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

National Report: Poland

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Table of contents

Table of contents	1
List of figures and tables.....	1
Summary	3
Source description.....	4
1. General prevalence	6
2. By age	9
3. By gender	11
4. By sector	14
5. By occupation.....	16
6. By employment status	18

List of figures and tables

Figure 1: Occupational diseases in Poland: cases of locomotors and nervous systems diseases, vibration syndrome and total, 2000-2005.....	6
Figure 2: Number of notified occupational musculoskeletal diseases in Poland, 2000-2005.	7
Figure 3: Percentage share of workers reporting health problems in Poland: work affects health, backache and muscular pains, 2005.....	8
Figure 4: Number of chronic diseases of locomotors system in Poland, by age, 2000-2005.	9
Figure 5: Number of chronic diseases of peripheral nervous system in Poland, by age, 2000-2005....	9
Figure 6: Number of cases of vibration syndrome in Poland, by age, 2000–2005.	10
Figure 7: Percentage share of workers reporting backache and muscular pain in Poland, by age, 2005.....	10
Figure 8: Incidence rate (per 100,000 employed people) of chronic diseases of locomotors system, by gender, 2000-2005.....	11
Figure 9: Incidence rate (per 100,000 employed people) of chronic diseases of peripheral nervous system, by gender, 2000-2005.....	11
Figure 10: Incidence rate (per 100,000 employed people) of vibration syndrome, by gender, 2000-2005.	12
Figure 11: Percentage share of workers reporting backache and muscular pain in Poland, by gender, 2005	13
Figure 12: Number of chronic diseases of locomotors system, by sector, 2000-2005	14
Figure 13: Number of chronic diseases of peripheral nervous system, by sector, 2000-2005	15
Figure 14: Number of cases of vibration syndrome, by sector, 2000-2005.....	15
Figure 15: Percentage share of workers reporting backache and muscular pain in Poland, by sector, 2005.....	16
Figure 16: Percentage share of workers reporting backache and muscular pain in Poland, by occupation, 2005	17

Figure 17: Percentage share of workers reporting backache and muscular pain in Poland, by employment status, 2005	18
Table 1: Chronic diseases of locomotors, peripheral nervous system and vibration syndrome in Poland, rate per 100,000 employed people, 2000-2005.....	7
Table 2: Chronic diseases of locomotors, peripheral nervous system and vibration syndrome in Poland, number of cases by specific type of disease, 2000–2005.	7
Table 3: Chronic diseases of locomotors, peripheral nervous and vibration syndrome, number of cases by specific type of disease and gender, 2000–2005.	12

Summary

45.8% of Polish workers reported backache and 43.9% muscular pains in shoulders, neck and/or upper/lower limbs in 2005, according to the Fourth European Survey on Working Conditions (ESWC) carried out by the European Foundation for the Improvement of Living and Working Conditions. These numbers are significantly higher than the EU27 average (24.7% and 22.8%, respectively) and exceed too those found in the overall NMS10 (38.9% and 36.2%, respectively) and the two NMS - Bulgaria and Romania- (39.2% and 37%, respectively) in 2005.

Between 2000 and 2005 the total number of recognised and notified cases of occupational diseases has decreased in Poland by more than 55%. During the same period of time the number of occupational diseases related to musculoskeletal system disorders (including chronic diseases of locomotors and peripheral nervous system and vibration syndrome) has decreased by approximately 47%. The rates per 100,000 employed people have not changed significantly over this period for chronic diseases of locomotors and nervous system but vibration syndrome shows a declining trend.

Chronic diseases of locomotors and peripheral nervous system and vibration syndrome are mostly recognised in the age groups 40 – 49 and 30 – 39. Between 1% and 3% of all reported cases of chronic diseases of locomotors and peripheral nervous system concern young people aged under 30.

Women are more likely to suffer from chronic diseases of peripheral nervous system than men while vibration syndrome is more frequently recognised for men, which is mainly due to the workforce structure.

Mining and Manufacturing are the activities with the biggest numbers of recognised cases of occupational diseases between 2000 and 2005. Particularly, vibration syndrome is one of the most frequently recognised diseases in these activity sectors: 60 cases in 2005. Another sector with a big number of chronic locomotors and nervous system diseases is Education and Health, where the highest number of cases of occupational diseases have been recognised by personal care and related workers.

Finally, ESWC data show that Polish self-employed workers are more affected by MSDs, both backache and muscular pains, than employees.

Source description

Statistical sources

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. 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).

Country/ region	Poland
Title	Central Register of Occupational Diseases
Institution	The Nofer Institute of Occupational Medicine
Country	Poland
Periodicity	Yearly
Type	Register
URL	http://www.imp.lodz.pl/organizacje/rej_chor_zawod.htm
Demographic group	All employed persons
Objectives	Collecting and analyzing data on recognized occupational diseases in Poland.

Country/ region	Poland
Description	<p>The Central Register of Occupational Diseases has been organized in 1999 on the basis of data bank regarding occupational diseases existing in Nofer Institute of Occupational Medicine.</p> <p>For each recognized case of occupational disease “The card for occupational disease recognition” is filled in by authorized institution (sanitary inspector). The data registered in the Card are included in the Register.</p>
Content	<p>The information on occupational disease in the Register include:</p> <ul style="list-style-type: none"> ▪ name, gender and age of the worker for whom the disease has been recognised; ▪ name of employer, sector of economic activity; ▪ name of the disease (from list); ▪ factor that have caused the disease and period of worker’s exposure to this factor.

