

Trade Control  
of Lower Saxony

Guideline  
Maternity Protection

Maternity Protection  
Outpatient and  
Inpatient  
Healthcare

Lower Saxony

## General

In order to protect expecting and nursing mothers from dangers, excessive pressures and harm to their health in the workplace, the legislator has enacted appropriate regulations.

### Employer's Liability

The Act for the Protection of the Employed Mother (Mutterschutzgesetz -MuSchG- /Maternity Protection Law) generally obligates the employer, at his/her own responsibility to undertake the necessary precautions and measures which are necessary in order to avoid any danger to mother or child related to the workplace, course of work and working conditions.

### Risk Investigation

Pursuant to the Ordinance for the Protection of Mothers in the Workplace (Mutterschutzarbeitsplatzverordnung -MuSchArbPVO-), the employer also has to evaluate the type, extent and duration of the risk in good time with regard to every task in which the expecting or nursing mother could be endangered by hazardous chemical materials, hazardous biological substances, adverse physical factors, adverse processes or working conditions.

### Determining Protective Measures

It is the aim of the evaluation, to assess any danger to health and safety as well as any effect on the pregnancy or nursing period of female employees affected and to determine any protective measures that should be adopted. The employer shall inform the expecting or nursing mother, the other female employees employed by him and, if necessary, the works council, staff council or employees' representation about the outcome of such evaluations. If the evaluation reveals that the health and safety of the female employee is at risk, the employer shall adopt the relevant measures to restructure the working conditions.

### Specific hazards

The following information is intended to support employers and female employees regarding the appropriate evaluation of specific hazards for expecting or nursing mothers employed in in-patient (e.g. hospitals and similar institutions) and outpatient healthcare (e.g. medical practices, dialysis stations, day hospitals, and similar institutions), to adopt protective measures and to consider employment limitations and bans necessary to protect mother and child.

## Specific Hazards

### Limitations

Basically, expecting or nursing mothers shall not be engaged in heavy physical work or work in which they are exposed to the adverse affects of substances which are hazardous to health or to the adverse effects of dust, gases or vapours, heat, cold or dampness, vibration or noise. The following shall be observed in detail:

### Hazardous substances/pathogens

► It is prohibited for expecting or nursing mothers to handle hazardous substances which are very toxic, toxic, dangerous to the health or in any other way chronically harmful for humans if the limit value is exceeded. Amongst others this means, that expecting or nursing mothers may only handle such hazardous substances for which it has been ascertained by measurements that the limit value is not exceeded and where skin contact is impossible.

#### Observe limit values

Pursuant to TRGS 101, the limit value is exceeded if compliance with the air limit value is not ascertained.

► It is prohibited for expecting mothers to handle hazardous substances which are carcinogenic, teratogenic and mutagenic. This does not apply if the expecting mother is not exposed to the hazardous substance when handling it in accordance with the intended use.

#### Observe limit values

Pursuant to TRGS 101, employees are exposed to hazardous substances, if exposure exceeds the ubiquitous air pollution ("background exposure").

Nursing mothers may not deal with the above mentioned hazardous substances if the limit value is exceeded. (For limit value see TRGS<sup>1</sup> 101).

### Example: Detergents and disinfectants

Pursuant to the ordinance on hazardous substances, if the employer authorises employees to use a substance, preparation or product, the employer must determine whether the same may constitute a hazardous substance with regard to the intended use of this substance. Therefore, safety data sheets for any detergents used must be available which, if necessary, have to be requested from the detergent manufacturer.

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<sup>1</sup> TRGS: Technische Regeln für Gefahrstoffe = Technical Regulations for Hazardous Substances

## Suitable safety gloves

Expecting or nursing mothers may only handle disinfectants containing hazardous substances if it is ensured that the workplace limit value and the biological limit value are not exceeded. Suitable safety gloves (CE certified) must be worn when handling disinfectants that contain hazardous substances.

### Example: Anaesthetic gases

Employment of an expecting or nursing mother in areas where the appearance of anaesthetic gases from the halogenated hydrocarbons family is to be expected is only permitted if it is ensured that the workplace limit value is safely and permanently not exceeded. If necessary, this is to be ascertained by sufficiently frequent measurements.

