Ordinance on Preventive Occupational Health Care
(ArbMedVV)


The Ordinance was adopted by the Federal Government with the consent of the Bundesrat as Article 1 of the Ordinance of 18 December 2008 (Federal Law Gazette I, p. 2768) after hearing the Central Commission on Biological Safety. Pursuant to Article 10, first sentence, of that Ordinance, it entered into force on 24 December 2008.

Section 1
Objective and scope

(1) The objective of this Ordinance is the early diagnosis and prevention of work-related illnesses, including occupational diseases, by adopting preventive occupational health care measures. At the same time, preventive occupational health care contributes to maintaining employability and further developing occupational health protection.

(2) This Ordinance applies to preventive occupational health care within the scope of the Safety and Health at Work Act (Arbeitsschutzgesetz — ArbSchG).

(3) This Ordinance does not affect other preventive occupational health care measures, in particular those taken in accordance with the Safety and Health at Work Act and the Act relating to Occupational Physicians, Safety Engineers and other Occupational Safety Experts (Occupational Safety Act) (Arbeitssicherheitsgesetz — ASiG).

Section 2
Definitions

(1) For the purposes of this Ordinance, ‘preventive occupational health care’

1. forms part of the preventive occupational health care measures adopted in an establishment;

2. serves the assessment of individual interactions between work and physical and mental health and the early diagnosis of work-related health problems as well as the determination of whether there is an increased health risk when performing certain activities;

3. includes a medical consultation meeting with anamnesis, including work anamnesis, as well as physical or clinical examinations, insofar as these are necessary to investigate individual matters or for an individual consultation, and the worker does not refuse to undergo these examinations;

4. comprises the use of the findings from preventive health care for the risk assessment and for other measures of occupational safety and health;
5. does not comprise proof of physical fitness for meeting occupational requirements on the basis of other legal provisions or individually or collectively negotiated agreements.

(2) ‘Mandatory health care’ is preventive occupational health care which must be occasioned when certain particularly dangerous activities are performed.

(3) ‘Optional health care’ is preventive occupational health care which must be offered as an option when certain dangerous activities are performed.

(4) ‘Elective health care’ is preventive occupational health care which must be made possible at the request of workers performing activities which it cannot be ruled out will cause damage to health.

Section 3
General obligations on the employer

(1) The employer must guarantee appropriate preventive occupational health care on the basis of a risk assessment. He or she must thereby comply with the provisions of this Ordinance, including the Annex, and take into consideration the regulations and findings published in accordance with section 9 (4). When complying with the regulations and findings referred to in sentence 2, it must be assumed that the requirements set have been fulfilled. Preventive occupational health care may also comprise additional preventive health care measures.

(2) In accordance with section 7, the employer must commission a physician with the provision of preventive occupational health care. Where an occupational physician has been appointed in accordance with section 2 of the Occupational Safety Act, the employer is to give priority to him or her when commissioning the provision of preventive occupational health care. The physician must be given all the necessary information regarding workplace conditions, in particular the occasion for the preventive occupational health care and the outcome of the risk assessment, and he or she must be allowed access to inspect the workplace. He or she must, upon request, be allowed access to the documents referred to in paragraph 4 sentence 3.

(3) Preventive occupational health care is to be provided during working hours. If the risk assessment for the worker’s/workers’ activity/activities results in the necessity to check several risks preventive occupational health care must take place during a single appointment. Preventive occupational health care is not to be provided in conjunction with examinations which serve to prove fitness for work to meet professional requirements, unless there are operational reasons for doing so; in such cases, the employer must obligate the physician to reveal to the worker the various purposes of preventive occupational health care and the fitness test.

(4) The employer is to keep file records containing information regarding the fact that, when and on what occasions preventive occupational health care was provided; the file records may be kept in automated form. The information must be retained until the employment relationship ends and must then be deleted, unless legal provisions or the regulations published in accordance with section 9 (4) provide otherwise. The employer has to transmit a copy of the file records to the competent authority by order. When the employment relationship ends the employer has to hand over to the person concerned a copy of the information concerning him or her; section 34 of the Federal Data Protection Act (Bundesdatenschutzgesetz — BDSG) remains unaffected.

Section 4
Mandatory health care

(1) The employer must occasion mandatory health care for workers in accordance with the provisions of the Annex. Mandatory health care must be occasioned before an activity is taken up and thereafter at regular intervals.

