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Annex to Report:
Work-related musculoskeletal disorders –
Facts and figures

National Report: Germany

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for Safety and Health
at Work

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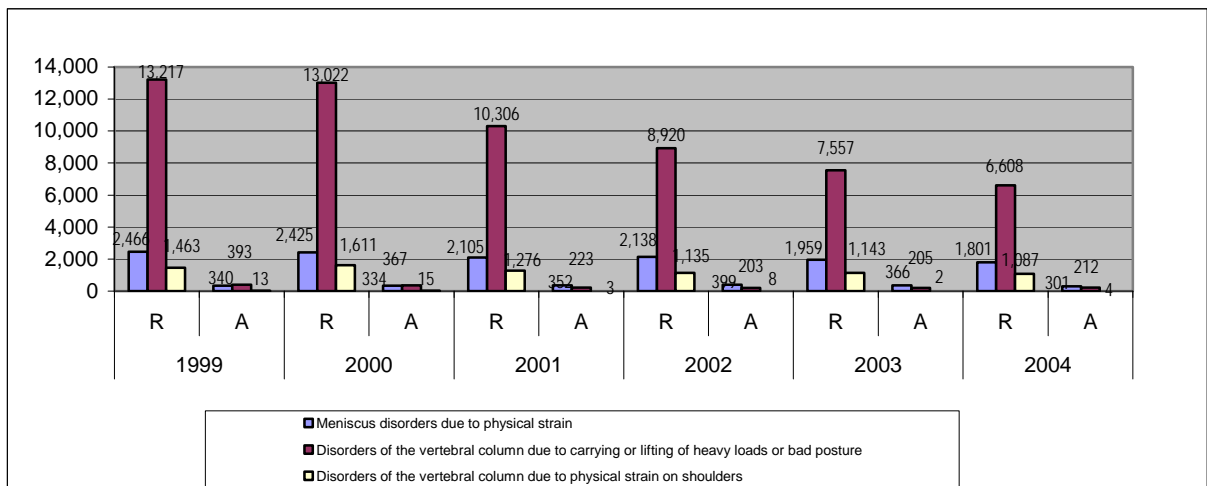
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Summary

The number of reported musculoskeletal disorders (MSDs) due to physical strain and carrying/ lifting of loads or bad posture decreased during 1999-2004. However, and despite the significant difference between reported and recognised diseases, the recognition rate has increased slightly in the period under consideration for the meniscus disorders and remained relatively the same for the disorders of the vertebral column.

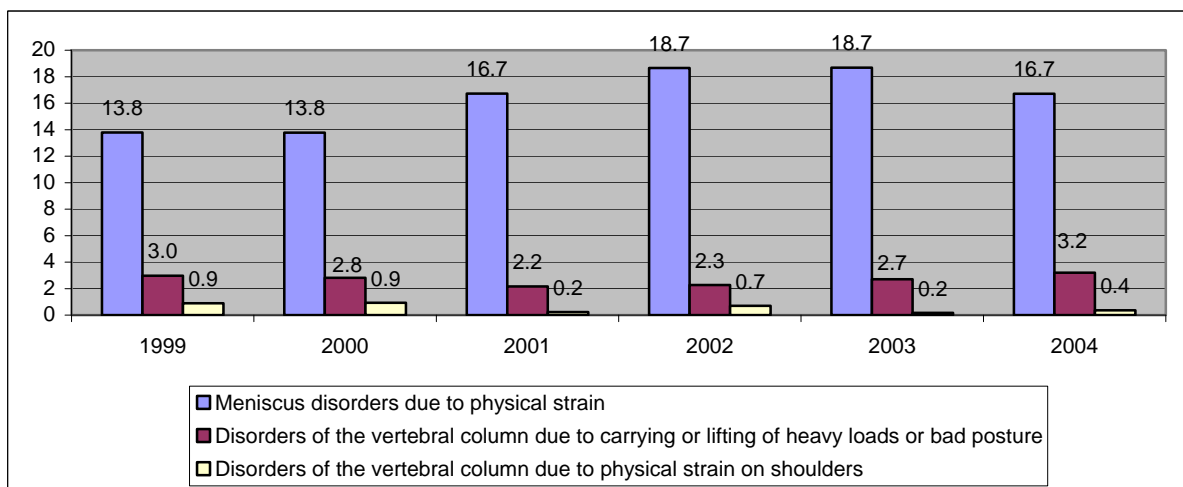
Figure 1: Number of reported (R) and recognised/accepted (A) musculoskeletal diseases 1999-2004



Source: Sicherheit und Gesundheit bei der Arbeit (SUGA), 2002 and 2004

As shown in the graph below, meniscus disorders have a higher number of compensations compared to the disorders of the vertebral column, that is, the percentage share of recognised meniscus disorders is notably higher than that of disorders of the vertebral column. In any case, the recognition rate of MSDs is below the overall rate of occupational diseases, which fluctuates around the 25% mark.

Figure 2: Recognition rates (in %) of MSDs, 1999-2004



Source: Sicherheit und Gesundheit bei der Arbeit (SUGA), 2002 and 2004

According to the SUGA reports, the highest number of working days lost are due to musculoskeletal disorders: 24.3% in 2004. Hence, MSDs caused around a quarter of all days lost in Germany in 2004. This had an economic impact which was estimated to represent 0.4% of the GNP in 2004, the highest percentage share of productivity loss among all occupational diseases.

Table 1: Productivity loss related to diagnosis 2004

Diagnosis	Days of sick leave (Number of lost working days)		Productivity loss	
	Million	% of total	Billion €	% of GNP
MSDs	107.2	24.3	9.7	0.4
Total	440.1	100.0	40.0	1.8

Source: Sicherheit und Gesundheit bei der Arbeit 2004

Male workers appear to be more affected than female workers. By age, MSDs are causing higher absenteeism in the older age group. Workers aged 45 and more are causing more absenteeism (23.5% in 2004) and more working days lost due to MSDs (33.0%) than those under 45 years: 15.2% absenteeism and 21.4% working days lost in 2004. In any case, when analysing the prevalence of MSDs by body part, younger workers under 30 years old report significant rates too.

As to be expected, workers in 'agriculture' and 'construction' report the highest rates of MSDs. Neck and shoulder problems are above average in the administration and service sector (30.8%), while leg and foot problems are the highest in the whole sale, retail, hotel, restaurants and transport sector (20.2%). As a result of this, occupations in these sectors are highly affected by MSDs.

Regarding employment status, workers with permanent contracts report slightly more back pain (38.2%) and neck/shoulder pain (29.3%) than workers with a fixed term contract.

Source description

Statistical sources

Title	BIBB/ IAB-Erhebungen Berufliche Qualifikation und Erwerbs situation in Deutschland
Acronym	BIBB/ IAB
Institution	Federal Institute for Vocational Training Affairs (BIBB)/ Institute for Employment Research (IAB) Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (BAuA) also took part in the last survey (1998/1999)
Country	Germany
Periodicity	1979 - 1985/86 - 1991/92 - 1998/99
Type	From the year 2005, it is the BIBB/ BAuA survey
URL	http://de.osha.eu.int/statistics/erhebungen_und_umfragen/ http://www.bibb.de/de/
Demographic group	Households
Objectives	Assess the working population and their actual working conditions.
Description	<p>Sampling strategy: Random route procedure on household basis.</p> <p>Register used for the sample: ADM – Master sample of precincts (Micro census for controlling and weighting. The BIBB/ IAB surveys are large representative surveys of 0,1% of the labour force in Germany concerning qualifications, career history and current occupational situations. These surveys are conducted jointly by the Federal Institute for Vocational Training Affairs (BIBB), and former the Institute for Employment Research, now in co-operation with the Federal Institute for Occupational Safety and Health (BAuA) at intervals of 6-7 years. The aim of the studies it to obtain for the particular time of the survey differentiated representative information about the labour force on the one hand and about jobs on the other. As regards research into occupation and qualification the surveys constitute a social science addition to the micro census survey conducted annually by the Federal Statistical Office, whose legally stipulated questionnaire is restricted to a few structural variable, though they are central ones. The sample size of the BIBB/ IAB; BIBB/ BAuA surveys, which is unusually large for such surveys in empirical social research, permits differentiated analyses of occupational fields, industries and various labour force sub-groups. Each of the individual surveys has a special focus subject. With all flexibility in incorporating new subject areas, in the surveys conducted so far a broad set of comparable variables was included in order to determine structural changes over the time.</p>
Content	Occupational Safety and Health (OSH) management, design of work stations, exposure to physical agents (noise, radiation, vibration, etc.), exposure to chemical agents, exposure to biological agents, safety at the workplace, physical workload, mental strain, work organisation issues, social environment (participation and consultation, equal opportunities, violence at work, etc.), occupational safety and health outcomes. Among others: tools and machinery used.