### Observe limit values

In the case of teratogenic anaesthetic gases (e.g. halothan) employment is not permitted. The workplace limit value for laughing gas (nitrous oxide - N<sub>2</sub>O-) was determined at 180 mg/m<sup>3</sup> pursuant to the ordinance on hazardous substances (see TRGS 900). A classification regarding teratogenic characteristics is still outstanding. For a number of anaesthetic gases (isoflurane, desflurane, sevoflurane and xenon) neither limit values nor a classification regarding carcinogenic, mutagenic or teratogenic characteristics exist as yet. Employment of expecting mothers with exposure to such anaesthetic gases constitutes a risk, which is presently not sufficiently assessable.

### Example: Carcinogenic, mutagenic, teratogenic (CMR-) active pharmaceutical ingredients

Prohibition of employment regarding the preparation and administration, disposal of excrements (after oral intake, high dosage treatment), handling of residuals of active pharmaceutical ingredients or contaminated materials as well as cleaning contaminated areas and devices.

## Pathogens

### Pathogens

► It is prohibited for expecting and nursing mothers to handle substances, preparations or products which - according to experience and based on their attributes - may transmit pathogens, if they are exposed to the pathogens (biological working materials, see Biostoffverordnung - BioStoffV-/The Control of Substances Hazardous to Health Regulation).

Pathogens may also be contained in:

- blood, blood products or blood components, plasma, serum;
- body fluids and expulsions, e.g. saliva, lachrymal fluid;
- secretions/exudates, e.g. sperm, vaginal secretions, serous exudates.

### Protective equipment

In the case of handling such substances or instruments, devices or surfaces, which may have been moistened with them, the expecting mother may be employed further if sufficient protective measures are undertaken. Work with closed systems, with suitable protective gloves, protective glasses, breathing protection and aprons are considered sufficient protective measures.

### Protected work

If cutting or perforating instruments/appliances such as scalpels or injection needles which are contaminated with blood, serum, secretions or excreted are handled, protective gloves are not a sufficient protective measure as there is still a risk of injury and the possibility of further infection. Due to the possibility of infection it is also prohibited to tidy up/clean or disinfect instruments. Therefore, it is not permitted to employ expecting or nursing mothers to - for example:

- take blood samples, administer injections;
- work in the laboratory where there is a risk of contact with blood;
- work in the part of the sterilisation unit where contaminated instruments are handled;
- or in surgery.

Although the use of secure working devices for the prevention of stab or cut wounds reduces the risk of needle stitch injuries, it does not prevent them. This means that the aforementioned explanations apply to the requirement of maternity protection until further research is available.

## Occupational diseases

Furthermore, expecting mothers may especially not be employed in work in which they are – as a result of their pregnancy – exposed to the risk of falling ill with an occupational disease or in which the risk of developing an occupational disease represents an increased risk to the expecting mother or endangers the unborn child. This general prohibition of employment also applies to nursing mothers.

## Ionising rays

### Observe limit values

Pursuant to the ordinance on protection against harmful X-rays (Röntgenverordnung -RöV-/Radiation Control Regulation) and by ionising rays (Strahlenschutzverordnung -StrlSchV-/Radiation Protection Ordinance), pregnant women are only permitted to enter control areas if they have to take action for performance or maintenance of the operational procedures intended in such control areas, if the competent person who is responsible for radiation protection or the radiation protection commissioner expressly permits it and ensures that the special dosage limit value (1 mSv) is complied with by suitable monitoring measures and this is documented. Entry to such control areas as an assistant shall only be permitted if required for compelling reasons.

### Observe limit values

The dosage limit value from external and internal exposure to radiation for an unborn child, who is exposed to radiation due to its mother's employment is 1 millisievert -1 mSv- from the time of notification of pregnancy until the end of the pregnancy. The occupational exposure to radiation is to be assessed every working week and the expecting mother shall be informed of it.

In any case, special protective measures are necessary when dealing with open radioactive substances. In addition to that it must be ensured that the relevant female employees do not have contact with patients who have been administered radioactive substances nor may they have contact with excreted substances of such patients. In case a patient has been administered a radionuclide, a temporary control area may be created (up to a circumference of 3 metres in accordance with the applied dosage).

