

European Agency for Safety and Health at Work

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

National Report: Spain

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This document is an annex to the Agency's Report "Work-related musculoskeletal disorders – Facts and figures" - Spain

You can find the full report –in English only- on the Agency's website:

<http://osha.europa.eu/en/publications/TERO09009ENview>

More information on the European Union is available on the Internet (<http://europa.eu>).

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Source description

Statistical sources

Country/ region	SPAIN
Title	Encuesta Nacional de Condiciones de Trabajo (National Survey of working conditions)
Acronym	ENCT
Institution	Instituto Nacional de Seguridad e Higiene en el Trabajo
Country	SPAIN
Periodicity	VARIABLE 2 – 4 YEARS
Type	Survey (employers and employees)
URL	Fifth Survey: http://www.mtas.es/insht/sst/statistics/enct_5.htm Sixth Survey: http://www.mtas.es/Insht/statistics/viencuesta.pdf
Demographic group	The country is covered almost completely. The agriculture and mining enterprises are excluded. The companies with less than two workers and self-employed are excluded too and also the enterprises sited in the cities of Ceuta and Melilla.
Objectives	The main aim of this Survey is to analyse the world of work from the point of view of the prevention of risk accidents. The information gathered should help to take decisions that could improve security and health conditions at company level. The enterprise questionnaire is focused on collecting the data concerning to the staff, management and OSH preventing actions, training and technological innovation. The workers questionnaire is focused mainly on gathering information about the employment and working conditions, OSH preventing actions and training, and to identify those health effects due to the working conditions, and also to characterize personal variables in order to make qualitative analysis.
Description	Face-to face interviews to workers in their households enterprises. In the last Survey 11,054 workers were interviewed in the whole of the country.
Content	This survey describes a broad range of questions in the field of working conditions.

Country/ region	SPAIN
Title	Estadísticas de accidentes de trabajo
Acronym	----
Institution	Ministerio de Trabajo y Asuntos Sociales
Country	SPAIN
Periodicity	1 per year – non detailed information every month
Type	Register
URL	http://www.mtas.es/estadisticas/

Country/ region	SPAIN
Demographic group	<p>The data is referred to all workers affiliated to the national system of social security with full insurance (economic and sanitary) for accidents at work. The media of workers covered in this system for 2004 is approx. 14.00.000 and all the country is covered.</p> <p>The exclusions are:</p> <ul style="list-style-type: none"> • Self-workers (approx 2,5 millions), although since 2004 they have also the chance to join the system. • Civil servants (approx 700.000).
Objectives	Also provide information about the “form” in which the accident has been produced (note: it is not the cause of the accident) and also the “agent” that has caused the damage to the worker, both of them in a codify way. So in an indirect way, they provide information of safety situations, chemical handling, heavy loads, physical violence at work.
Description	Register
Content	<p>Gender, age, type of contract, experience in that work, occupation, branch of activity of the enterprise, number of workers, where the accident happened (usual working centre, commuting... Or in other working centre), when (hour of the day and working hour), how description of the type of work, deviation (Eurostat codes) and agents, part of the body, type of harm, apart from others that identified the worker and the enterprise and also, some economic details.</p> <p>Each information is codified.</p>

Country/ region	SPAIN
Title	Estadísticas de enfermedades profesionales
Acronym	----
Institution	Ministerio de Trabajo y Asuntos Sociales
Country	SPAIN
Periodicity	1 per year – non detailed information every month
Type	Register
URL	http://www.mtas.es/estadisticas/
Demographic group	<p>The data is referred to all workers affiliated to the national system of social security with full insurance (economic and sanitary) for accidents at work. The media of workers covered in this system for 2004 is approx. 14.00.000 and all the country is covered.</p> <p>The exclusions are:</p> <ul style="list-style-type: none"> • Self-workers (approx 2,5 millions), although since 2004 they have also the chance to join the system. • Civil servants (approx 700.000).
Objectives	Register of the new occupational diseases
Description	Register
Content	The information occupational diseases is:

Country/ region	SPAIN
	<p>Gender, age, occupation, experience in that work, tasks performed at the time of being diagnosed, previous works, branch of activity of the enterprise, number of workers, working hours, diagnose of the occupational disease, description of the tasks that might have caused the disease, number of month that the worker has been exposed to the risk, and agent causing the harm, part of the body, type of harm, apart from others that identified the worker and the enterprise and also, some economic details.</p> <p>Only occupation, branch of activity and type of occupational disease are codified.</p>

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	<p>Monitoring of trends in working conditions for employees and the self-employed throughout the European Union.</p> <p>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.</p>
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	<p>Q.33. Does your work affect your health, or not? (yes, no);</p> <p>Q.33a. How does it affect your health?;</p> <p>Q33a_d Backache (mentioned, not mentioned);</p> <p>Q33a_g Muscular pains -in shoulders, neck and/or upper/lower limbs (mentioned, not mentioned).</p>

1 General prevalence

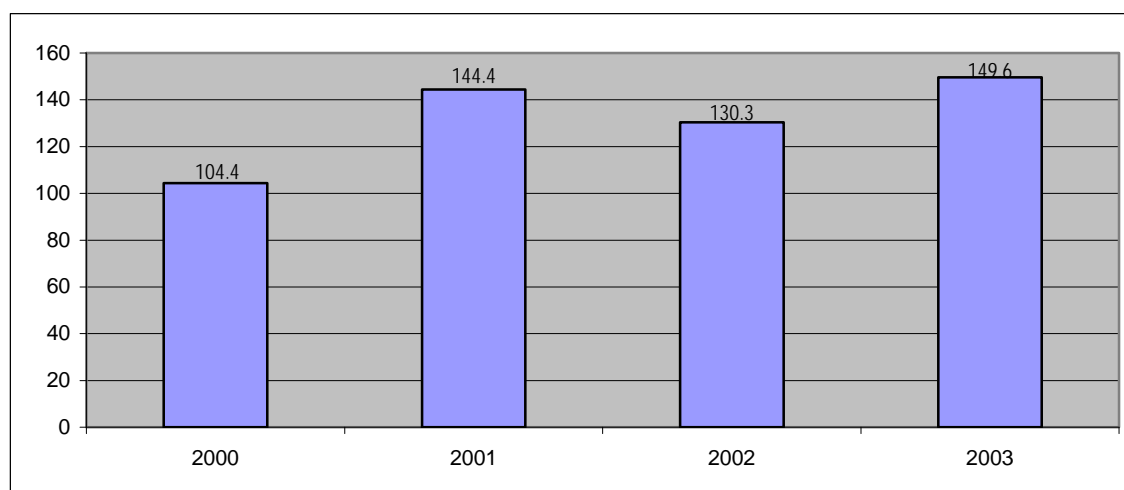
The information provided by the statistics on occupational diseases in Spain shows that the incident rates for MSDs decreased in the period 2001-2002 but rose again in 2003. The same can be said for the rest of occupational diseases.

Table 1: Main occupational diseases (incidence rate by 100,000 workers)

	2000	2001	2002	2003
MSDs	104.38	144.41	130.31	149.60
ASTHMA	1.86	2.28	1.94	2.07
BRUCELLOSIS	0.82	1.16	0.93	0.81
HYPOACOUSIS	0.53	0.71	0.36	0.76
VIRAL HEPATITIS	0.23	0.24	0.28	0.31
SILICOSIS	0.11	0.33	0.25	0.28
ASBESTOSIS	0.13	0.23	0.05	0.04
TOTAL OCCUPATIONAL DISEASES WITH ABSENCE	125.26	177.30	155.87	173.20

Source: Occupational Diseases File

Figure 1: MSDs incidence rate (by 100,000 workers), 2000-2003



Source: Occupational Diseases File

According to the five National Working Conditions Survey carried out until now, neck and back pains, together with pains in the upper extremities (shoulders, arms/forearms, elbows and hands/wrist) have reported a steady increase.