Title	Ausgewählte Indikatoren und Daten zur Arbeitswelt in Nordrhein-Westfalen und Deutschland - Observatorium der Gesundheitsrisiken -
Institution	Ministerium für Arbeit, Gesundheit und Soziales in Nordrhein Westfalen (MAGS)
Country	Germany
Type	Online Information Pool
URL	http://www.arbeitsschutz.nrw.de/bp/systems/statistik/arbeit_ges_daten.html
Demographic group	Working population
Objectives	All topics regarding OSH
Description	<p>The basis for the work of the federal OSH institutes are current and comprehensive data and information. Continuously, data from internal and external sources are provided. To this belong in particular the 'Bundesagentur für Arbeit' (Federal Agency for Labour), the 'Spitzenverbände der Unfallversicherungsträger' (Statutory Social Security organisations) and some health insurances (e.g. AOK Rheinland und Westfalen Lippe, Bundesverband der Betriebskrankenkassen).</p> <p>The data material contains information as to employees, enterprises, economic and socio-demographic framework conditions as well as to risks and strains of the employees at the workplace. The data basis applies to NRW and Germany.</p>
Content	<p>Figures are available to:</p> <ul style="list-style-type: none"> • Data and indicators for the world of work; • Framework conditions of work; • Exposure of the employees; • Work-related outcomes of health; • Special analyses;

Title	European Survey on Working Conditions
Acronym	ESWC
Institution	European Foundation for the Improvement of Working and Living Conditions (Dublin)
Country	EU
Periodicity	Every 5 years: 1990-1995-2000-2005
Type	Employee Survey
URL	http://www.eurofound.eu.int/working/surveys/index.htm
Demographic group	Employees, self-employed without personnel and self-employed with less than 10 employees.
Objectives	Monitoring of trends in working conditions for employees and the self-employed throughout the European Union.

Title	European Survey on Working Conditions
	This Survey provides an opportunity to monitor working conditions in the EU and to analyze specific themes in depth, such as: sector differences, working conditions and gender, age, or employment contracts, work organization, working hours, etc.
Description	Face-to face interviews in all EU countries, with approx. 1,000 people in each country are selected (random walk), structured questionnaire.
Content	This survey describes a broad range of questions in the field of working conditions.
Question	Q.33. Does your work affect your health, or not? (yes, no); Q.33a. How does it affect your health?; Q33a_d Backache (mentioned, not mentioned); Q33a_g Muscular pains -in shoulders, neck and/or upper/lower limbs (mentioned, not mentioned).

Title	BG Statistics 2004. Current figures and long-term trends relating to the Berufsgenossenschaften for the industrial sector in Germany
Institution	Berufsgenossenschaft (BG)
Country	Germany
Periodicity	Annual since 1975
Type	Statistical report
URL	http://www.hvbg.de/d/pages/statist/brosch/bgspeng.pdf
Objectives	Analyses, trends and figures related to companies, manhours and full workers; accidents and accident pensions; fatal accidents; Occupational diseases (OD); pensions; expenditure; prevention etc.
Description	<p>In Germany, the Gewerbliche Berufsgenossenschaften (BGs) are the institutions for statutory accident insurance and prevention for the industrial sector.</p> <p>The Hauptverband der gewerblichen Berufsgenossenschaften (Central Federation – HVBG) was founded by the BGs to support their common objectives and to serve their mutual interest.</p> <p>Since 1975, all received notifications concerning suspected occupational diseases together with all resulting decisions concerning insurance law have been documented and could be analysed. Cases of occupational disease benefits are documented until payment stop of benefits or until death of the beneficiary.</p>
Content	Personal data; medical determination of disease (diagnosis); medical history (working intervals, existing dangers, practised activity, working field); decisions according to insurance law. In particular diseases caused by continued mechanical strain on the locomotor system (p. 70 ff.).

Title	Report on the Current Level of Safety and Health at Work
Acronym	SUGA (Sicherheit und Gesundheit bei der Arbeit)
Institution	Federal Institute for Occupational Safety and Health (BAuA)
Country	Germany
Periodicity	Annual
Type	Statistical Report
URL	http://de.osha.eu.int/statistics/statistiken/bericht_zum_stand_von_sicherheit_und_gesundheit_bei_der_arbeit/
Description	An annual statistical report from the BAuA about work related accidents (fatal and non fatal), occupational diseases, economical effects etc. in Germany.
Question	Trends over the years

Analytical sources

Title	Time constraints at work and Health risks in Europe
Editor	European Foundation for the Improvement of Working and Living Conditions
Country	EU
Time	2003
URL	http://www.eurofound.eu.int/publications/files/EF0307EN.pdf
Description	The third European survey on working conditions highlights the risks and dangerous working conditions that continue to pose a threat to workers' health, as well as the increase in time and organisational constraints at work. A study based on the statistical use of the data gathered from the survey provides a great deal of information on the organisation of working time. It also explores the links between the organisation of working time and the duration of working time, and the health risks to which workers in the EU are exposed.
TOC	Rising trend in atypical working hours - Working hours decline, but disparities remain - Industrial and market constraints on the pace of work - Intensity of work: impact on employees - Sources of strain - Health problems.

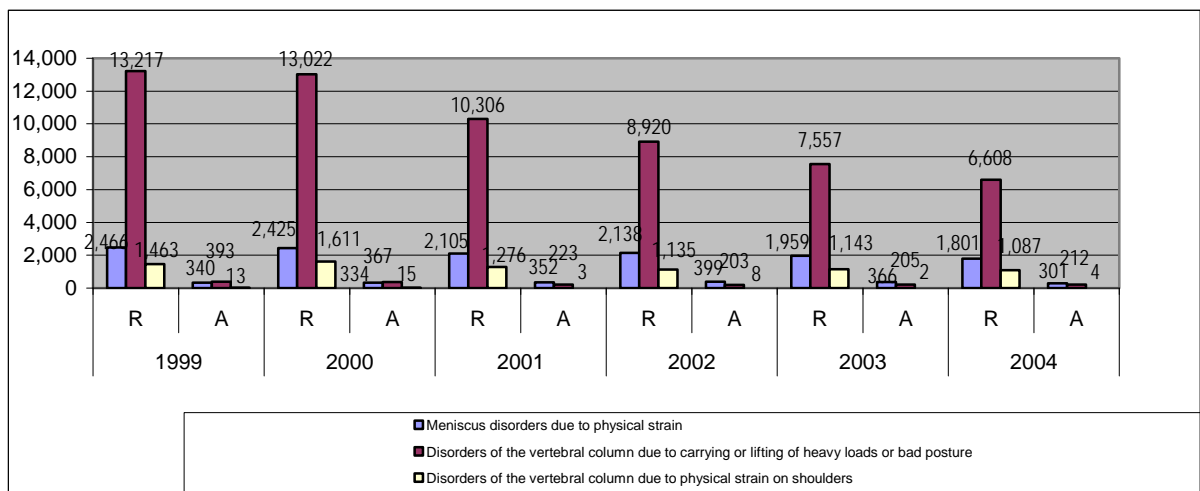
Title	MSDs Online. Org: Adressing Musculo-Skeletal Disorders in the Telecoms Industry
Country	UK
URL	http://www.msdonline.org/

1. General prevalence

MSDs caused around one quarter of working days lost in Germany in 2004 and represented 10.3% of all reported cases of occupational diseases.