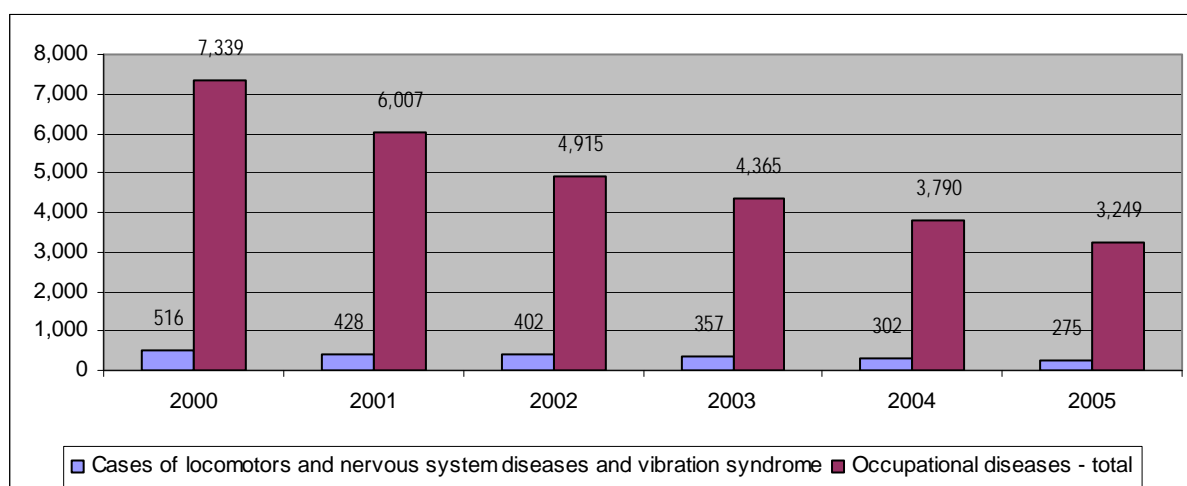
1. General prevalence

45.8% of Polish workers reported backache and 43.9% muscular pains in shoulders, neck and/or upper/lower limbs in 2005, according to the Fourth European Survey on Working Conditions carried out by the European Foundation for the Improvement of Living and Working Conditions. These numbers are significantly higher than the EU27 average (24.7% and 22.8%, respectively) and exceed too those found in the overall NMS10 (38.9% and 36.2%, respectively) and the two NMS -Bulgaria and Romania- (39.2% and 37%, respectively) in 2005.

Between 2000 and 2005 the total number of recognised and notified cases of occupational diseases has decreased in Poland by more than 55%: from 7,339 cases in 2000 to 3,249 in 2005¹. The incidence rate per 100,000 employed has dropped from 46.9 in 2000 to 25.5 in 2005. During the same period of time the number of occupational diseases related to musculoskeletal system disorders (including chronic diseases of locomotors and peripheral nervous system and vibration syndrome) has decreased by approximately 47%, from 516 cases in 2000 to 275 in 2005.

The rates per 100,000 employed people have not changed significantly over this period for chronic diseases of locomotors and nervous system but vibration syndrome shows a declining trend.

Figure 1: Occupational diseases in Poland: cases of locomotors and nervous systems diseases, vibration syndrome and total, 2000-2005

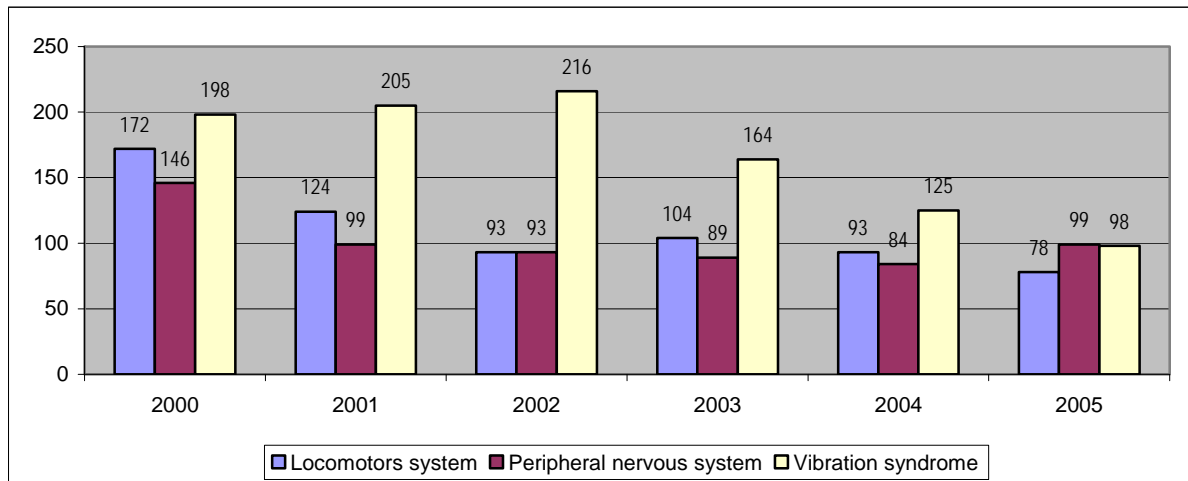


Source: Central Register of Occupational Diseases

In general, the highest numbers of chronic musculoskeletal diseases correspond to vibration syndrome cases but in 2005 carpal tunnel syndrome were the most frequently recognised occupational musculoskeletal diseases: 33% of all cases.

¹ Most national info is provided in graphs instead of tables for the sake of visual clarity but data are available upon request.

Figure 2: Number of notified occupational musculoskeletal diseases in Poland, 2000-2005



Source: Central Register of Occupational Diseases

Table 1: Chronic diseases of locomotors, peripheral nervous system and vibration syndrome in Poland, rate per 100,000 employed people, 2000-2005

Nosologic units	Rate per 100,000 employed people					
	2000	2001	2002	2003	2004	2005
Chronic diseases of locomotors system	1.7	1.3	1.0	1.1	1.0	0.8
Chronic diseases of peripheral nervous system	1.5	1.0	1.0	0.9	0.9	1.1
Vibration syndrome	2.0	2.2	2.4	1.7	1.3	1.0

Source: Central Register of Occupational Diseases

Table 2: Chronic diseases of locomotors, peripheral nervous system and vibration syndrome in Poland, number of cases by specific type of disease, 2000–2005.