(2) The employer may only have an activity performed if the worker has taken part in the mandatory health care.

(3) (repealed)

Section 5
Optional health care

(1) The employer must offer workers optional health care in accordance with the provisions of the Annex. Optional health care must be offered before an activity is taken up and
thereafter at regular intervals. Where a worker rejects the offer, this does not release the employer from the obligation to offer further regular optional health care.

(2) If the employer learns of an illness which may have been caused by the worker’s activity, he must immediately offer him or her optional health care. This also applies to workers performing comparable activities if there are indications that they may also be at risk.

(3) The employer must offer workers and former workers follow-up preventive health care in accordance with the provisions of the Annex after they stop performing certain activities which may lead to health problems after extended latency periods. At the end of the employment relationship the employer’s obligation transfers to the competent statutory accident insurance provider, and he or she has to hand over a copy of all the necessary documents insofar as the worker has agreed thereto.

Section 5a
Elective health care

Over and above the provisions set out in the Annex, the employer has to make regular preventive occupational health care under section 11 of the Safety and Health at Work Act available to workers at their request unless no health damage is to be expected on the basis of the evaluation of the conditions of work and the protective measures taken.

Section 6
Obligations on the physician

(1) The physician must comply with the provisions of this Ordinance, including the Annex, when providing preventive occupational health care and must give consideration to the regulations and findings corresponding to the state of occupational medicine. Before providing preventive occupational health care he or she must obtain the necessary knowledge regarding the conditions of work. The work anamnesis must comprise all working conditions and work-related hazards. Before carrying out physical or clinical examinations the physician must examine their necessity at his or her dutiful medical discretion and must inform the worker about the content, purpose and risks of the examination. Examinations in accordance with sentence 3 may not be carried out against the worker’s will. The physician must observe medical confidentiality.

(2) Biomonitoring is a part of preventive occupational health care insofar as analytical methods recognised by occupational medicine and suitable evaluation values are available. Biomonitoring may not be carried out against the worker’s will. Vaccinations are a part of preventive occupational health care and must be offered to workers insofar as the risk of infection is activity-related and greater than in the general population. Sentence 3 does not apply if the worker already has sufficient immunity.

(3) The physician has to

1. record the results and the findings of the preventive occupational health care appointment in writing and discuss these results and findings with the worker,

2. make the results available to the worker at his or her request and

3. issue the worker and the employer with an attestation regarding the fact that, when and on what occasion a preventive occupational health appointment was held; the attestation also includes information on when another preventive occupational health care appointment is necessary from a medical point of view.

(4) The physician has to analyse the preventive occupational health care findings. Where these provide indications that the measures of occupational safety and health taken in regard to the worker or workers are not sufficient, the physician must inform the employer thereof and make recommendations regarding measures of occupational safety and health. Where the physician feels it is necessary for the worker to change jobs for medical reasons which purely relate to the worker’s person, such notification to the employer requires the consent of the worker.

Section 7
Requirements for the physician

(1) Notwithstanding other provisions in the Annex regarding individual occasions for the provision of preventive occupational health care, the physician must be authorised to use the
designation “Occupational Medicine” (Arbeitsmedizin) or the additional designation “Industrial Medicine” (Betriebsmedizin). He or she may not exercise the function of employer vis-à-vis the worker. Where the physician does not have the requisite specialist knowledge or the special authorisations or equipment for certain methods of examination in accordance with sentence 1, he or she must bring in physicians who meet these requirements.

(2) The competent authority may, in justified individual cases, grant exceptions to paragraph (1) sentence 1, for physicians.

Section 8
Measures following preventive occupational health care

(1) In the case of section 6 (4) sentence 2, the employer has to check the risk assessment and immediately take the required measures of occupational safety and health. If a change of job is recommended, the employer must assign the worker another activity in accordance with public service law or labour law regulations.

(2) The works or staff council and the competent authority are to be informed of the measures taken.

(3) If the worker or the employer feels that the result of the assessment conducted in accordance with section 6 (4) is incorrect, the competent authority issues a decision upon application.

Section 9
Occupational Medicine Committee

(1) An Occupational Medicine Committee will be established at the Federal Ministry of Labour and Social Affairs comprising expert representatives of the employers, the trade unions, Land authorities, the statutory accident insurance providers and other experts, especially those from the scientific community. The total number of members should not exceed twelve. A deputy is appointed for each member. Membership of the Occupational Medicine Committee is on an honorary basis.