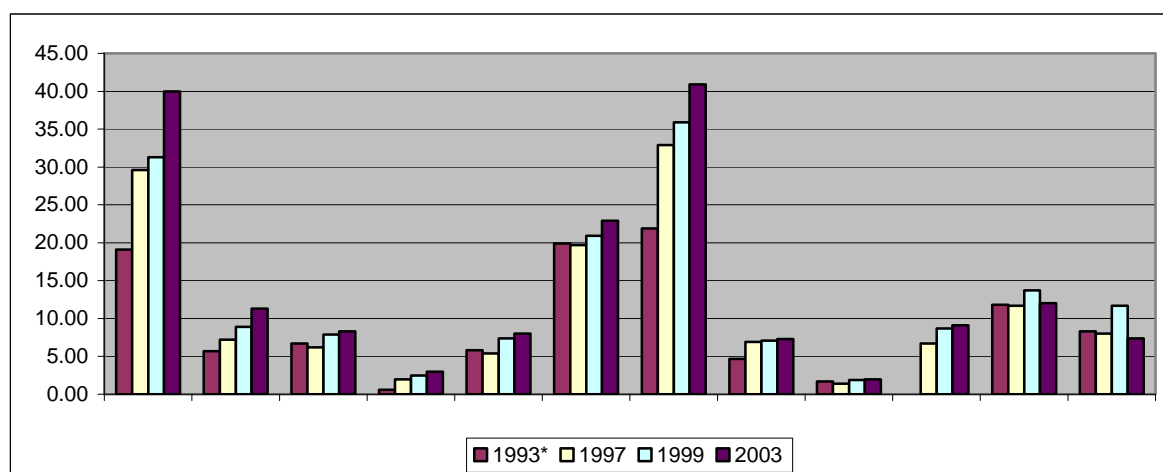
Table 2: Musculoskeletal disorders by body part (in % over total workers), 1987, 1993, 1997, 1999 and 2003

	Neck	Shoulders	Arms	Elbows	Hands	Upper Back	Lower Back	Hips	Thighs	Knees	Legs	Feet
1987	19.10	4.8	6.8	-	3.3	19.5	28.8	2.4	3.0	-	18.6	13.1
1993*	19.10	5.70	6.70	0.60	5.80	19.90	21.90	4.70	1.70	-	11.80	8.30
1997	29.60	7.20	6.20	2.00	5.40	19.70	32.90	6.90	1.40	6.70	11.70	8.00
1999	31.30	8.90	7.90	2.50	7.40	20.90	35.90	7.10	1.90	8.70	13.70	11.70
2003	40.00	11.30	8.30	3.00	8.00	22.90	40.90	7.30	2.00	9.10	12.00	7.40

Base: Total of workers - Source: National Survey of Working Conditions (1987, 1993, 1997, 1999, 2003)

Note (*): The II National Survey of Working Conditions doesn't include Construction

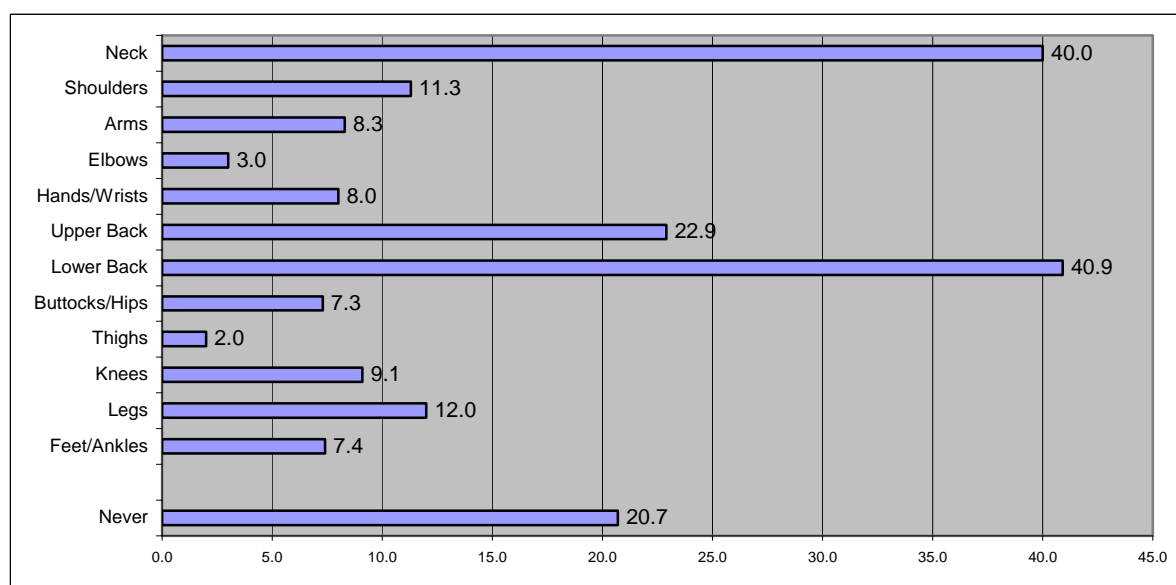
Figure 2: Musculoskeletal disorders by body part (in % over total workers), 1987, 1993, 1997, 1999 and 2003



