with the Biological Agents Ordinance (BioStoffV). In the case of non-specific work, this applies if the work is assigned protection level 3. In the case of work at protection level 2, the risk assessment must review whether there is a risk of infection despite the protective measures taken; if there is a risk of infection, preventive occupational healthcare services are to be offered. Preventive consultations and measures apply above all to employees having contact with patients in the health service and in care facilities.
- (2) Work in which the risk of infection arises solely from work-based contact with other employees or customers is not deemed to constitute work which comes under the scope of BioStoffV. It therefore does not constitute grounds for compulsory or optional preventive services under Annex Part 2 ArbMedVV.
- (3) Elective healthcare is to be made possible (see point 5.2.1(2)).
- 5.2.3 Preventive occupational healthcare for work requiring the wearing of respirators

If the risk of infection makes it necessary to wear group 1 respirators (e.g. FFP2 half-face masks) (Annex Part 4(2)(2) ArbMedVV; AMR 14.2 "Classification of respirators into groups"), preventive occupational healthcare is to be offered if this is worn for more than 30 minutes per day. Preventive occupational healthcare must be provided in the case of work requiring the wearing of group 2 or 3 respirators. The risk of infection by SARS-CoV-2 in connection with work that does not come under the scope of BioStoffV does not normally require group 2 or 3 respirators to be worn.

- 5.2.4 Preventive occupational healthcare as a result of mobile working due to the epidemic
- (1) Mobile working in the context of the epidemic often takes place under difficult conditions (e.g. reduced social contacts, juggling family tasks at the same time, etc.). Psychosocial stress caused by working from home can constitute a work-related health risk and therefore a reason to provide elective healthcare.

(2) If work is carried out on screens, employers must offer optional healthcare services (Annex Part 4(2)(1) ArbMedVV).

# 5.3 Evaluation of SARS-CoV-2 infections among employees

Occupational physicians evaluate SARS-CoV-2 infections among employees that have come to their attention with the aim of identifying areas of work which could be associated with a greater risk in order to subsequently define recommendations for measures where appropriate.

# 5.4 Dealing with particularly sensitive employees

- (1) The procedure for particularly sensitive employees is based on the following:
  - 1. Review and update the risk assessment, taking into account specific risks for particularly sensitive groups of employees (following the guidance of the Robert Koch Institute) and initiation of appropriate measures (see point 3(6)),
  - 2. Implement the TOP principle,
  - 3. Priority for situational prevention over behavioural prevention,
  - 4. Optimised occupational health and safety so the employee can continue to work,
  - 5. Inclusion of individual protection needs within the framework of preventive occupational healthcare [9].
- (2) The individual measures prepared (point 3(6)) are to be activated when individual risk characteristics that trigger these come to light, for example presentation of a medical certificate. In unclear cases, a consultation with the occupational physician should be offered.
- (3) Within the scope of preventive occupational healthcare, employees can obtain occupational medical advice regarding their individual risks. If individual protective measures are required, the physician will notify the employer without mentioning diagnoses or findings. If the recommendation is a change in the work performed, such notification requires the consent of the employee.
- (4) Even in the case of work with a very high risk of exposure, there is no justification for the employer to collect data on individual risk characteristics from its employees for occupational health and safety reasons, and there is no obligation on the part of employees to disclose medical risks in the context of occupational health and safety.

## 5.5 Return to work after a SARS-CoV-2 infection or COVID-19 illness

- (1) Employees returning to work after suffering from COVID-19 need special support in coping with work-related physical and psychological stress due to potentially severe repercussions of the illness.
- (2) Returning staff must receive information on the protective measures that have been taken at the place of work in response to the SARS-CoV-2 epidemic before resuming their work.
- (3) In the case of a period of work incapacity lasting more than six weeks in the last 12 months, the employer is also obligated to offer these employees an occupational integration management service in accordance with Section 167(2) German Social Code IX (SGB IX).
- (4) As a general rule, employees do not have to disclose diagnoses or symptoms of illness to the employer in the event of illness. Any information required for the employer will be

provided by the public health department as part of the quarantine order. If the employer becomes aware of an employee being infected, the employee's identity must be protected to the greatest extent possible to prevent stigmatisation of those affected.