The number of reported musculoskeletal disorders (MSDs) due to physical strain and carrying/ lifting of loads or bad posture decreased from 1999 to 2004. However, the recognition rate has increased slightly in the period under consideration for meniscus disorders and it has remained relatively the same for disorders of the vertebral column.

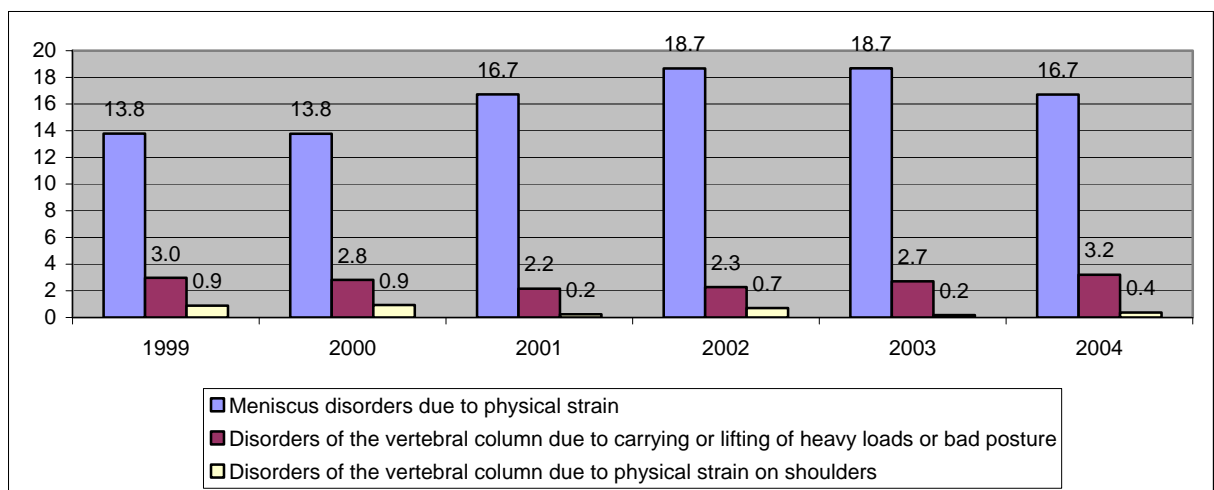
Figure 3: Number of reported (R) and recognised/accepted (A) musculoskeletal diseases 1999-2004



Source: Sicherheit und Gesundheit bei der Arbeit (SUGA), 2002 and 2004

As shown in the graph below, meniscus disorders have a higher number of compensations compared to the disorders of the vertebral column, that is, the percentage share of recognised meniscus disorders is notably higher than that of disorders of the vertebral column. In any case, the recognition rate of MSDs is below the overall rate of occupational diseases, which fluctuates around the 25% mark.

Figure 4: Recognition rate (in %) of MSDs, 1999-2004.



Source: Sicherheit und Gesundheit bei der Arbeit (SUGA), 2002 and 2004

For comparison:

	2004	2003
Total reported occupational diseases	67,768	68,812
Total recognised occupational diseases	17,401	17,413

According to the SUGA reports, the highest number of working days lost are due to musculoskeletal disorders: 27.4% in 2002 and 24.3% in 2004. Hence, MSDs caused around a quarter of all days lost in Germany in 2004. This had an economic impact which was estimated to represent 0.57% of the GNP in 2002 and 0.4% in 2004. MSDs represent the highest percentage share of productivity loss among all occupational diseases.

Table 2: Productivity loss related to diagnosis 2002

Diagnosis	Days of sick leave (Number of lost working days)		Productivity loss	
	Million	% of total	Billion €	% of GNP
Mental disorders	34.37	7.0	3.09	0.15
Cardiovascular disorders	30.45	6.2	2.74	0.13
Respiratory disorders	68.75	14.0	6.18	0.29
Gastrointestinal disorders	32.41	6.6	2.91	0.14
MSDs	134.55	27.4	12.10	0.57
Total	491.08	100.0	11.15	2.09

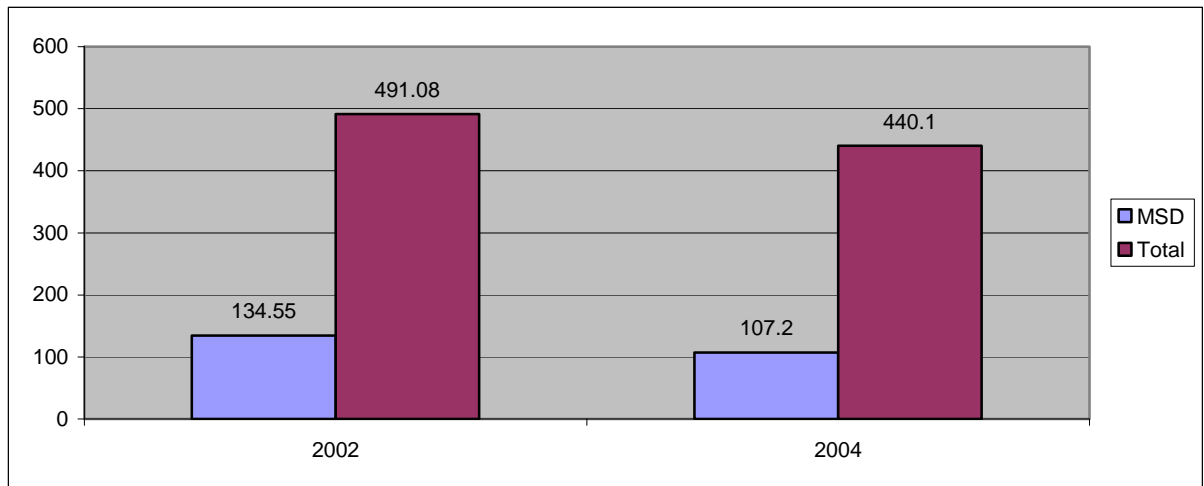
Source: Sicherheit und Gesundheit bei der Arbeit (SUGA), 2002

Table 3: Productivity loss related to diagnosis 2004

Diagnosis	Days of sick leave (Number of lost working days)		Productivity loss	
	Million	% of total	Billion €	% of GNP
MSDs	107.2	24.3	9.7	0.4
Total	440.1	100.0	40.0	1.8

Source: Sicherheit und Gesundheit bei der Arbeit (SUGA), 2004

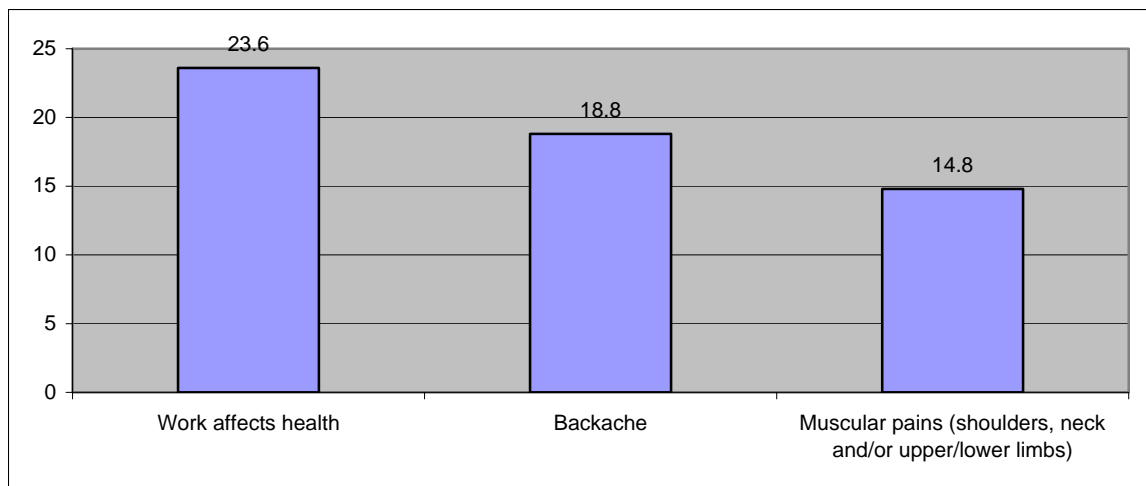
Figure 5: Number of lost working days by sick leave due to MSDs (in millions), 2002 and 2004



Source: Sicherheit und Gesundheit bei der Arbeit (SUGA), 2002 and 2004

Data from the Fourth European Survey on Working Conditions (ESWC) reveal that almost one quarter (23.6%) of German workers feel that work affects their health. As far as MSDs are concerned, almost one fifth of surveyed workers (18.8%) report suffering from backache while 14.8% complain of muscular pain.