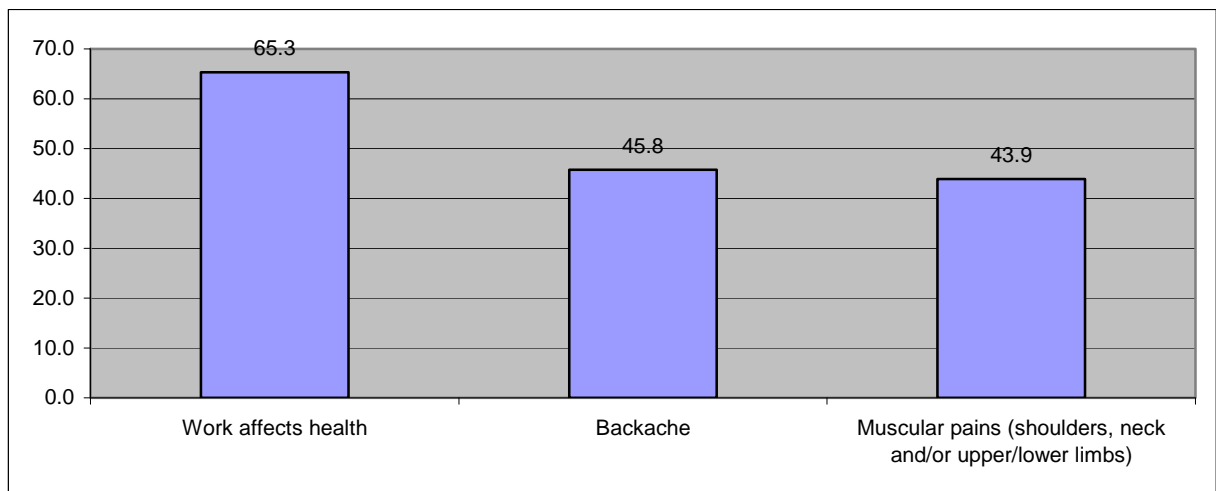
Nosologic units	Number of cases					
	2000	2001	2002	2003	2004	2005
Chronic diseases of locomotors system (total)	172	124	93	104	93	78
• Tendovaginitis				15	17	14
• Bursitis				3	5	2
• Lesion of meniscus				17	13	7
• Periarticular inflammation of shoulder joint				26	21	23
• Epicondylitis of shoulder bone				43	35	31
• Wrist bone necrosis				0	2	1
Chronic diseases of peripheral nervous (total)	146	99	93	89	84	99
• Carpal tunnel syndrome						93
• Groove of ulnar nerve syndrome						6

Nosologic units	Number of cases					
	2000	2001	2002	2003	2004	2005
Vibration syndrome (total)	198	205	216	164	125	98
• Vibratory angioneuropathy				48	35	37
• Osteoarticular form				82	63	41
• Mixed form: angioneuropathy and osteoarticular disorders				34	25	20
• Unspecified form					2	

Source: Central Register of Occupational Diseases

Data from the Fourth European Survey on Working Conditions (ESWC) reveal that almost two thirds of Polish workers (65.3%) feel that their health is affected by work. Concerning MSDs in particular, and as pointed out above, 45.8% of Polish workers report suffering from backache while 43.9% of them complain of muscular pains.

Figure 3: Percentage share of workers reporting health problems in Poland: work affects health, backache and muscular pains, 2005



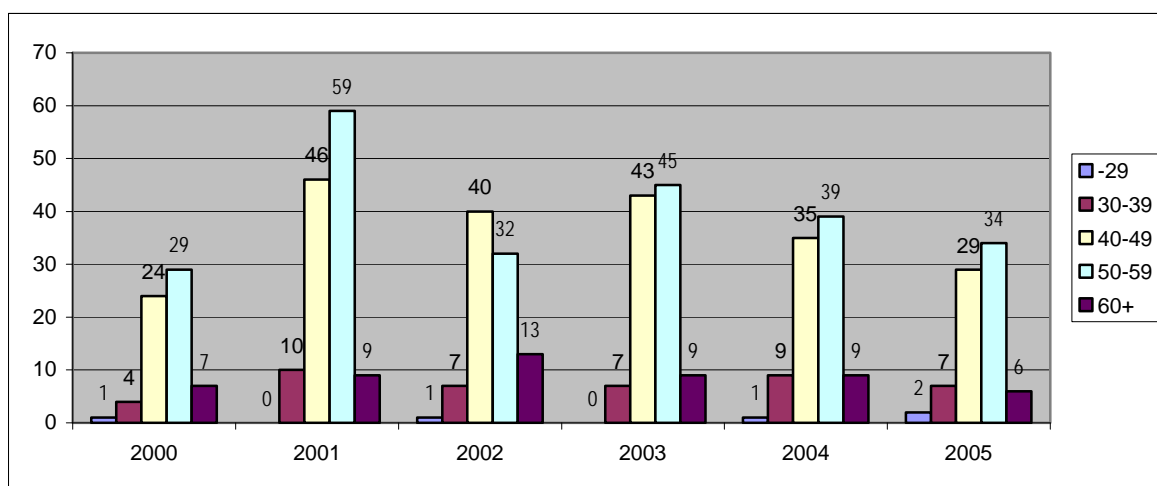
European Survey on Working Conditions, 2005.

2. By age

High numbers of workers report backache and muscular pains and already more than one quarter of young workers report being affected by them.

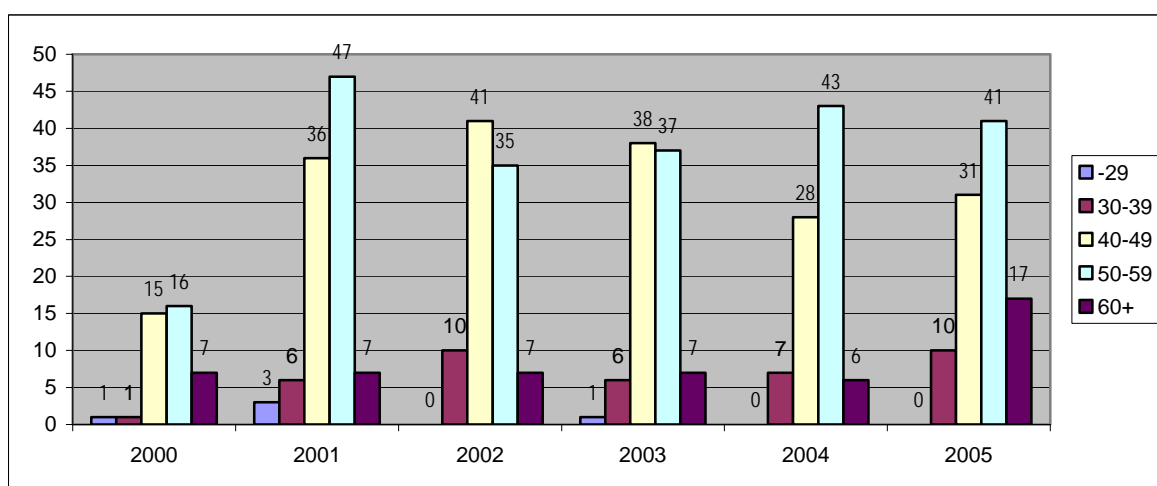
Chronic diseases of locomotors and peripheral nervous system and vibration syndrome are mostly recognised in the age groups 40 – 49 and 30 – 39. Between 2000 and 2005 around 43% to 46 % of all musculoskeletal chronic diseases were recognised in the age group 40 – 49, while 35% to 43% corresponded to the age group 30 – 39. Between 1% and 3% of all reported cases of chronic diseases of locomotors and peripheral nervous system concern young people aged under 30.