Base: Total of workers - Source: National Survey of Working Conditions (1987, 1993, 1997, 1999, 2003)

Note (*): The II National Survey of Working Conditions doesn't include Construction

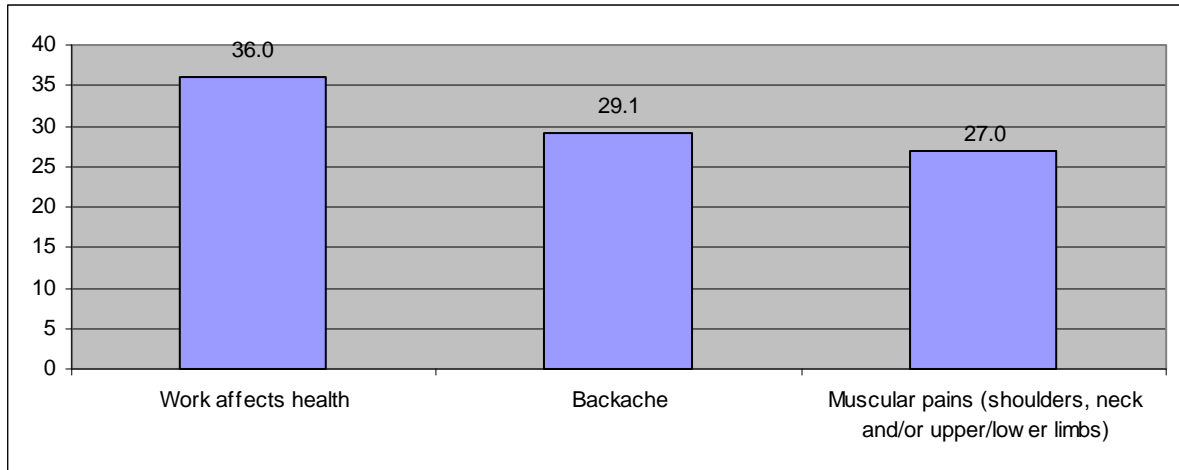
Figure 3: Body part affected by musculoskeletal disorders (in % over total workers), 2003



Base: Total of workers - Source: National Survey of Working Conditions (2003)

As shown in the table and graphs above, the Spanish National Survey of Working Conditions provides information on MSDs broken down by body part. More specifically, the question regarding muscular pain distinguished between twelve types of MSDs in the 2003 survey: 79.3% of respondents report suffering from some kind of musculoskeletal disorders, the most common being “Lower back” (40.9%), “Neck” (40%) and “Upper back” (22.9%).

Figure 4: Percentage share of workers reporting health problems in Spain: work affects health, backache and muscular pains, 2005