(5) If specific cases of infection have become known, individual employees may be unsure as to how to interact with returning employees and may be afraid of becoming infected at work. Information on the current state of knowledge, in particular on the risk of infection or the risk of a new illness, can help to reduce fears. The persons to contact in case of questions or concerns of employees regarding their health at the workplace are in particular occupational physicians, occupational health and safety specialists or, if necessary, an employee counselling service.

# Annex: Protective measures for special workplaces, workstations and special work facilities

# 1 Construction sites ("C-ASS" item 4)

- (1) At every construction site, there must be facilities for hand hygiene, and the requirements of ASR A4.1 must be implemented at all times. Hand-washing facilities or washing facilities and toilets must be available near workstations. Washing facilities and hand-washing facilities are to be equipped with running water, liquid soap and disposable towels and a closed water drainage system (in drains or tanks) in accordance with point 3.11 or point 5.4(2) ASR A4.1 to enable employees to clean themselves in accordance with hygienic requirements. If closed water drainage systems are not possible, waste water must be disposed of in an alternative way that is hygienic and environmentally sound. In addition, hand disinfectants are to be provided, for example to immediately ensure the requisite hand hygiene in the event of limited availability of washing facilities or hand-washing facilities.
- (2) Due to the current infection situation, portable, stand-alone toilet cubicles with no external connections must be equipped with at least one hand-washing facility with running water, liquid soap and disposable towels and, if necessary, with disinfectants. If this is not possible, a hand-washing facility in accordance with (1) must be provided in the immediate vicinity of the toilets.
- (3) At construction sites, toilet rooms and washrooms must be provided in accordance with points 8.2 to 8.4 ASR A4.1, for example in containers. If no washrooms are provided at construction sites, washing facilities are to be provided in accordance with point 6.1(2) ASR A4.1. If facilities are used outside the premises of a construction site in accordance with point 8.2(5) ASR A4.1, it is to be ensured and demonstrated (e.g. by means of usage agreements) that these are available during working hours, are equipped in accordance with (2) and are cleaned in compliance with hygienic requirements.
- (4) It must be ensured that the filling and emptying schedule for the tanks used is adjusted and aligned with the increased water consumption.
- (5) Within the scope of application of the Construction Site Ordinance (BaustellV), sanitary rooms and sanitary facilities should be coordinated at construction sites whenever employees of several employers work together, if necessary as jointly used facilities, in accordance with the rules on occupational health and safety at construction sites (RAB) "Suitable Coordinator" (RAB 30) and the "Safety and Health Protection Plan SiGePlan" (RAB 31).
- (6) Sanitary rooms and facilities are to be cleaned in compliance with hygienic requirements; at constructions sites at least daily in derogation from point 8.1(2) ASR A4.1, if necessary, several times daily.
- (7) With regard to coordination pursuant to Section 3 BaustellV, infection risks from SARS-CoV-2 are to be considered cross-trade risks under point 3.2 RAB 31 or cross-enterprise risks. Additional coordination obligations for employers result from Section 8 ArbSchG and point 6 of the "Principles of Prevention" accident-prevention regulation (German Statutory Accident Insurance (DGUV) Rule 1).

## 2 Agriculture, forestry ("C-ASS" item 4)

In addition to the scope of application of Section 1(2) ArbStättV, hand hygiene facilities must also be available outside the premises of a workplace. If the brief nature of the work does not

warrant making hand-washing facilities or washing facilities available, employees must be provided with a means of hand disinfection to ensure the requisite hand hygiene. For work involving biological agents, the provisions of TRBA 230 "Protective Measures for Activities Involving Biological Agents in Agriculture, Forestry and Comparable Activities" apply.