Figure 4: Number of chronic diseases of locomotors system in Poland, by age, 2000-2005.



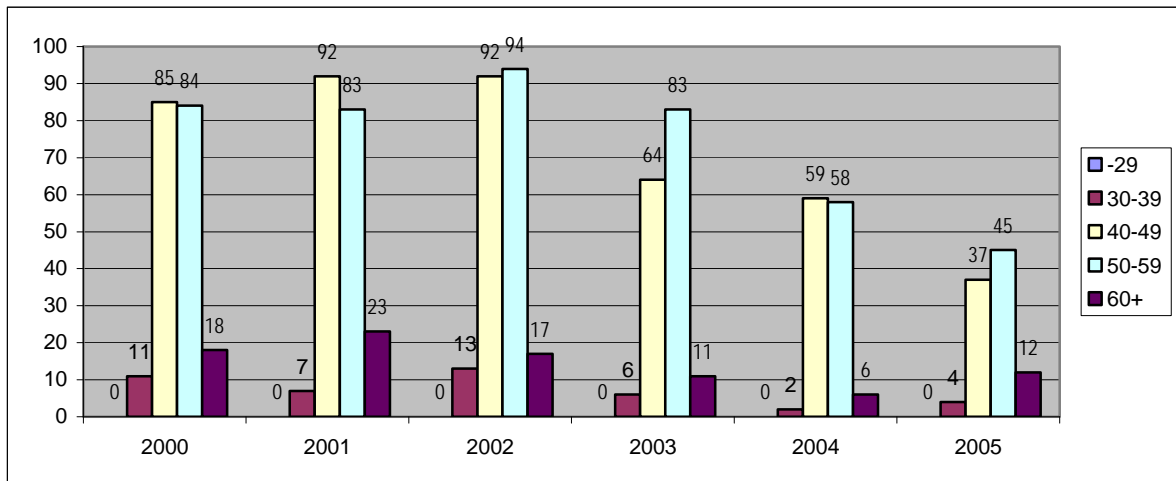
Source: Central Register of Occupational Diseases

Figure 5: Number of chronic diseases of peripheral nervous system in Poland, by age, 2000-2005.



Source: Central Register of Occupational Diseases

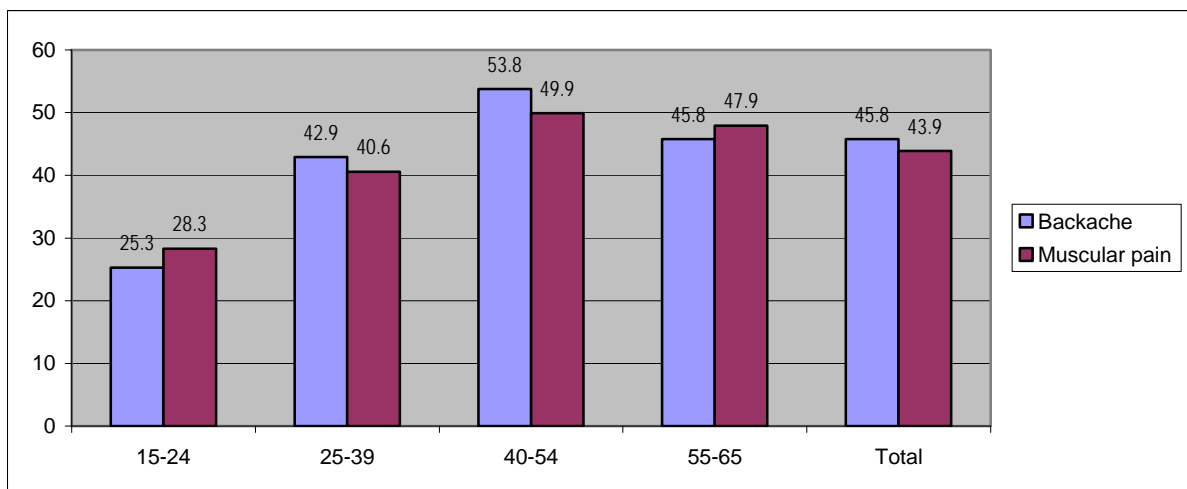
Figure 6: Number of cases of vibration syndrome in Poland, by age, 2000–2005



Source: Central Register of Occupational Diseases

According to the ESWC, the prevalence of MSDs in Poland increases with age up until the 40-54 age group, which reports the highest shares of workers affected by backache (53.8%) and muscular pain (49.9). It goes down slightly for the 55-65 and 25-39 age groups and it is worth stressing that more than one quarter of young workers (15-24 age group) already report suffering from backache (25.3%) and muscular pains (28.3%).

Figure 7: Percentage share of workers reporting backache and muscular pain in Poland, by age, 2005



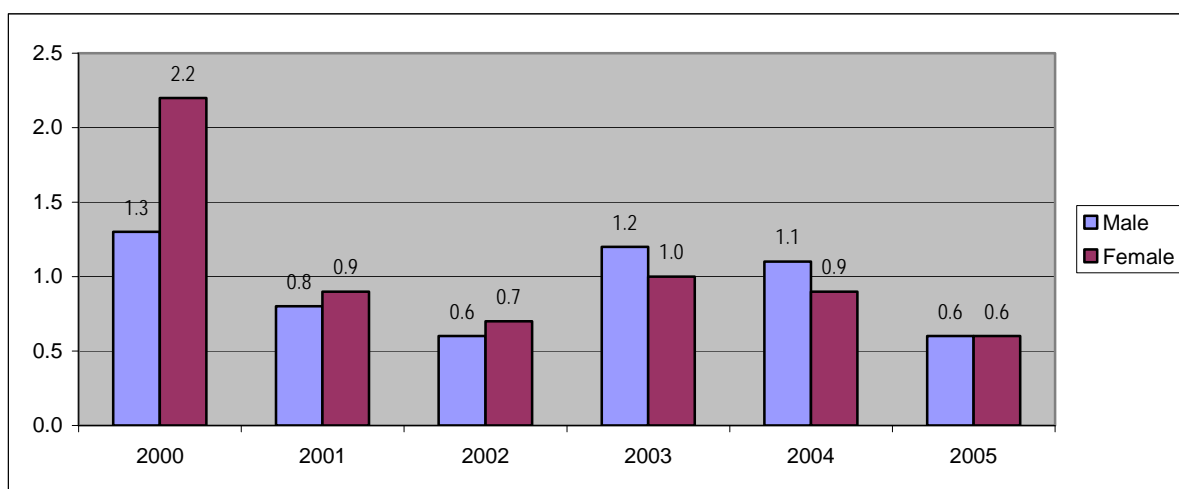
European Survey on Working Conditions, 2005

3. By gender

Women are more likely to suffer from chronic diseases of peripheral nervous system than men (incidence rates are 2-4 times higher). Vibration syndrome instead is more frequently recognised for men (incidence rates 7 – 13 times higher), which is mainly due to the workforce structure (e.g. men are more likely to perform the tasks for which vibration syndrome is most common).