### Obligation to instruction

In the scope of the employer's obligation to instruction, the employer shall inform women that the employer has to be informed of a pregnancy as early as possible with regard to the risks of radiation exposure of the unborn child. In case of contamination of the mother it is furthermore to be pointed out that the breast-feeding baby may absorb radio-active substances during breast-feeding. As soon as a woman has informed her employer that she is either pregnant or breast-feeding, her working conditions shall be changed in such a way as to exclude occupational exposure to radiation.

With regard to the potentially high amount of protection required it is recommended that the present practise of transferring expecting mothers into other departments (e.g. administrative department) is maintained, when dealing with open radio-active substances (e.g. in the laboratory) or with radiation work.

### Non-ionising rays

In particular areas of strong magnetic or electromagnetic (stray) fields, adverse effects on the human body, especially for the expecting mother and the unborn child, cannot be excluded. It is therefore recommended that pregnant women should not be employed in the following areas:

- in the magnet room of magnetic resonance imaging equipment,
- in hyperthermia workplaces,
- with diathermy appliances.

### Work of an emergency nature

Even in cases of emergency, expecting mothers may not give assistance or perform any work for which an employment prohibition is in place.

### Lifting and carrying weights

#### Weight limit

Expecting and nursing mothers may not be employed in heavy physical work and particularly not in work in which weights of more than 5 kg are regularly lifted by hand, moved or carried without mechanical support or casually if the weight is higher than 10 kg. If larger weights are to be lifted by hand, moved or carried with mechanical support, it is permitted to lift them by hand, to move or carry them with mechanical support, however, the physical strain of the expecting or nursing mother may not exceed the described strain. Work demanding severe physical power, involving exhausting postures or movements or putting exceptional strain on particular body parts or organs is considered heavy physical work.

Physiotherapy with immobile patients or guiding such patients from bed to toilet is not permitted. If holding or supporting patients is associated with considerable energy expenditure, support from a second person must be available at all times.

## Permanent standing

### Time limit

After the end of the fifth month of pregnancy, expecting mothers may not be employed in work where they have to permanently stand, if this work exceeds four hours per day.

## Frequent stretching and bending down

Expecting or nursing mothers may not be employed in work in which they often have to stretch or bend down considerably or in which they permanently have to kneel or bend down.

## Overtime/night work/work on Sundays and public holidays

### Double week

Expecting or nursing mothers may not be employed in overtime for more than 8.5 hours daily or 90 hours in a double week (women under 18 years more than 8 hours daily or 80 hours in a double week) and they may not work during the night between 8 p.m. and 6 a.m., or on Sundays and public holidays.

Exceptions from the prohibition of working on Sundays and on public holidays apply to hospitals and similar institutions if the expecting or nursing mother is granted an uninterrupted rest period of 24 hours each week following a night's rest (night rest see § 5 Arbeitszeitgesetz -ArbZG-/Law on Working Hours).

## Measures to be undertaken

### Interruption of work

### Providing seating accommodation

Employers who employ expecting or nursing mothers in work in which they permanently have to stand or walk must provide a seat with a backrest near their working area, so that the mothers can take a short rest.

## Rest

### Providing an opportunity to rest

Expecting and nursing mothers shall be given the opportunity to take a rest on a couch in a suitable room during the breaks as well as during working hours (independent of statutory regulated rest periods) if necessary for health reasons.



## Change of work / release

### Change of work

If a modification of the working conditions and/or of the working hours is not possible taking into consideration the state-of-art technology, occupational medicine and hygiene as well as other assured ergonomic findings or if it is unreasonable due to verifiable disproportional expenditure, the employer shall take the necessary measures to change the workplace. If a change of workplace is not possible or if it is unreasonable, expecting or nursing mothers may not be employed as long as required to protect their health and safety.

Even if the expecting or nursing mother agrees to proceed with the previously undertaken work, it does not release the employer from his obligation and responsibility to observe employment prohibitions and to implement the regulations of maternity protection law. Particularly in maternity protection, the imperative of risk minimisation is applicable; expecting and nursing mothers require protection, which, in some cases, exceeds the usual scope of occupational health and safety. Risks shall be taken into consideration, which may be caused by carelessness, conditions in the workplace and particular pressure such as time pressure, emergency, shortage of manpower etc.