(2) The Federal Ministry of Labour and Social Affairs appoints the members of the Committee and their deputies. The Committee draws up its own rules of procedure and elects the chair from amongst its members. The rules of procedure and the election of the chair require the consent of the Federal Ministry of Labour and Social Affairs.

(3) The tasks of the Committee include

1. to determine appropriate rules and other assured occupational medical findings in accordance with the state of occupational medicine,

2. to determine rules and findings on how the requirements set out in this Regulation can be met, in particular regarding the content and scope of mandatory, optional and elective health care,

3. to make recommendations on preventive occupational health care measures,

4. to publish other recommendations on preventive health care, in particular as part of in-company health care programmes,

5. determining regulations and findings regarding other measures of preventive occupational health care in accordance with section 1 (3), in particular regarding general occupational health care advice to workers,

6. advising the Federal Ministry of Labour and Social Affairs in regard to all issues concerning preventive occupational health care and other issues concerning medical occupational health.

The work programme of the Occupational Medicine Committee is to be coordinated with the Federal Ministry of Labour and Social Affairs. The Committee cooperates closely with the other committees in the Federal Ministry of Labour and Social Affairs.

(4) The Federal Ministry of Labour and Social Affairs may publish the regulations and findings as well as recommendations of the Occupational Medicine Committee in the Joint Ministerial Gazette.

(5) The federal ministries and the highest Land authorities may send representatives to the meetings of the Committee. Upon request, they may be allowed to speak in those meetings.
(6) The business of the Committee is conducted by the Federal Institute for Occupational Safety and Health.

Section 10

Administrative offences and criminal offences

(1) Whoever intentionally or negligently,

1. contrary to section 4 (1) does not occasion mandatory health care or does not do so in good time,
2. contrary to section 4 (2) permits the performance of an activity,
3. contrary to section 3 (4) sentence 1 clause 1, does not, does not correctly or does not completely keep a file record on preventive health care provision,
4. contrary to section 5 (1) sentence 1, does not offer optional health care or does not do so in good time, is deemed to have committed an administrative offence within the meaning of section 25 (1) no. 1 of the Safety and Health at Work Act.

(2) Whoever endangers the life or health of a worker on account of an act described in paragraph (1) is liable to punishment in accordance with section 26 (2) of the Safety and Health at Work Act.

Annex Mandatory and optional occupational health care


regarding individual amendments, see footnote)

Part 1

Activities involving hazardous substance

(1) Mandatory health care must be provided in the case of

1. activities involving the following hazardous substances:
   – acrylonitrile,
   – alkyl mercury compounds,
   – alveolus dust,
   – aromatic nitro and amino compounds,
   – arsenic and arsenic compounds,
   – asbestos,
   – benzene,
   – beryllium,
   – tetraethyl lead and tetramethyl lead,
   – cadmium and cadmium compounds,
   – chrome VI compounds,
   – dimethylformamide,
   – inhalable dust,
   – fluoride and inorganic fluoride compounds,
   – glycerin nitrate and glycol dinitrate (nitro glycerin/nitro glycol),
   – hardwood dust,
   – carbon disulphide,
   – carbon monoxide,
– methanol,
– nickel and nickel compounds,
– polycyclic aromatic hydrocarbons (pyrolysis products made of organic matter),
– white phosphorus (tetraphosphorus),
– platinum compounds,
– mercury and inorganic mercury compounds,
– hydrogen sulphide,
– silicogenic dust,
– styrene,
– tetrachloroethene,
– toluene,
– trichloroethene,
– vinyl chloride,
– xylene (all isomers),

if

a) the Occupational Exposure Limit applicable to the hazardous substance in accordance with the Hazardous Substances Ordinance (Gefahrstoffverordnung — GefStoffV) is not complied with,

b) repeat exposure cannot be ruled out and the hazardous substance is a Category 1A or 1B carcinogenic or mutagenic substance or a Category 1A or 1B carcinogenic or mutagenic mixture within the meaning of the Hazardous Substances Ordinance or the activities involving the hazardous substance are designated as Category 1A or 1B carcinogenic activities or processes within the meaning of the Hazardous Substances Ordinance, or

c) the hazardous substance is absorbed through the skin and a health risk on account of the skin coming into contact with the hazardous substance cannot be ruled out;