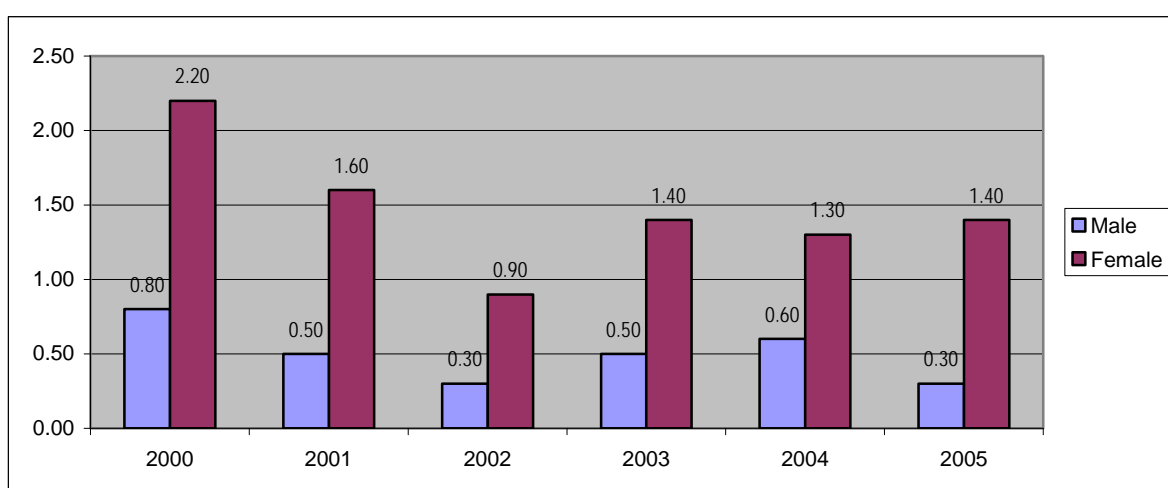
In 2000 – 2002 there were more cases of chronic diseases of locomotors system recognised for women but in 2003 – 2005 the number of cases in both gender groups was similar.

Figure 8: Incidence rate (per 100,000 employed people) of chronic diseases of locomotors system, by gender, 2000-2005

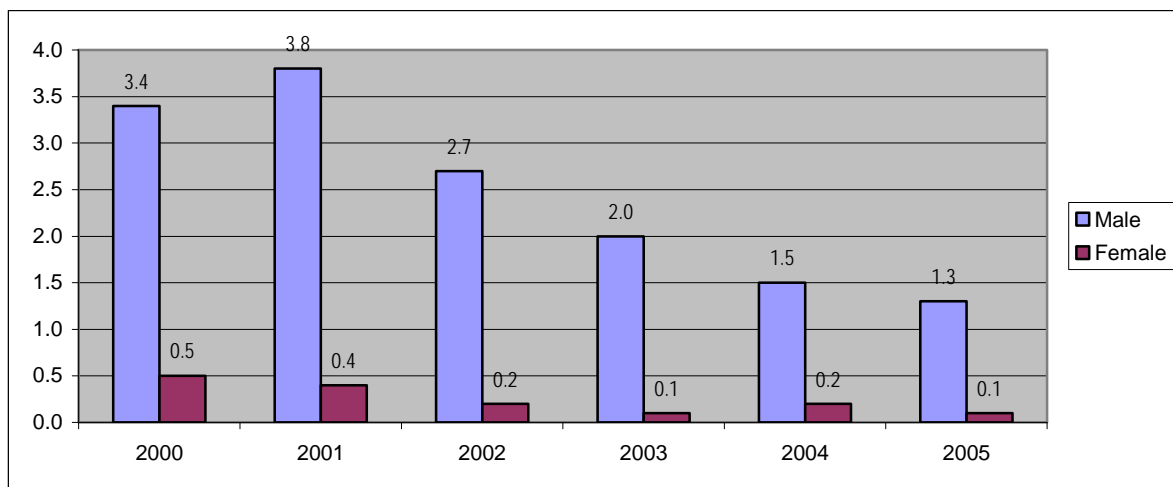


Source: Central Register of Occupational Diseases

Figure 9: Incidence rate (per 100,000 employed people) of chronic diseases of peripheral nervous system, by gender, 2000-2005



Source: Central Register of Occupational Diseases

Figure 10: Incidence rate (per 100,000 employed people) of vibration syndrome, by gender, 2000-2005


Source: Central Register of Occupational Diseases

Table 3: Chronic diseases of locomotors, peripheral nervous and vibration syndrome, number of cases by specific type of disease and gender, 2000–2005