## Hospital areas with particular strain

### Risk of infection

In areas where there are especially intensive and/or multiple pressures, it is difficult to ensure effective protection. This applies to areas in which

- the proportion of contagious patients is particularly high and/or there is particularly intensive contact with contagious material (e.g. isolation wards, dialyses, laboratories);
- multiple pressures prevail (e.g. in surgery departments and on intensive care wards)
- the work is determined by activities which entail emergency assistance or where particular time pressure prevails (first aid institutions, blood bank);
- short interruptions of work are impossible due to the job sequence.

Removal of expecting mothers from isolation wards is common practice. The increased risk of infection for employees on such wards is undisputed. A comparable risk is to be expected where – although the proportion of contagious patients is lower – the number of activities with direct contact to contagious material (e.g. with blood or blood products) is incomparably higher. For example, this applies to blood banks where consequent protection against the risks outlined is not possible due to job assignments and job organisation.

Examples of areas with multiple pressures are anaesthesia (intensive contact with blood, anaesthetic gases, ionising rays, mechanical strains, work under time pressure, suddenly arising stress factors) or delivery room (work under increased physical strain and time pressure combined with risk of infection). The following directions are intended as guidelines or examples for the employment of expecting mothers in hospitals and comparable institutions. After individual assessment and in compliance with the employment limitations or prohibitions of maternity protection law and the aforementioned recommendations in this manual it is possible to employ expecting or nursing mothers.

List

- **Surgical disciplines, e.g. surgery, gynaecology etc.**

The employment of female physicians is only permitted outside the operating room on the wards under relevant protection conditions. Employment of other operating theatre staff is possible as stand-ins in compliance with the general protection regulations, where a risk from anaesthetic gases must also be considered in ambient exposures. Employment of personnel on surgery wards is permitted in accordance with the general protection regulations.

- **Anaesthesia**

Employment of female medical personnel is possible in pre-medication, scientific work, regional anaesthesia under particular conditions (agreement of rotation possibilities anaesthesia/internal medicine is recommended). Employment of nursing staff: Transfer to internal medicine or to general wards.

- **Internal Medicine**

Medical and nursing staff may be employed in compliance with the general protection regulations, except:  
on isolation wards, intensive care wards, oncology wards, in a blood bank, in accident and emergency departments, in first aid units.

- **Dialysis**

Employment of expecting or nursing mothers is only permitted on the white side with good hygienic and spatial conditions without contact to bodily excretions (including vomit) as well as blood/serum (no cleaning of equipment, no application or removal of shunts etc.). Individual assessment is necessary.

- **Paediatrics**

Possible employment in the non-surgical area, in compliance with the general protection regulations.

- **Dermatology**

Possible employment in the non-surgical area, in compliance with general protection regulations.

- **Laboratory**

Employment in compliance with the general protection regulations for assessment of fixed blood smears. Urine examination with pipette and gloves, input of serum-filled plastic tubes into auto-analyser with gloves.

- **Pathology**

Employment for handling fixed preparations. Other than that, the general protection regulations are to be observed.

- **Sterilisation**

Employment only on the clean side without exposure to carcinogenic, mutagenic, teratogenic hazardous substances (e.g. ethylene oxide) or other hazardous substances if the workplace limit value is exceeded.

- **Animal testing laboratory/animal shed**

Employment only when handling proven non-contagious animals (certificate: for example SPF<sup>2</sup> animals without hantaviruses or alternatively from known origin/examination) avoiding accident risk.

Please note:

### Compensatory payments

If expecting mothers have to suspend their work partly or completely due to an employment prohibition, the employer has to grant them at least the average earnings of the past 13 weeks or the past 3 months before the start of the month in which the pregnancy occurred (see section 11, para 1 MuSchG/Law on Protection of Expectant and Nursing Mothers).

Pursuant to the law for compensation of employer's expenditure for wage continuation (Aufwendungsausgleichgesetz – AAG/Expense Compensation Act) of 22.12.2005, all employers participate in the compensation procedure for employer's expenditures for maternity benefits from 01.01.2006 (U2-Verfahren/U2 procedure). The following will be reimbursed:

1. Employer's allowance to maternity benefit for the term of the protection periods before and after childbirth.
2. Remuneration for the duration of employment prohibitions pursuant to the maternity protection act.
3. Employer's contribution to the continued remuneration paid to female employees in case of employment prohibitions.

Compensatory payments shall be applied for at the competent health insurance (e.g. AOK, IKK, company health insurance funds, substitute health insurance societies).

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<sup>2</sup> specified pathogen-free animals