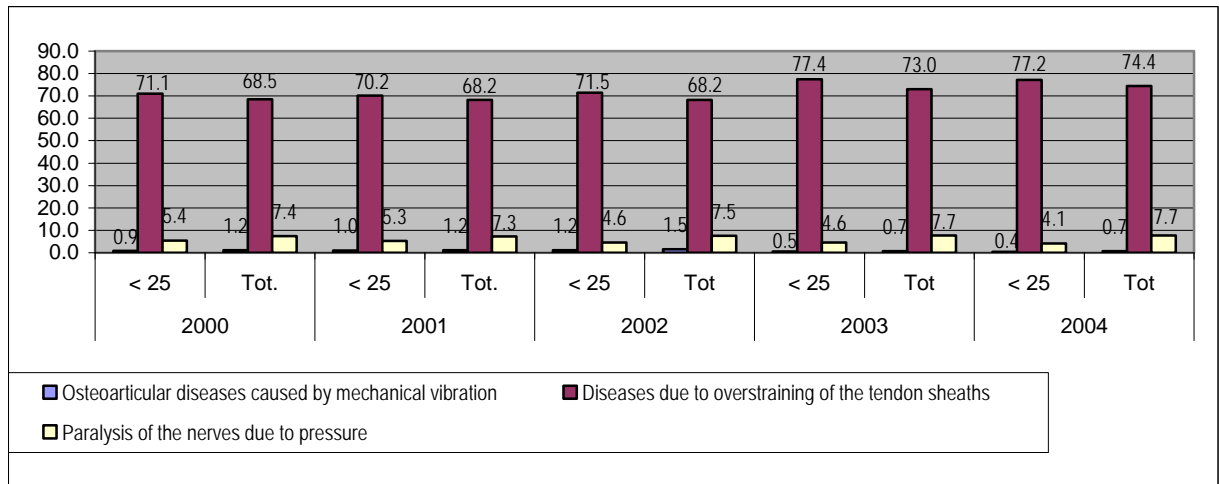
European Survey on Working Conditions, 2005.

Data for Spain from the Fourth European Survey on Working Conditions (ESWC) reveal that in 2005 slightly over one third (36%) of Spanish workers considered their health to be affected by their work. 29.1% of them reported to suffer from backache while 27% had muscular pains.

2 By age

Diseases due to overstraining of the tendon sheaths are the most frequent MSDs and in 2004 they were slightly more recurrent among young workers (77% of the total for young workers) than among all workers: 74%.

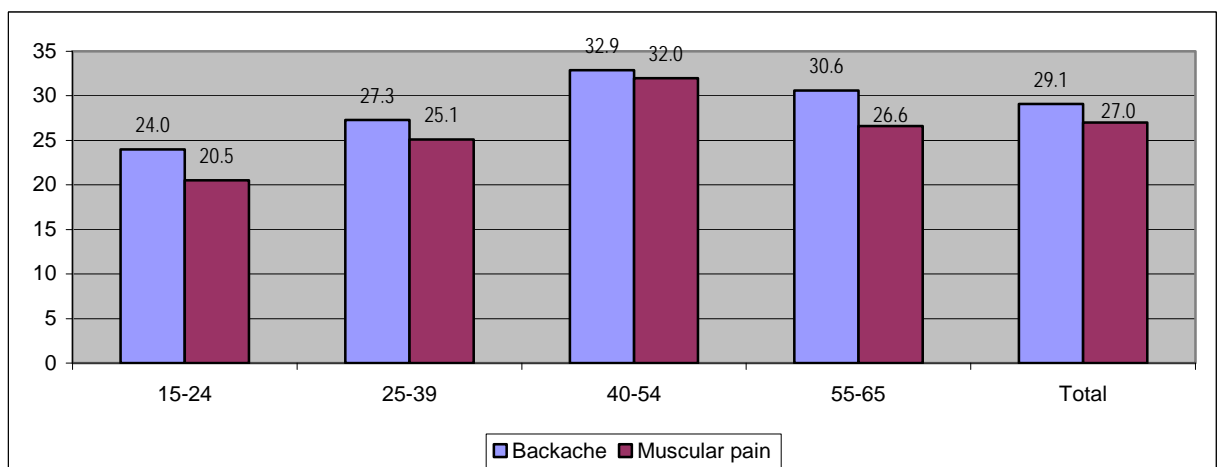
Figure 5: Main musculoskeletal disorders by age (% of the total), 2000-2004



Source: Occupational Diseases File

Also by age, the ESWC reveals that the age group 40-54 reports the highest shares of both backache (32.9%) and muscular pain (32%) in Spain. In general, the prevalence of MSDs increases with age until the 40-54 age group but all age groups report significant shares of MSDs.