Figure 6: Percentage share of workers reporting health problems in Germany: work affects health, backache and muscular pain, 2005

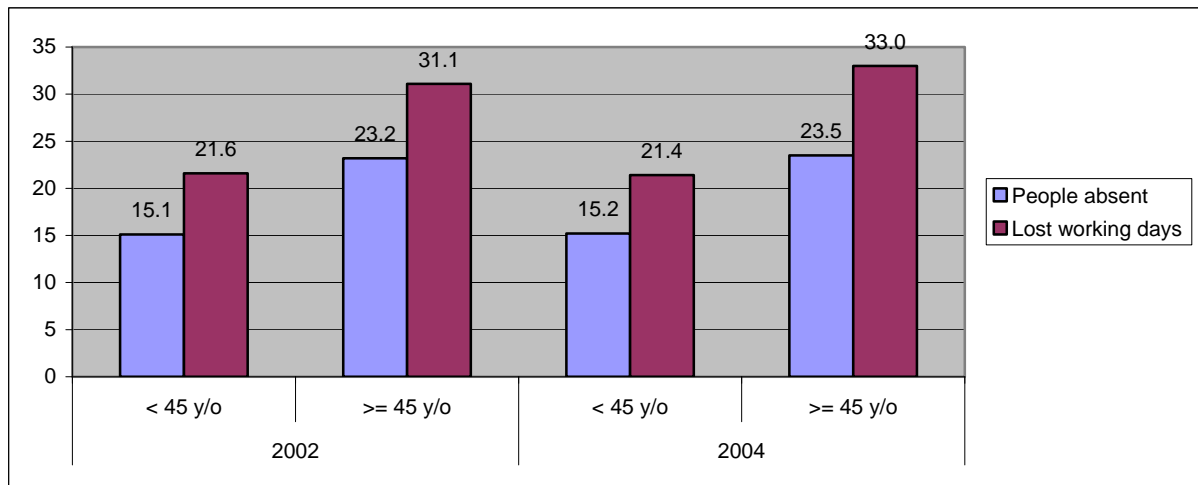


European Survey on Working Conditions, 2005.

2. By age

Musculoskeletal disorders are causing higher absenteeism in the older age group. Workers aged 45 account for more absenteeism (23.2% in 2002, 23.5% in 2004) and more working days lost due to MSDs (31.1% in 2002, 33.0% in 2004) than those under 45 years: 15.1% absenteeism and 21.6% working days lost in 2002 and 15.2% absenteeism and 21.4% working days lost in 2004.

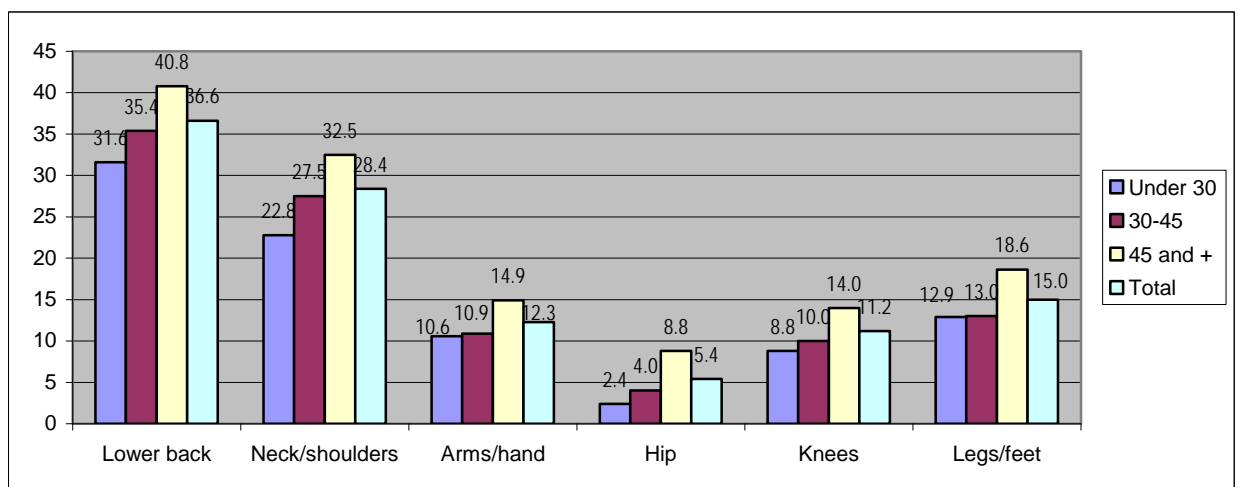
Figure 7: Prevalence of absenteeism (and lost working days) due to work-related MSDs by age, in %, 2001, 2004



Source: SUGA 2002, 2004

According to the analysis of the BIBB/IAB surveys, which provide information on MSDs broken down by body part, the highest rates of each MSDs (lower back, neck/ shoulder, arms/ hands, hip, knees, legs/ feet) are also found among those aged 45 and above. They report higher than average prevalence shares for all body parts, the highest being lower back pain (40.8%) and pains in the neck and shoulder (32.5%). In any case, it is worth stressing that younger workers (under 30 years old) too report significant shares of MSDs.

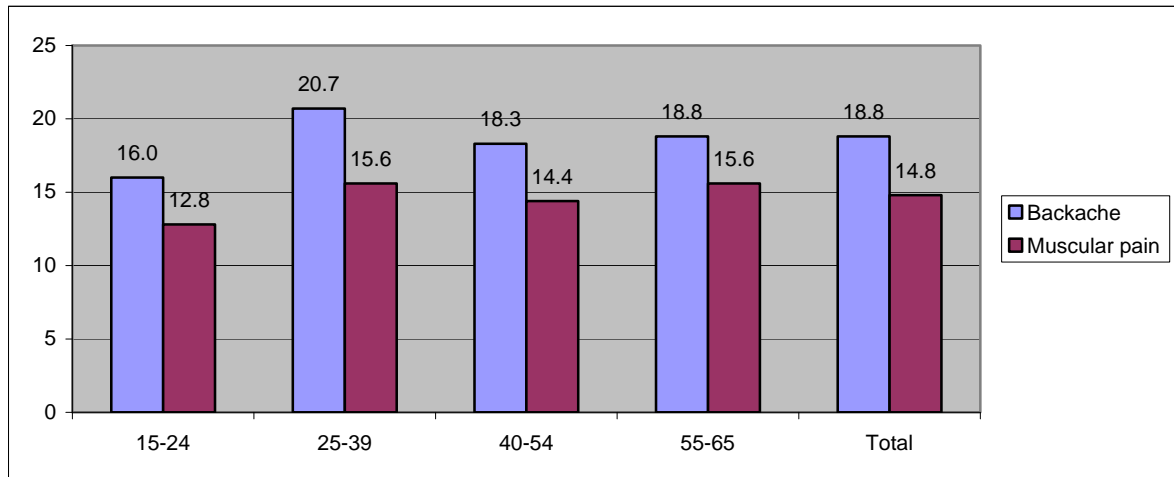
Figure 8: Prevalence of MSDs during/after work, by body part and age group, in %, 1998



Source BIBB/IAB survey

Info from the EWCS reveal a somewhat different picture as the highest prevalence of MSDs is found in the 25-39 age group, among whom 20.7% report suffering from backache and 15.6% from muscular pain. These shares are slightly lower among the 55-65 age group (18.8% and 15.6%, respectively), but in any case, above the overall average too.