2. other activities involving hazardous substances, namely

a) working in wet conditions for four hours or more every day on a regular basis,

b) welding and separating metals in conditions exceeding air concentrations of 3 milligrams per cubic metre of welding smoke,

c) activities involving exposure to cereal and fodder dusts exceeding air concentrations of 4 milligrams per cubic metre of inhalable dust,

d) activities involving exposure to isocyanates for which it cannot be ruled out that regular contact with the skin or an air concentration exceeding 0.05 milligrams per cubic metre is exceeded,

e) activities involving exposure to health risks on account of laboratory animal dust in animal rooms and facilities,

f) activities performed using natural rubber gloves with more than 30 micrograms of protein per gram of glove material,

g) activities posing a risk to the dermal layer of skin or inhalative exposure with a health risk caused by components of unhardened epoxide resins, in particular by spraying of epoxide resins,
h) activities involving exposure to lead and inorganic lead compounds exceeding an air concentration of 0.075 milligrams per cubic metre,

i) activities involving exposure to high temperature wools, insofar as Category 1 or 2 fibre dusts classified as carcinogenic within the meaning of the Hazardous Substances Ordinance may be released,

j) activities involving exposure to flour dust exceeding a flour dust concentration of 4 milligrams per cubic metre of air.

(2) Optional health care must be provided in the case of

1. activities involving those hazardous substances referred to in paragraph (1) no. 1 if exposure cannot be ruled out and the employer is not obliged to occasion mandatory health care;

2. other activities involving hazardous substances, namely

   a) pest control in accordance with the Hazardous Substances Ordinance,
   
   b) gassing in accordance with the Hazardous Substances Ordinance,
   
   c) activities involving the following substances or their mixtures: \( n \)-hexane, \( n \)-heptane, 2-butanon, 2-hexanon, methanol, ethanol, 2-methoxyethanol, benzene, toluene, xylene, styrene, dichloromethane, 1,2,2-trichlorethane, trichlorethene, tetrachlorethene,
   
   d) activities involving a hazardous substance insofar as the hazardous substance is not referred to in paragraph (1) no. 1, repeated exposure cannot be ruled out and

      aa) the hazardous substance is a carcinogenic or mutagenic substance or a Category 1A or 1B mixture within the meaning of the Hazardous Substances Ordinance,
      
      bb) the activities or processes involving the hazardous substance are described as carcinogenic activities of Category 1A or 1B in accordance with the Hazardous Substances Ordinance,
      
   e) working in wet conditions for more than two hours per day on a regular basis,
   
   f) welding and separating metals in conditions not exceeding air concentrations of 3 milligrams per cubic metre of welding smoke,
   
   g) activities involving exposure to cereal and fodder dusts exceeding air concentrations of 1 milligram per cubic metre of inhalable dust,
   
   h) activities involving exposure to isocyanates during which contact with the skin cannot be ruled out or an air concentration of 0.05 milligrams per cubic metre is complied with,
   
   i) activities involving exposure to lead and inorganic lead compounds and an air concentration of 0.075 milligrams per cubic metre,
   
   j) activities involving exposure to flour dust and a flour dust concentration of 4 milligrams per cubic metre of air,
   
   k) activities involving exposure to other substances with a sensitising effect on the airways or skin for which no preventive occupational health care is provided under paragraph (1) no. 1 or letters (a) to (j).

3. (repealed)

(3) Occasions for follow-up health care:

1. Activities involving exposure to a hazardous substance, insofar as
a) the hazardous substance is a carcinogenic or mutagenic substance or a carcinogenic or mutagenic Category 1A or 1B mixture within the meaning of the Hazardous Substances Ordinance, or

b) the activities involving the hazardous substance are described as Category 1A or 1B carcinogenic activities or processes within the meaning of the Hazardous Substances Ordinance;

2. Activities exposing workers to lead or inorganic lead compounds;

3. Activities exposing workers to high temperature wools in accordance with paragraph (1) no. 2 letter (i).

(4) Deviations:
Preventive health care in accordance with paragraphs (1) to (3) does not need to be occasioned or offered if and insofar as the rules determined on the basis of section 9 (3) sentence 1 no. 1 and published in accordance with section 9 (4) determine otherwise.