Figure 6: Percentage share of workers reporting backache and muscular pain in Spain, by age, 2005

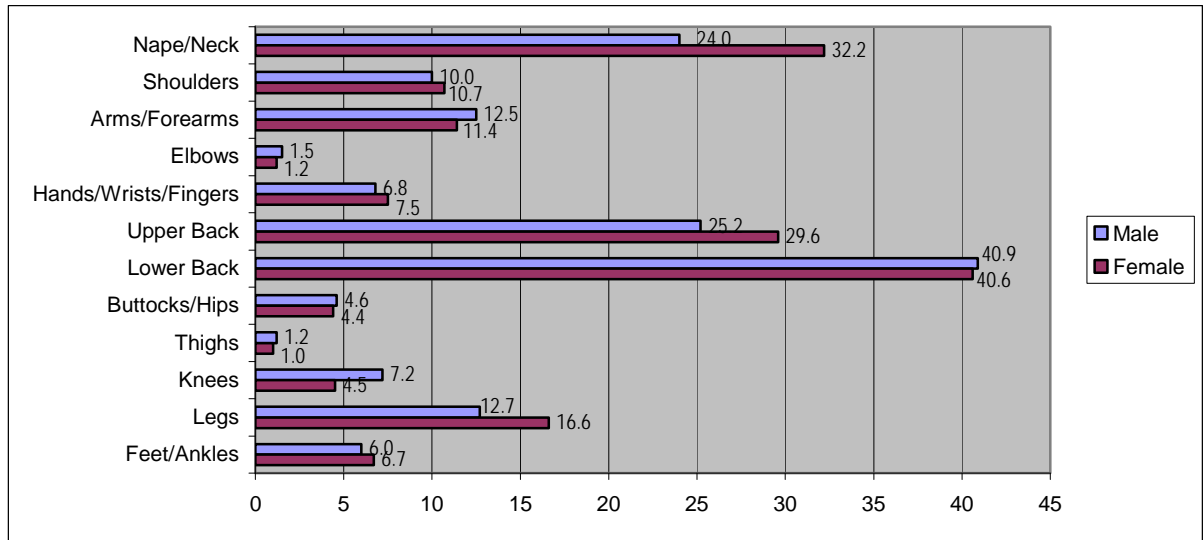


European Survey on Working Conditions, 2005.

3 By gender

Although there are no great differences in the prevalence of physical demands by sex, neck pain is more frequent among women (32.2%) than men (24%). Women also report higher shares of upper back pain (29.6%) and pains in the legs (16.6%).

Figure 7: Body part affected by musculoskeletal disorders, by gender (% of the total), 2007

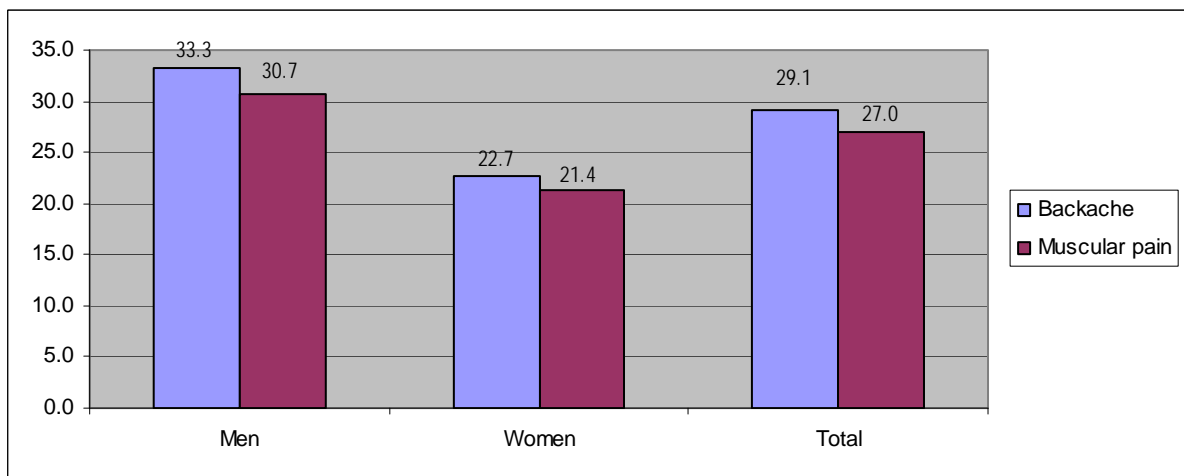


Base: Total of workers

Source: Sixth National Survey of Working Conditions (2007)

Data from the ESWC report a slightly higher prevalence of MSDs among Spanish men than among their female counterparts. In this sense, one third of Spanish men complain of backache as opposed to 22.7% among their female counterparts. The prevalence of muscular pain is a bit lower for both genders.