Figure 9: Percentage share of workers reporting backache and muscular pain in Germany, by age, 2005

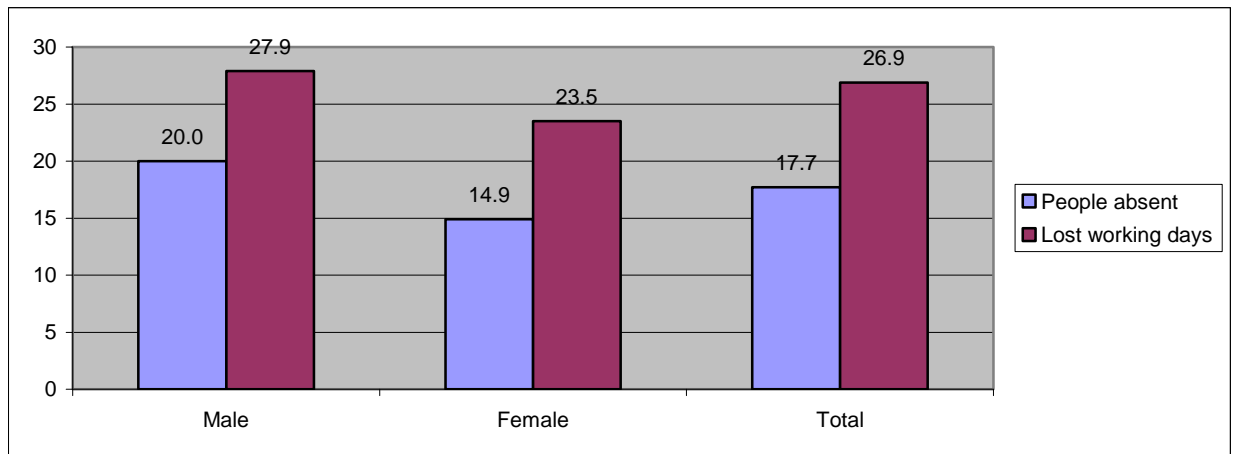


European Survey on Working Conditions, 2005.

3. By gender

According to the SUGA report, more male workers appear to be affected by musculoskeletal disorders than female workers. As shown in the figure below, 20% of absenteeism among men was due to MSDs while the share drops to 14.9% among women. Similarly, MSDs caused 27.9% of lost working days among men as opposed to 23.5% among women.

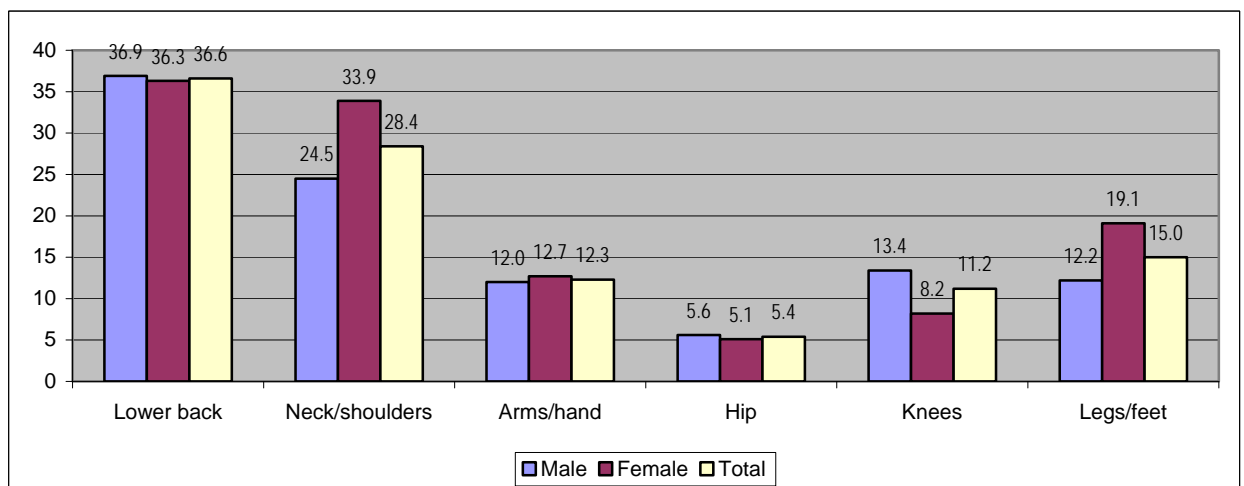
Figure 10: Prevalence of absenteeism (and lost working days) due to work-related MSDs, by gender, in %, 2001



Source: SUGA 2002

But in general, when analysing the prevalence of MSDs by body part, the difference among genders is not as wide. For instance, women report a higher share of pains in neck and shoulder (33.9%), legs and feet (19.1%) and arms and hands (12.7%), while men have more problems with the knees (13.4%). Gender differences for other body parts are narrower.

Figure 11: Prevalence of MSDs during/after work, by body part and gender, in %, 1998.



Source BIBB/IAB survey

Data on pensions reveal that there has been a decrease in the absolute number of pensions granted due to MSDs between 2002 and 2004. As shown in the table and graph below, in 2002 almost 40,000 pensions were granted in Germany as a result of MSDs, while in 2004 the figure had dropped to

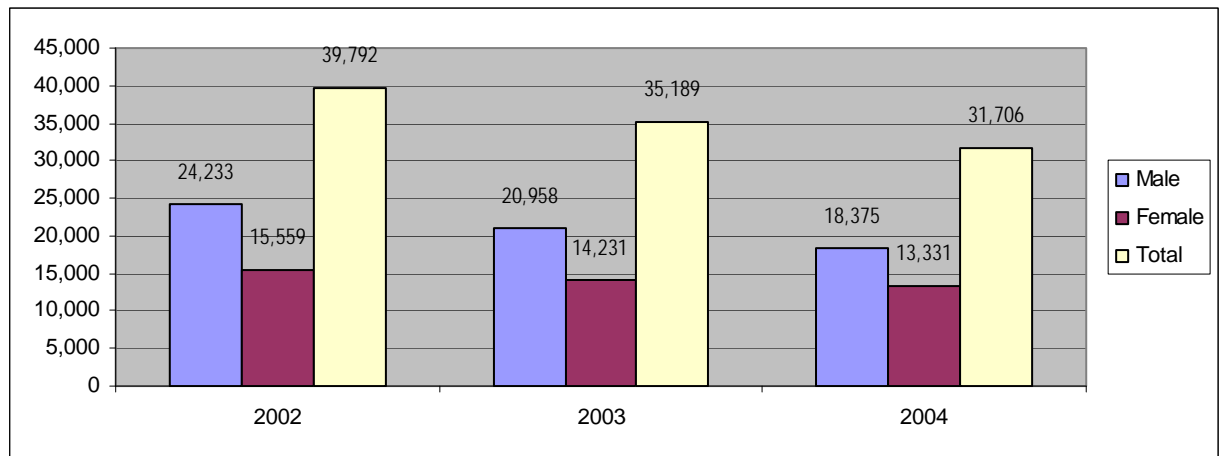
31,706, which represents 18.7% of the total pensions granted due to decreased working ability. The reduction has been more acute among men (-24.2%) than women (-14.3%).