Part 2
Activities involving biological agents, including genetic engineering activities involving human pathogen organisms

(1) Mandatory health care must be provided in the case of

1. tasks specifically involving contact with a biological agent of Risk Group 4, or with

   – Bacillus anthracis,
   – Bartonella bacilliformis,
   – Bartonella henselae,
   – Bartonella quintana,
   – Bordetella pertussis,
   – Borrelia burgdorferi,
   – Borrelia burgdorferi sensu lato,
   – Brucella melitensis,
   – Burkholderia pseudomallei (Pseudomonas pseudomallei),
   – Chamydophilia pneumoniae,
   – Chamydophilia psittaci (avian strains),
   – Coxiella burnetii,
   – Francisella tularensis,
   – tick-borne encephalitis virus (TBEV),
   – yellow fever virus,
   – Helicobacter pylori,
   – hepatitis A virus (HAV),
   – hepatitis B virus (HBV),
   – hepatitis C virus (HCV),
   – influenza virus A or B,
   – Japan encephalitis virus,
   – Leptospira spp.,
– measles virus,
– mumps virus,
– Mycobacterium bovis,
– Mycobacterium tuberculosis,
– Neisseria meningitidis,
– Poliomyelitis virus,
– rubella virus,
– Salmonella typhi,
– Schistosoma mansoni,
– Streptococcus pneumoniae,
– rabies virus,
– Treponema pallidum (syphilis),
– Topheryma whippiei,
– Trypanosoma cruzi,
– Yersinia pestis,
– varicella zoster virus (VZV), or
– Vibrio cholerae;

2. activities involving incidental contact with biological agents of Risk Group 4 where there is a possibility of coming into contact with infected or suspected samples or sick or suspected persons or animals, including their transportation, as well as

3. the following activities involving incidental contact:

   a) In research facilities or laboratories: regular activities which involve the possibility of coming into contact with infected or suspected samples, with infected or suspected animals, or objects or materials containing or contaminated with pathogens in respect of a biological agent referred to in no. 1;

   b) In tuberculosis departments or other pulmonologic facilities: activities involving regular contact with sick or suspect persons in respect of Mycobacterium bovis or Mycobacterium tuberculosis;

   c) In facilities for the medical investigation, treatment or care of persons:

      aa) activities involving regular, direct contact with sick or suspect persons in respect of
      – Bordetella pertussis,
      – hepatitis A virus (HAV),
      – measles virus,
      – mumps virus, or
      – rubella virus,

      bb) activities which can regularly involve extensive contact with

      body fluids, excretions or tissue, in particular activities with an increased risk of injury or of spraying or aerosol formation, in respect of the
– hepatitis B virus (HBV), or
– hepatitis C virus (HCV);

the same applies to areas which serve to supply or maintain these facilities;
d) In facilities conducting medical examinations, treating and caring for children, excluding facilities exclusively looking after children: activities involving regular, direct contact with sick or suspect children in respect of the varicella zoster virus (VZV); letter (c) remain unaffected;
e) In facilities exclusively looking after people: activities which can regularly involve extensive contact with body fluids, excretions or tissue, in particular activities with an increased risk of injury or of spraying or aerosol formation in respect of the
– hepatitis A virus (HAV),
– hepatitis B virus (HBV), or
– hepatitis C virus (HCV);
f) In facilities looking after pre-school children: activities with regular, direct contact with children in respect of
– Bordetella pertussis,
– measles virus,
– mumps virus,
– rubella virus, or
– varicella zoster virus (VZV); letter (e) remain unaffected;
g) In the emergency and rescue services: activities which can regularly involve extensive contact with body fluids, excretions or tissue, in particular activities with an increased risk of injury or of spraying or aerosol formation, in respect of the hepatitis B virus (HBV) or hepatitis C virus (HCV);
h) In pathology: activities which can regularly involve extensive contact with body fluids, excretions or tissue, in particular activities with an increased risk of injury or of spraying or aerosol formation, in respect of the hepatitis B virus (HBV) or hepatitis C virus (HCV);
i) In sewage treatment plants or in sewerage systems: activities involving regular contact with faeces-containing sewage or faeces-contaminated objects in respect of the hepatitis A virus (HAV);
j) In facilities rearing and keeping birds or poultry slaughterhouses: regular activities involving the possibility of contact with infected or suspected samples, with infected or suspected animals, or objects or materials containing or contaminated with pathogens, if there is a transmission path, in respect of Chlamydophila psittaci (avian strains);
k) In a district at risk of rabies: activities involving regular contact with wildlife in respect of the rabies virus;
l) In or in the vicinity of bat shelters: activities involving close contact with bats in respect of the European Bat lyssavirus (EBLV 1 and 2);
m) Outdoors, in forests, parks, gardens and zoos: regular activities in low vegetation or direct contact with wildlife in respect of
aa) Borrellia burgdorferi, or
bb) in areas in which the tick-borne encephalitis virus (TBEV) is endemic.