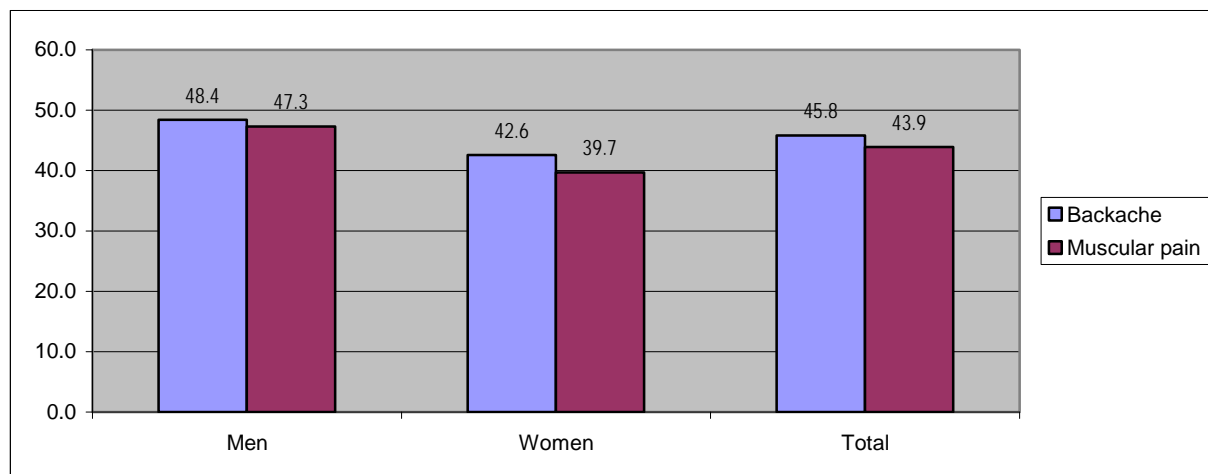
		Number of cases					
		2000	2001	2002	2003	2004	2005
Chronic diseases of locomotors system	Men	65	60	42	61	53	40
	Women	107	64	51	43	40	38
Tendovaginitis	Men				7	5	3
	Women				8	12	11
Bursitis	Men				2	4	2
	Women				1	1	0
Lesion of meniscus	Men				17	12	7
	Women				0	1	0
Periarticular inflammation of shoulder joint	Men				11	8	13
	Women				15	13	10
Epicondylitis of shoulder bone	Men				24	22	14
	Women				19	13	17
Wrist bone necrosis	Men				0	2	1
	Women				0	0	0
Chronic diseases of peripheral nervous system	Men	40	24	25	26	27	19
	Women	106	75	68	63	57	80
Carpal tunnel syndrome	Men				20	21	17
	Women				58	55	76
Groove of ulnar nerve syndrome	Men				6	6	2
	Women				5	2	4

		Number of cases					
		2000	2001	2002	2003	2004	2005
Vibration syndrome	Men	173	187	205	153	116	92
	Women	25	18	11	11	9	6
Vibratory angioneuropathy	Men				42	30	33
	Women				6	5	4
Osteoarticular form	Men				81	62	40
	Women				1	1	1
Mixed form: angioneuropathy and osteoarticular disorders	Men				30	23	19
	Women				1	2	1
Unspecified form	Men					1	
	Women					1	

Source: Central Register of Occupational Diseases

The ESWC reports a slightly higher prevalence of MSDs among men than women. As shown in the graph below, almost half of all men in Poland complain of backache (48.4%) and muscular pain (47.3%), while the shares among their female counterparts are a fraction smaller: 42.6% and 39.7%, respectively.

Figure 11: Percentage share of workers reporting backache and muscular pain in Poland, by gender, 2005



European Survey on Working Conditions, 2005.

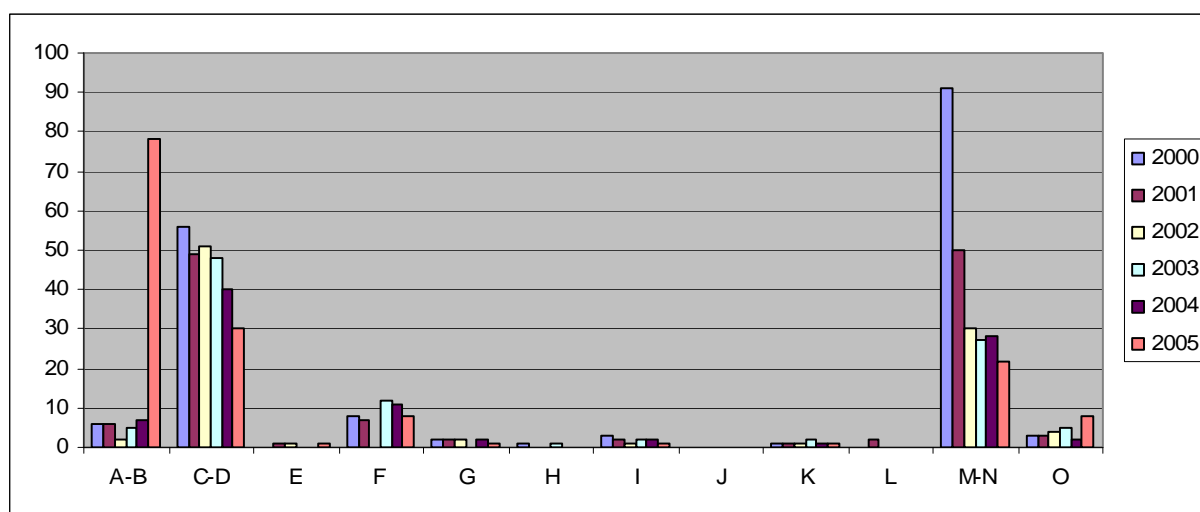
4. By sector

Sector groups (sections in NACE Rev 1.1) used in 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 defence;
- M: Education;
- N: Health and social work;
- O: Other community, social and personal service activities.

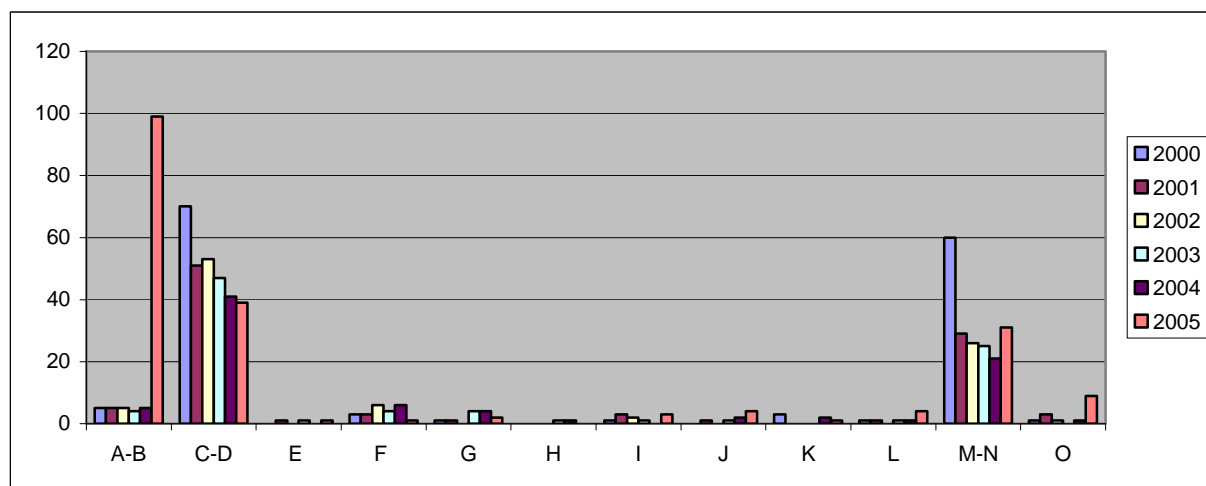
Mining and manufacturing (C-D) are the activities with the biggest numbers of recognised cases of occupational diseases between 2000 and 2005. Particularly, vibration syndrome is one of the most frequently recognised diseases in these activity sectors: 60 cases in 2005. Another sector with a big number of chronic locomotors and nervous system diseases is education and health (M-N), where the highest numbers of cases of occupational diseases have been recognised by personal care and related workers.