# Field and delivery services, internal transportation and travel, public transport ("C-ASS" item 4)

- (1) Employees working in the field and delivery service as well as in public transport must be provided with means of hand disinfection due to the limited availability of hand-washing facilities or washing facilities for them. Furthermore, company vehicles must be additionally equipped with hand hygiene and disinfection utensils as well as with paper towels and waste bags that can be sealed. Employees must be given the opportunity to use sanitary facilities. This is to be taken into account when planning tours.
- (2) If portable, stand-alone toilet cubicles are made available for employees, for example in the area of local public transport, toilet cubicles without any hand-washing facilities do not meet hygienic requirements. A hand-washing facility should be integrated into the toilet cubicle. Under point 5.4(2) ASR A4.1, hand-washing facilities (sinks with running water and closed waste-water system) are to be equipped with liquid soap and disposable towels.
- (3) Minimum distances must also be observed if possible in the case of work-related (customer) contacts outside the workplace. If the distancing rule cannot be adhered to, mouth and nose coverings must be worn as a minimum. The work procedures for these activities must be reviewed to see whether individual work is possible. This must not result in any additional risks.
- (4) If possible, customers and contracting parties are to be informed about necessary protective measures in the case of work-related (customer) contacts; if necessary (e.g. if there are persons from the place of work in officially ordered isolation at home or with symptoms of a respiratory disease with suspected SARS-CoV-2 infection that have yet to be clarified), protective measures are to be agreed with customers, contracting parties and, if necessary, other employers involved in the work.
- (5) In the case of travel required for work reasons, simultaneous use of vehicles by several employees should be avoided if possible. In addition, the group of persons sharing a vehicle simultaneously or consecutively should be restricted if possible, for example by assigning a vehicle to a specified group. The interiors of vehicles used for work purposes must be cleaned on a regular basis, especially if several people use the same vehicle, every time the users change.

## 4 Accommodation ("C-ASS" item 5)

- (1) Requirements applying to the establishment and operation of accommodation at workplaces are set out in Annex No. 4.4 ArbStättV; these are spelled out in detail in ASR A4.4 "Accommodation". The setting up and operation of sanitary rooms and sanitary facilities is to take place in accordance with ASR A4.1 in conjunction with point 4.2.2.
- (2) The provisions contained in ASR A4.4 and ASR A4.1 are at present insufficient to reflect the state of the art in occupational healthcare and hygiene with regard to the protection of

employees from infection with SARS-CoV-2. Additional measures need to be implemented, especially when operating accommodation.

- (3) Before starting their work, employees must be divided into fixed working groups having a maximum of four people. Larger groups of up to 15 persons are only possible if the technology used (e.g. sorting facilities, harvesting machines, weighing and packaging machines) demonstrably requires this.
- (4) The basic principle of "Living together Working together" (*Zusammen Wohnen Zusammen Arbeiten ZWZA*) applies.
- (5) A fixed room/apartment must be assigned at the accommodation for the entire duration of the stay. Different working groups should, if possible, be accommodated in separate facilities or, if this is not possible, at least in separate areas of the facility.
- (6) Employees from different working groups living in the same accommodation should be able to keep the minimum distance from each other (see point 4.2.6). In order to ensure this, normal occupancy should be reduced and furniture should be arranged or reduced accordingly.
- (7) It can be assumed that hygienic requirements are met if each employee has his or her own bedroom. This means single occupancy of bedrooms must be provided for as a general rule.
- (8) If the principle laid down in (4) cannot be implemented, the space required to be made available to each person in the sleeping area under ASR A4.4 is to be doubled from 6 m² to 12 m² when shared rooms are occupied. As a result, the occupancy density otherwise customary under ASR A4.4 is reduced by half. A maximum of four persons may be accommodated in a sleeping area and a maximum of two in a container. Exemptions apply in the case of partners or family members.
- (9) Where persons from different teams are accommodated in a shared room, the beds must be arranged in such a way that the distancing rule can be observed. Only one person may occupy a bunk bed. Exceptions apply in the case of partners or close family members.
- (10) In order to ensure the safety distance in common areas as well (point 5.4(6) ASR A4.4), the area for free movement may need to be increased.
- (11) It is recommended that, if possible, each working group should be provided with the necessary sanitary and social facilities for separate use. If this is not possible, use by different working groups must not be simultaneous. Between uses, the facilities must be cleaned and the rooms adequately aired or ventilated.
- (12) The accommodation and its facilities must be cleaned on a daily basis and as needed.
- (13) It must be ensured that liquid soap and disposable paper or textile towels are always available in sanitary and kitchen areas.
- (14) Viricidal disinfectants for hand disinfection must be made available in sufficient quantities (at least one dispenser per room, bathroom, toilet, kitchen).
- (15) A cleaning schedule must be attached to ensure that regular and thorough cleaning is maintained and checked. This schedule must be signed by the assigned cleaning personnel to confirm each cleaning operation carried out.
- (16) Washing machines and dishwashers must be provided to ensure that laundry and dishes are washed at a temperature of at least 60°C.