(2) Optional health care

1. Where the employer is not obliged to occasion mandatory health care in accordance with subsection (1), he must offer workers optional health care if they perform
   a) activities specifically involving contact with biological agents of Risk Group 3 under the Biological Agents Ordinance (Biostoffverordnung — BioStoffV) and activities involving incidental contact assigned to Protection Level 3 under the Biological Agents Ordinance or which involve a comparable risk,
   b) activities specifically involving contact with biological agents of Risk Group 2 under the Biological Agents Ordinance and activities involving incidental contact of Protection Level 2 under the Biological Agents Ordinance or which involve a comparable risk, unless on account of the risk assessment and on account of the protective measures taken it can be assumed that there is no risk of infection;
   c) activities involving exposure to sensitising or toxic biological agents for whom no preventive health care is provided for under paragraph (1) letter (a) or (b);

2. Section 5 (2) applies accordingly if as a result of the exposure to biological agents
   a) a serious infectious illness is to be expected and post-exposure prophylactic measures are possible, or
   b) an infection has occurred;

3. When finishing an activity for which mandatory health care had to be occasioned in accordance with paragraph (1), the employer must offer optional health care.

(3) Genetic engineering work involving human pathogen organisms:
Paragraphs (1) and (2) regarding mandatory health care and optional health care applies accordingly to genetic engineering activities involving human pathogen organisms.

Part 3
Activities involving physical agents

(1) Mandatory health care must be provided in the case of

1. activities involving extreme heat stress which can present a particular risk;
2. activities involving extreme cold stress (–25°Celsius and below);
3. activities involving exposure to noise if the upper action values of Lex,8h = 85 dB(A), or LpC,peak = 137 dB(C) are reached or exceeded.
   Where the action values referred to in sentence 1 are applied, no account is taken of the dampening effect of a worker’s personal hearing protectors;
4. activities involving exposure to vibrations if the exposure limit values of
   a) A(8) = 5m/s2 for activities with hand-arm vibrations, or
   b) A(8) = 1.15 m/s2 in the X or Y direction or A(8) = 0.8 m/s2 in the Z direction for activities with whole-body vibrations
   are reached or exceeded;
5. activities under water in the performance of which the worker is supplied with respiratory gas by means of diving equipment (diving work);
6. activities involving exposure to incoherent artificial optical radiation if the exposure limit values at the workplace in accordance with section 6 of the Ordinance on Occupational Safety and Health Protection of Workers Exposed to Artificial Optical Radiation (Arbeitsschutzverordnung zu künstlicher optischer Strahlung — OStrV) of 19 July 2010 (Federal Law Gazette I, p. 960), as amended, are exceeded.
(2) Optional health care must be provided in the case of

1. activities involving exposure to noise if the lower action values of $\text{Lex,8h} = 80 \text{ dB(A)}$, or rather $\text{LpC,peak} = 135 \text{ dB(C)}$ are exceeded.

Where the action values referred to in sentence 1 are applied, no account is taken of the dampening effect of a worker’s personal hearing protectors;

2. activities involving exposure to vibrations if the action values of
   
   a) $A(8) = 2.5 \text{ m/s}^2$ for activities with hand-arm vibrations, or
   
   b) $A(8) = 0.5 \text{ m/s}^2$ for activities with whole-body vibrations

   are exceeded;

3. activities involving exposure to incoherent artificial optical radiation if the exposure limits at the workplace in accordance with section 6 of the Ordinance on Occupational Safety and Health Protection of Workers Exposed to Artificial Optical Radiation of 19 July 2010 (Federal Law Gazette I, p. 960), as amended, may possibly be exceeded;

4. activities involving significantly increased physical stress which is linked to health risks to the musculoskeletal system on account of.
   
   a) the manual handling of loads when lifting, holding, carrying, pulling or pushing loads,
   
   b) repetitive manual activities, or
   
   c) work involving being forced to adopt a kneeling position, extended trunk bending or twisting or in work involving being forced to adopt comparable postures;

5. outdoor activities involving intense burdens due to natural UV radiation of regularly one hour or more per day. The employer has to take occupational safety and health measures helping to keep the burdens due to natural...