Table 4: Granted Pensions because of decreased working ability due to MSDs differentiated by gender

	2002		2003		2004	
	Number	%	Number	%	Number	%
Male	24,233	23.6	20,958	20.9	18,375	19.0
Female	15,559	21.2	14,231	19.1	13,331	18.3
Total	39,792	22.6	35,189	20.2	31,706	18.7

Source SUGA 2004

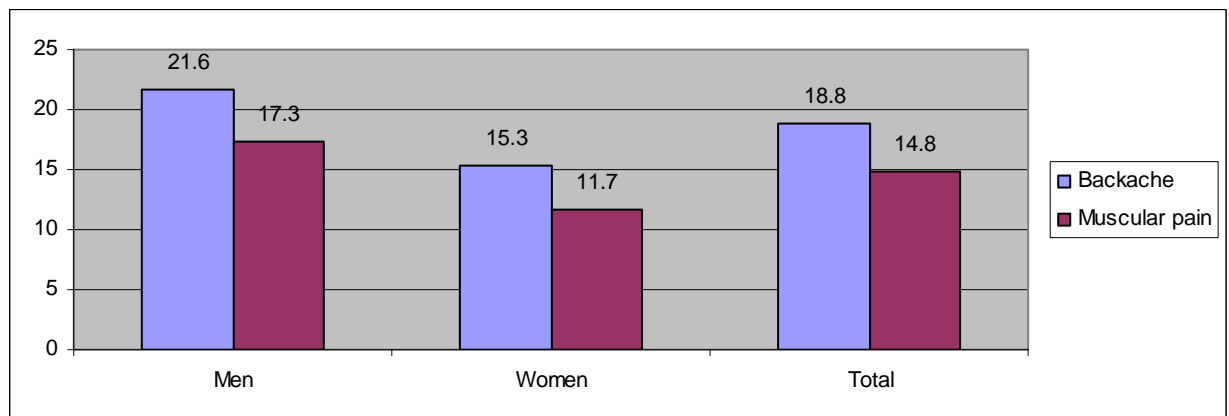
Figure 12: Absolute number of granted pensions because of decreased working ability due to MSDs, by gender, 2002, 2003, 2004.



Source SUGA 2004

According to the ESWC, German men report a higher share of MSDs than their female counterparts. As shown in the graph below, over one fifth of German men complain of backache (21.6%) as opposed to 15.3% among women while 17.3% of men report suffering from muscular pain (11.7% among women).

Figure 13: Percentage share of workers reporting backache and muscular pain in Germany, by gender, 2005



European Survey on Working Conditions, 2005.

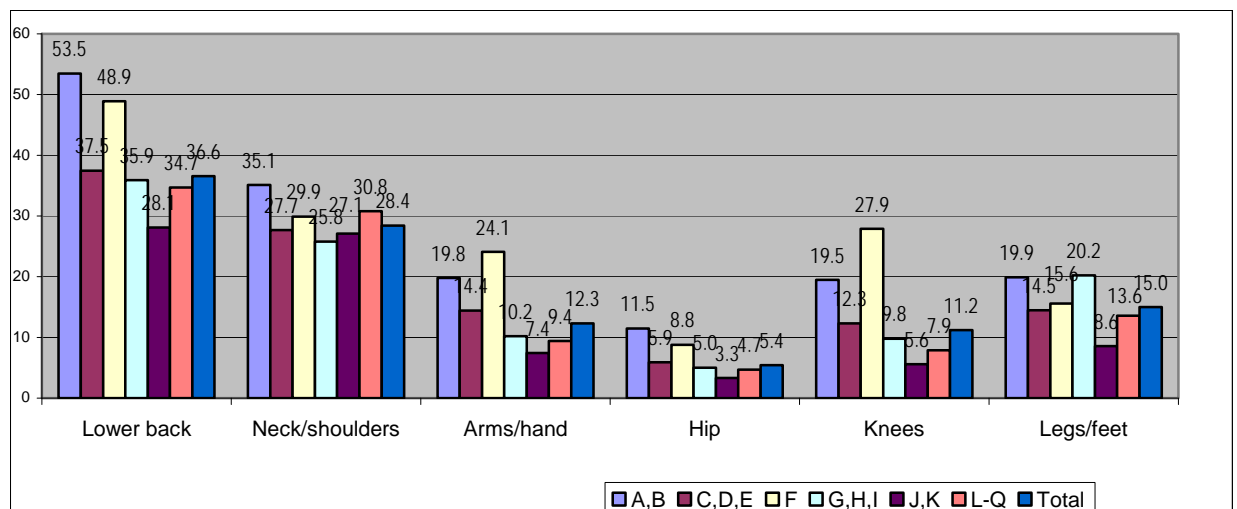
4. By sector

Sector groups (sections in NACE Rev 1.1) used in tables and figures:

- A: Agriculture, hunting, forestry;
- B: Fishing;
- C: Mining;
- D: Manufacturing;
- E: Electricity, gas and water;
- F: Construction;
- G: Whole sale and retail, repairs;
- H: Hotels and restaurants;
- I: Transport and communication;
- J: Financial intermediation;
- K: Real estate, business activity;
- L: Public administration and defense;
- M: Education;
- N: Health and social work;
- O: Other community, social and personal service activities;
- P: Activities of households;
- Q: Extra-territorial organizations and bodies.

As to be expected, workers in agriculture and construction report the highest rates of MSDs. Neck and shoulder problems are above average in the administration and service sector (30.8%), while legs and feet problems are the highest in the whole sale, retail, hotel, restaurants and transport sector (20.2%).

Figure 14: Prevalence of MSDs during/after work, by body part and sector, 1998

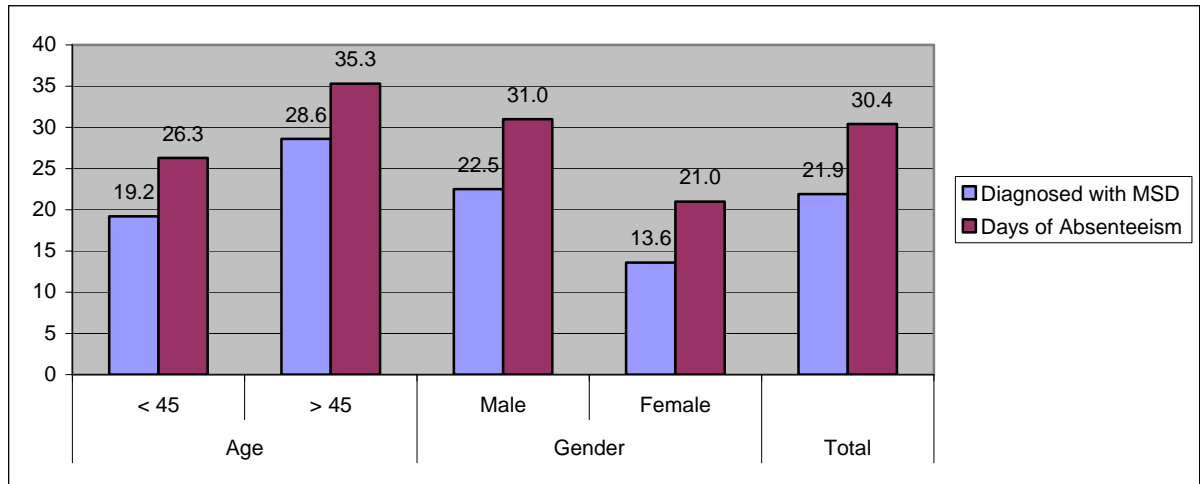


Source BIBB/IAB survey

In the “Report on Current Level of Safety and Health at Work – 2004 (SUGA 2004)” specific information is provided on construction, where, as expected, the prevalence of work related MSDs is high. It is shown that over one fifth (21.9%) of workers in construction were diagnosed with a work related MSDs in 2004, the share being particularly high among those aged 45 and above (28.6%).

Regarding the number of days lost due to the MSDs, 30.4% of days of absenteeism in construction were due to MSDs, again the share being higher for those workers aged 45 and above (35.3%).