Figure 12: Number of chronic diseases of locomotors system, by sector, 2000-2005



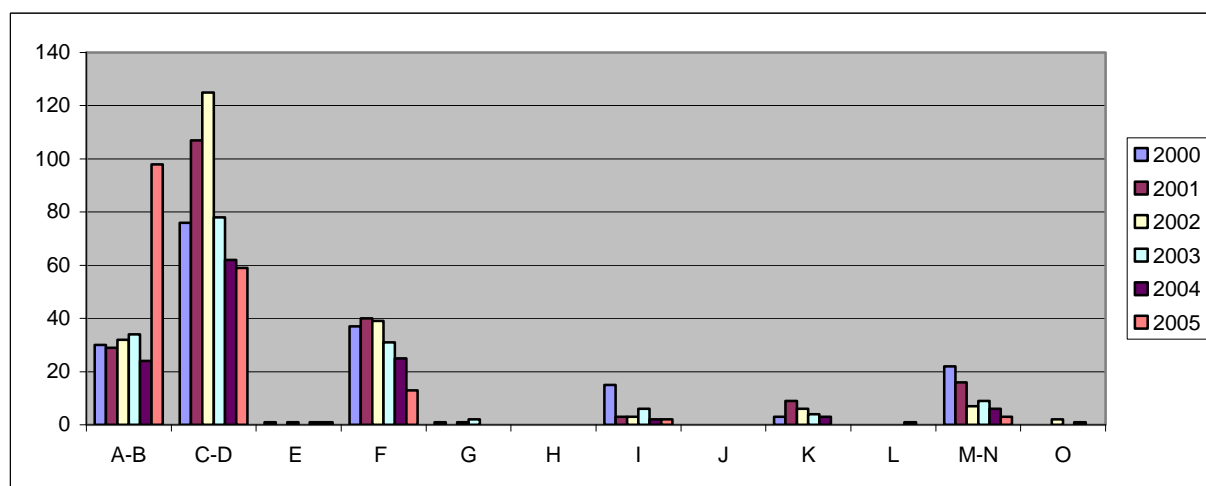
Source: Central Register of Occupational Diseases

Figure 13: Number of chronic diseases of peripheral nervous system, by sector, 2000-2005



Source: Central Register of Occupational Diseases

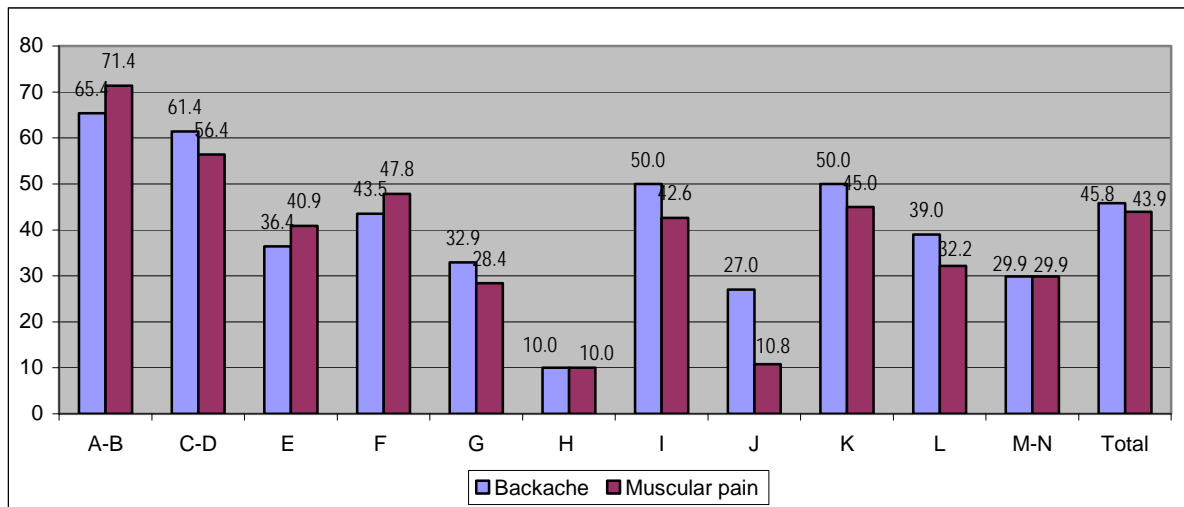
Figure 14: Number of cases of vibration syndrome, by sector, 2000-2005



Source: Central Register of Occupational Diseases

According to the ESWC there are a number of sectors with a relatively high share of MSDs. The highest prevalence is reported in agriculture and fisheries (A-B), where 65.4% of workers suffer from backache and 71.4% from muscular pains. As shown above, manufacturing and mining (C-D) too reports a high prevalence of MSDs, with well over half of its workers complaining of backache (61.4%) and muscular pain (56.4%). Other sectors with a high share of MSDs are real estate (K), transport and communications (I), construction (F), utilities (E) and public administration (L).