Figure 8: Percentage share of workers reporting backache and muscular pain in Spain, by gender, 2005



EEuropean Survey on Working Conditions, 2005.

4 By sector

MSDs represent over 80% of all occupational diseases in Spain and are highest in manufacturing and construction. High reported shares of backache and muscular pain in public administration.

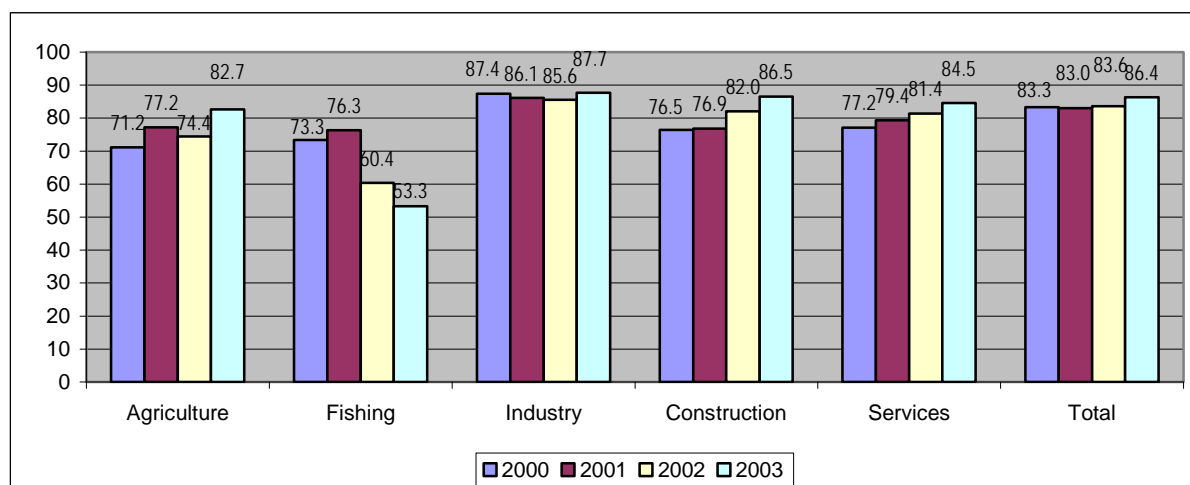
The number of MSDs has fluctuated between 12,884 cases in 2000 and 20,489 in 2003. These figures represented 83.3% and 86.4%, respectively, of the total of occupational diseases. The highest share is found among workers in manufacturing industry (87.7%), while construction has witnessed a steady increase from 76.5% in 2000 to 86.5% in 2003.

Table 3: Number of MSDs by sector

		Agriculture	Fishing	Manufacturing	Construction	Services	Total
2000	Other	92	8	1,221	372	882	2,575
	MSDs	227	22	8,446	1,211	2,978	12,884
	Total	319	30	9,667	1,583	3,860	15,459
2001	Other	114	9	1,473	469	968	3,033
	MSDs	386	29	9,161	1,560	3,724	14,860
	Total	500	38	10,634	2,029	4,692	17,893
2002	Other	124	21	1,671	456	1,126	3,398
	MSDs	360	32	9,916	2,083	4,933	17,324
	Total	484	53	11,587	2,539	6,059	20,722
2003	Other	102	28	1,590	401	1,112	3,233
	MSDs	486	32	11,314	2,573	6,084	20,489
	Total	588	60	12,904	2,974	7,196	23,722

Source: Occupational Diseases File

Figure 9: Percentage share of musculoskeletal disorders in total occupational diseases, by sector, 2000- 2003