- (17) It must be ensured that work clothes and personal clothing can be cleaned regularly and that rooms for drying laundry are available or tumble dryers are provided.
- (18) Spare containers or accommodation for quarantining employees suspected of being or who have become infected with COVID-19 must be provided in sufficient numbers and it must be ensured that these are easily accessible on a stretcher and have separate sanitary areas. Drinking water or non-alcoholic beverages must be provided in this area. The location of these facilities must be made known to employees.
- (19) As a precautionary measure, plans (e.g. with reference to epidemic plans) must be drawn up for the case of infections in the accommodation. In particular, preparations must be made for the separate accommodation of sick persons (e.g. if cold symptoms appear) (see point 4.2.11). In the provisions relating to the use of the accommodation to be drawn up in accordance with point 4(6) ASR A4.4 (e.g. cleaning, behaviour in case of fire, alarm plan), additional provisions on how to behave and proceed in the event of illness and the outbreak of an epidemic situation must be included (in particular distancing rules, cough/sneezing etiquette and hand hygiene, see point 4.1) and employees must be instructed in a manner comprehensible to them.

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3] ABAS decision on the provisional classification of the virus SARS-CoV-2 in risk group 3 and recommendations on non-specific work (laboratory diagnostics) and specific work with SARS-CoV-2:

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### 2 Additional literature

 VDSI-SARS-CoV-2 (Coronavirus) - Effects on day-to-day work routines: https://vdsi.de/corona (VDSI notes on the implementation of the BMAS SARS-CoV-2

- occupational health and safety standard: https://vdsi.de/start/corona/vdsi-hinweise-zur-umsetzung-des-bmas-sars-cov-2-arbeitsschutzstandards/)
- INQA Tips on organisation and communication when working from home: https://inqa.de/DE/wissen/schwerpunkt-covid/home-office/organisation-kommunikation-home-office.html
- Certo magazine for health and safety of the Verwaltungsberufsgenossenschaft (VBG):
  How to Homeoffice: https://www.certo-portal.de/arbeit-gestalten/artikel/zuhause-arbeiten-how-to-homeoffice/
- Joint German Health and Safety Initiative (GDA) psychological stress portal: https://www.gda-portal.de/DE/Betriebe/Psychische-Belastungen/Psychische-Belastungen\_node.html

# 3 Occupational health and safety government rules, and provisions and regulations of the occupational accident insurance schemes

- TRBA 500 Basic measures to be taken for activities involving biological agents
- ASR A1.2 Room dimensions and movement areas
- ASR A1.8 Circulation routes
- ASR A3.6 Airing and ventilation
- ASR A4.1 Sanitary rooms
- ASR A4.2 Break rooms and break areas
- ASR A4.4 Accommodation
- ASR V3 Risk assessment
- TRBS 1111 Risk assessment
- RAB 30 Suitable coordinator (further specification of Section 3 BaustellV)
- RAB 31 Health and safety plan SiGePlan
- AMR 2.1 Periods for initiating/providing occupational health care
- AMR 3.2 Preventive occupational healthcare
- AMR 14.2 Classification of respirators into groups
- DGUV (German Statutory Accident Insurance) Rule 1 "Principles of Prevention"
- DGUV (German Statutory Accident Insurance) Rule 112-190 "Use of respiratory protective equipment"

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