Figure 15: Percentage share of workers reporting backache and muscular pain in Poland, by sector, 2005



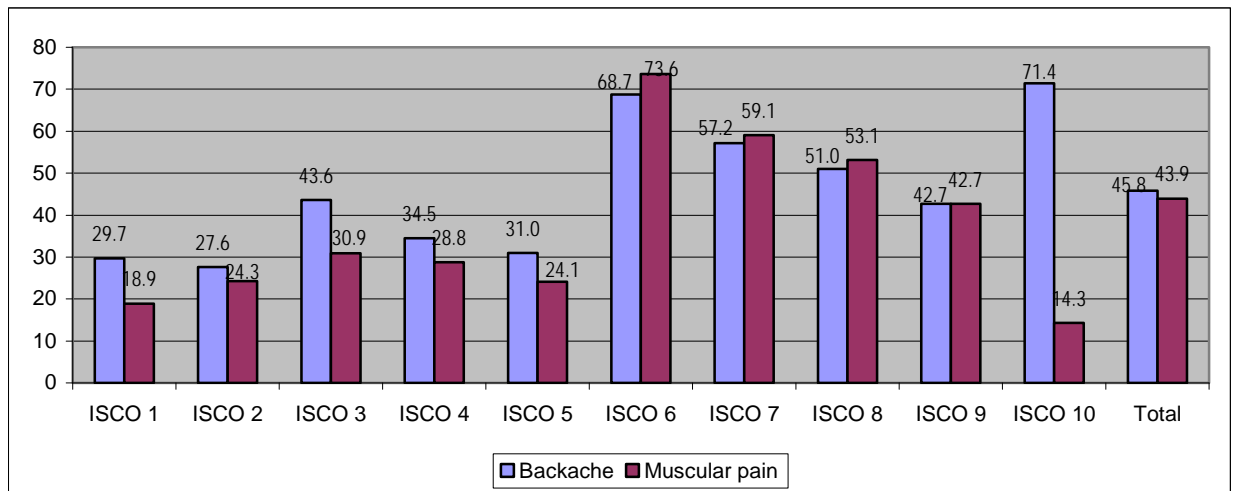
European Survey on Working Conditions, 2005.

5. By occupation

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.

Data from the ESWC show that skilled agricultural and fishery workers report the highest shares of backache (68.7%) and muscular pain (73.6%), followed by craft and related trades workers (57.2% and 59.1%, respectively), plant and machine operators and assemblers (51% and 53.1%, respectively) and elementary occupations (42.7% of both backache and muscular pains). The high prevalence of backache among workers in armed forces (71.4%) needs to be interpreted with caution due to the small sample size.

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

European Survey on Working Conditions, 2005.

The analysis of the insurance data related to statements on disabilities caused by chronic diseases of musculoskeletal system in 200 -2001 was made in order to receive more detailed information on the relationship between work performed and musculoskeletal work-related disorders.

As result the following occupations were identified for which the number of statements was the highest:

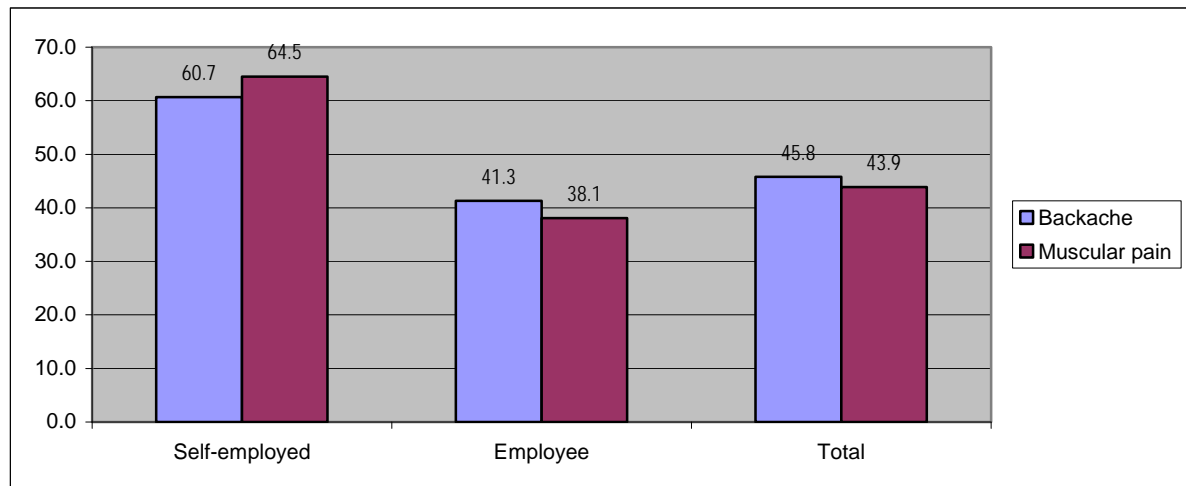
- **Personal care and related workers** (20% of all disabilities related to locomotors system disorders in 2000).
- **Textile, garment and related trades workers** (19.9% of all disabilities related to locomotors system disorders in 2000).
- **Domestic and related helpers, cleaners and launderers** (18.5% of all disabilities related to locomotors system disorders in 2000 and 15,8% in 2001, 9.4% all disabilities related to nervous system disorders in 2000 and 9.4% in 2001).
- **Building frame and related trades workers** (17.7% all disabilities related to locomotors system disorders in 2000; 8.5% all disabilities related to nervous system disorders in 2000 and 9% in 2001).
- **Housekeeping and restaurant services workers** (17.5% all disabilities related to locomotors system disorders in 2000).
- **Shop salespersons and demonstrators** (16.4% all disabilities related to locomotors system disorders in 2001; 9.3% all disabilities related to nervous system disorders in 2000 and 9.6% in 2001).
- **Motor vehicle drivers** (14.2 all disabilities related to locomotors system disorders in 2001; 8.9% all disabilities related to nervous system disorders in 2000 and 8.7% in 2001).
- **Manufacturing labourers** (14% all disabilities related to locomotors system disorders in 2001).
- **Blacksmiths, toolmakers and related trades workers** (12.4% all disabilities related to locomotors system disorders in 2001; 8.2 all disabilities related to nervous system disorders in 2000 and 8% in 2001).

Source: *Influence of work and out-off-work activities on the appearance of subjective and objective symptoms of selected overuse and pressure syndromes of hands, CIOP-PIB 2005*

6. By employment status

The ESWC reveals that the prevalence of MSDs in Poland is greater among the self-employed than the employees. As shown in the graph below, almost two thirds of Polish self-employed workers report suffering from backache (60.7%) and muscular pain (64.5%), while the shares for employees fluctuate around the 40% mark. In any case, the percentage shares found across both groups are remarkably high.

Figure 17: Percentage share of workers reporting backache and muscular pain in Poland, by employment status, 2005



European Survey on Working Conditions, 2005.