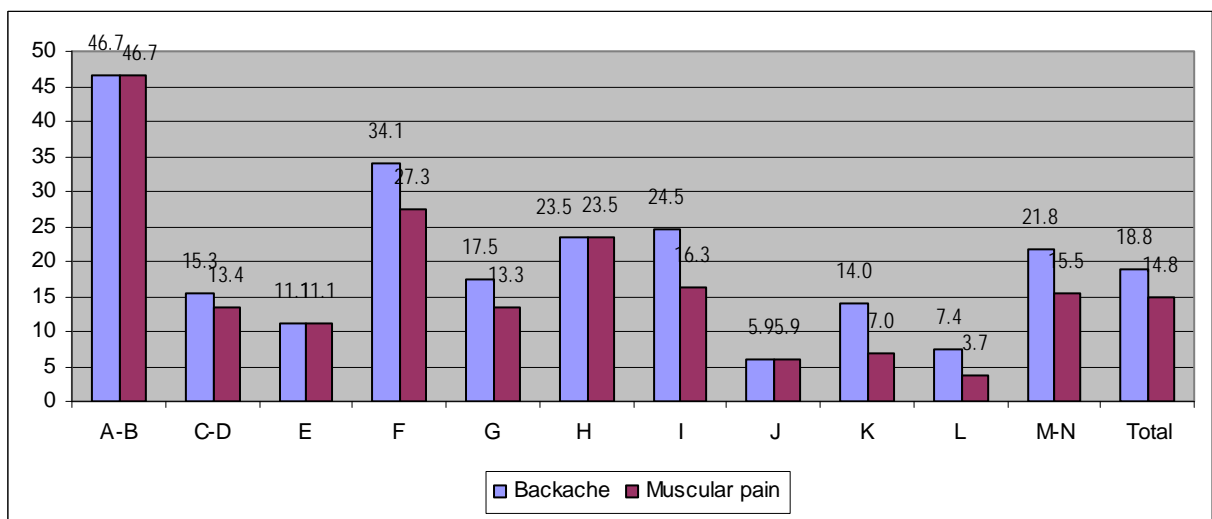
Figure 15: Work disability caused by MSDs in construction (in % of total), by age and gender, 2004.



Source SUGA 2004

As far as the ESWC is concerned, and in line with the BIBB/IAB survey, agriculture and construction report the highest prevalence of MSDs, followed by hotels and restaurants, transport and education and health. In general there is a higher share of backache than muscular pain, except in agriculture, hotels and restaurants, utilities and financial intermediation, where both MSDs report equal prevalence.

Figure 16: Percentage share of workers reporting backache and muscular pain in Germany, by sector, 2005

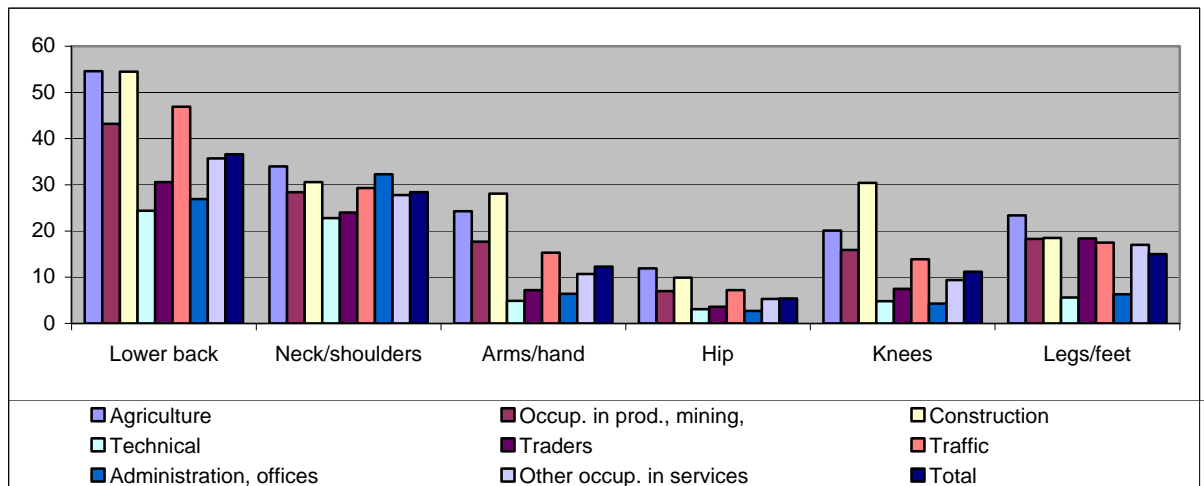


European Survey on Working Conditions, 2005.

5. By occupation

Following the results broken down by sector, existing differences in the prevalence of MSDs will be reflected in the occupations in those sectors that are most affected. As shown in the graph below, occupations in agriculture and construction tend to report the highest prevalence for most body parts. Lower back pain and pain in neck/shoulders are the most common MSDs in both sectors, while arm/hand pain and, particularly, pains in the knees, are more frequent in construction. Occupations in the traffic area report a notable prevalence of lower back pain (46.9%), while one third (32.3%) of workers in administration and offices suffers from pain in neck/shoulders.

Figure 17: Prevalence of MSDs during/after work, by body part and occupation, in %, 1998



Source BIBB/IAB survey

According to the SUGA report in 2004, workers in the metal working industry, the glass industry, the chemical and plastic industry are most affected by MSDs. Wood workers and assembly workers are also highly affected by MSDs. The highest number of working days lost to MSDs are found in the group of machinery workers (18.9), followed by mining workers (18.7) and leather industry workers (18.7).

Table 5: Prevalence and lost working days due to work-related MSDs, by occupation, 2004

No.	Occupation ¹⁾	Cases per 100 insurants			Days per diagnosis		
		Total	Male	Female	Total	Male	Female
01-06	Occupations in agriculture and forestry, horticulture	28.6	30.8	22.7	15.1	14.7	16.4
07-11	Miner, mineral worker, stone mason or cutter, producer of building materials	32.2	32.7	25.3	16.7	16.7	18.1
12, 13	Glass and ceramics professions	37.9	38.0	37.6	18.1	17.6	19.9
14, 15	Occupations in the chemical industry, plastic processing	37.9	36.9	41.2	15.9	15.4	17.4
16, 17	Paper converting, printer	33.3	33.0	34.1	16.4	15.7	18.2
18	Wood processing	35.9	35.5	38.2	16.5	16.1	18.7

Work-related musculoskeletal disorders - Facts and figures - Germany

No.	Occupation ¹⁾	Cases per 100 insurants			Days per diagnosis		
		Total	Male	Female	Total	Male	Female
19, 20	Sheet and structural metal workers, moulders and welders, and related workers	42.0 ²⁾	42.0	41.4 ²⁾	17.5 ²⁾	17.4	21.0 ²⁾
21-30	Metal, machinery and related trades professions	30.2	30.3	28.1	15.9	15.9	17.0
31	Electrical and electronic trades professions	23.8	23.4	30.4	15.8	15.7	16.8
32	Assembler	37.1	34.7	42.1	16.7	15.6	18.5
33-36	Textile production professions	32.3	35.5	30.7	18.5	16.7	19.5
37	Leather production and processing professions	30.6	31.4	29.8	18.7	17.5	20.1
39-43	Food processing and preparation professions	24.8	20.5	30.4	17.9	16.4	19.4
44, 46, 47	Surface and substructure construction professions, civil engineering	32.3	32.3	30.6	18.7	18.7	15.6
48, 49	Decorator, upholsterer	32.8	33,2	27,8	18,5	18,4	20,2
50	Wood and plastics processing	28.3	28.3	28.8	15.4	15.4	15.6
51	Painter	30.8	30.7	30.9	16.4	16.4	16.1
52	Warehousing and dispatching	35.3	33.7	37.6	16.7	15.3	18.5
53	Unskilled workers	29.3	29.5	28.8	13.5	13.0	14.7
54, 55	Machine operators	28.0	28.2	24.8	18.7	18.8	15.8
60, 61	Engineering, physical and chemical science professionals, mathematicians	4.9	4.5	8.6	13.9	14.1	13.3
62-65	Technicians	14.3	138	161	17.0	17.6	15.2
66-68	Managers (wholesale and retail trade) and salespersons	14.8	13.0	15.6	17.7	15.3	18.7
69, 70	Business services professions	11.1	9.6	12.3	13.9	14.6	13.4
71-74	Transport professions	31.0	31.3	29.6	18.0	17.9	18.7
75-78	Business and administration professions	13.0	10.7	14.1	14.7	14.5	14.8
79-81	Protective services	24.5	24.9	22.9	18.9	18.8	19.7
82, 83	Authors, Journalists and Related Writers, artistic professions	11.7	11.1	12.3	15.0	15.8	14.3
84, 85	Health professions	16.3	16.7	16.3	18.2	17.2	18.3
86-89	Social and education professions	17.2	12.4	18.8	16.0	14.7	16.3
90-93	Other service professions	27.7	27.6	27.7	18.4	16.2	19.1
97-99	Other occupations	22.5	30.3	11.4	21.5	21.2	22.6
01-99	Total	23.5	25.7	20.3	17.0	16.6	17.6

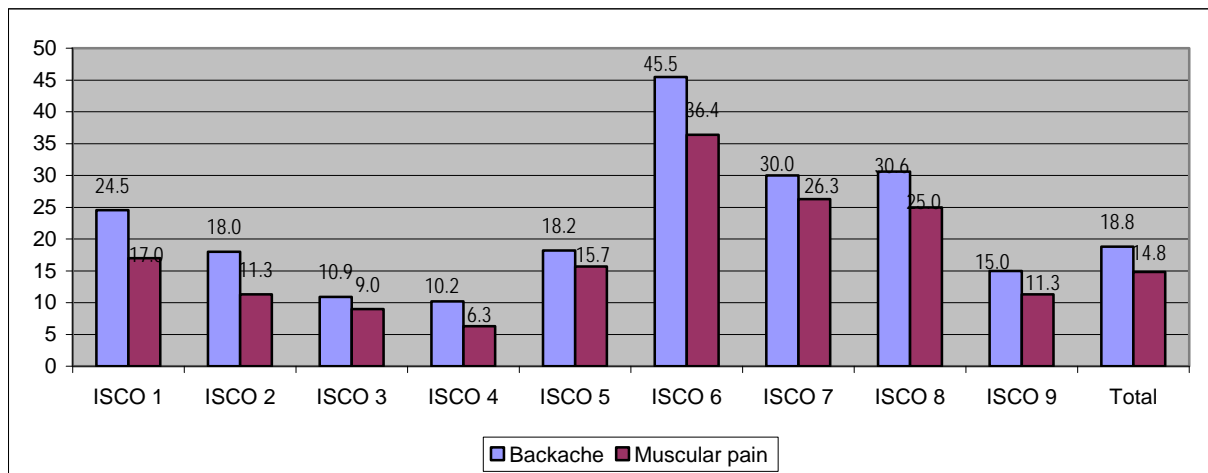
Source SUGA 2004

1) Categorisation/break down of professions, edition 1992

2) Figures for women in this professional category were not provided by all insurance companies with the necessary accuracy therefore in the illustration part of the data were not taken into consideration.

Information from the ESWC reveals that skilled agricultural and fishery workers (ISCO 6) report the highest prevalence of MSDs, both backache (45.5%) and muscular pain (36.4%). Craft and related trades workers (ISCO 7) and plant and machine operators and assemblers (ISCO 8) are next, followed by legislators, senior officials and managers (ISCO 1).

Figure 18: Percentage share of workers reporting backache and muscular pain in Germany, by occupation, 2005



European Survey on Working Conditions, 2005.

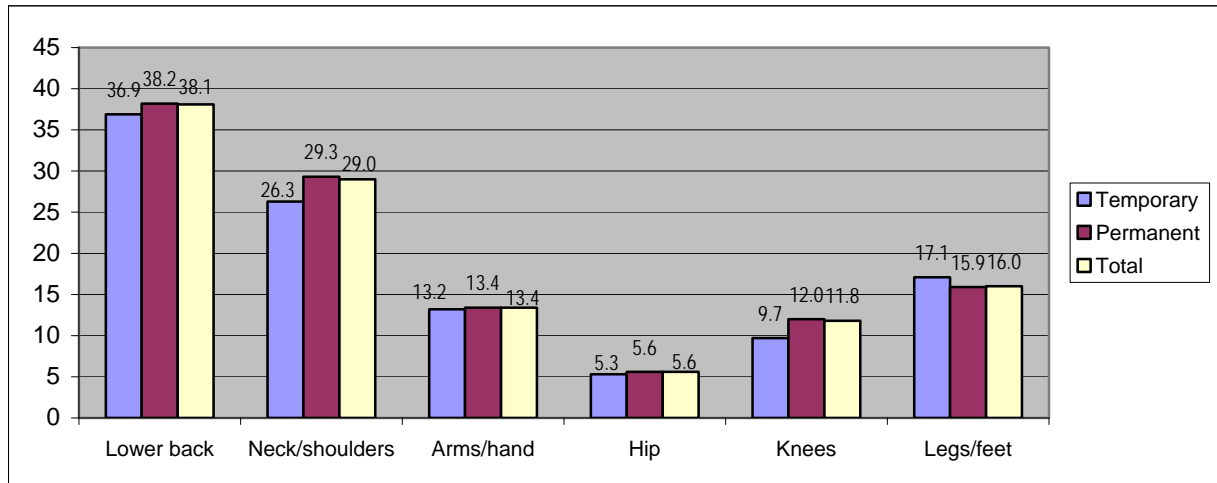
ISCO Groups of occupation used in tables and figures:

- ISCO 1: Legislators, senior officials and managers;
- ISCO 2: Professionals;
- ISCO 3: Technicians and associate professionals;
- ISCO 4: Clerks;
- ISCO 5: Service workers and shop and market sales workers;
- ISCO 6: Skilled agricultural and fishery workers;
- ISCO 7: Craft and related trades workers;
- ISCO 8: Plant and machine operators and assemblers;
- ISCO 9: Elementary occupations;
- ISCO 10: Armed forces.

6. By employment status

Workers with contracts on a permanent basis show slightly more back pain (38.2%) and neck/shoulder pain (29.3%) than workers with a fixed term contract, whereas pains in leg/feet are slightly more frequent among temporary workers than permanent ones: 17.1% and 15.9%, respectively. In any case, differences are not wide for any body part.

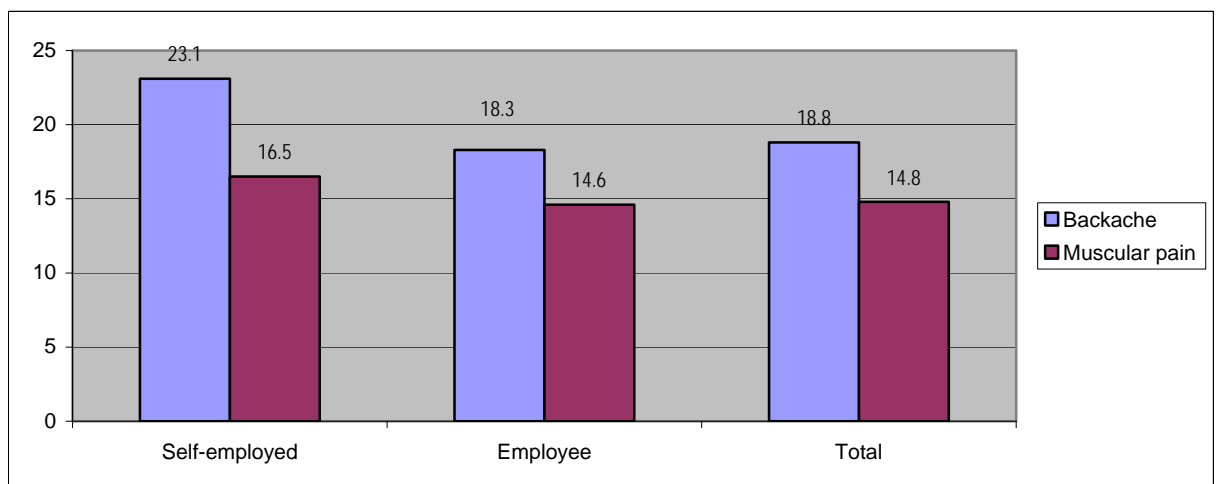
Figure 19: Prevalence of MSDs during/after work, by body part and employment status, 1998



Source BIBB/IAB survey

The ESWC shows a slightly greater prevalence of MSDs among self-employed workers than employees. Almost one fourth of self-employed (23.1%) complain of backache as opposed to 18.3% among employees, while the shares of muscular pain are more similar among both groups: 16.5% among employees and 14.6% among employees.

Figure 20: Percentage share of workers reporting backache and muscular pain in Germany, by employment status, 2005



European Survey on Working Conditions, 2005.