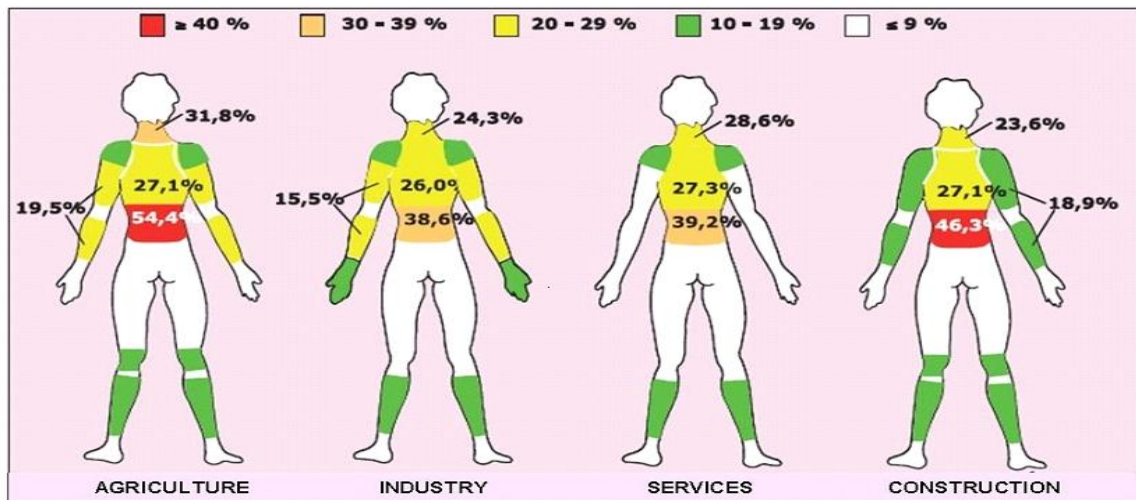


Source: Occupational Diseases File

The information by body part reveals that lower back pain is the most frequent MSDs across all big four sectors, being particularly high in agriculture (54.4%) and construction (46.3%). Neck pains are the second most common in agriculture (31.8%) and services (28.6%), whereas in manufacturing and construction upper back pains come second, being reported by 26% and 27.1% of workers, respectively.

Body part affected by MSDs (in % of workers), by sector, 2007

MORE FREQUENT MUSCULOSKELETAL DISORDERS BY SECTOR OF ACTIVITY

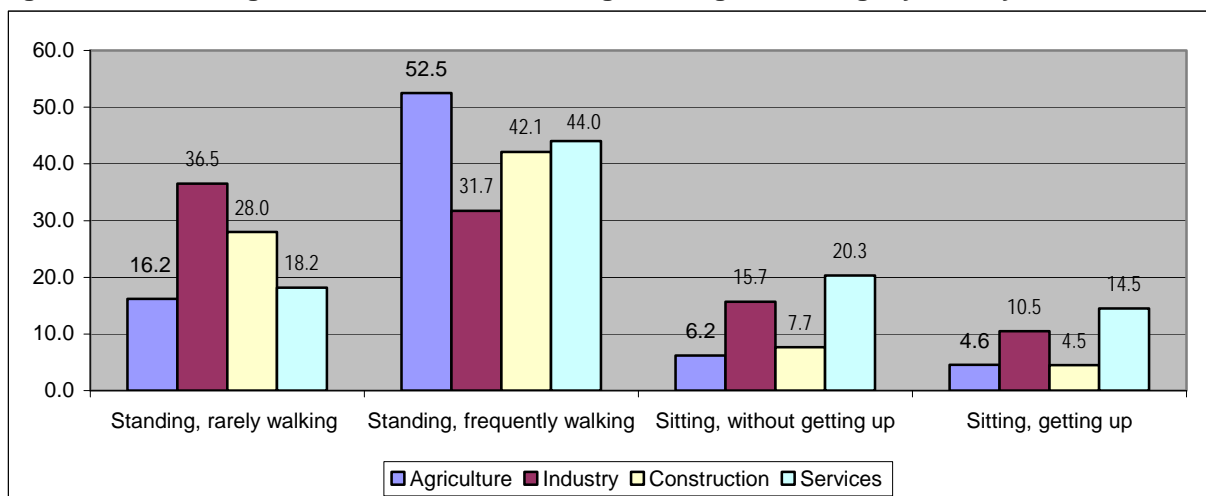


*Basis: Total interviewed.
Multiple choice questions*

Source: National Survey of Working Conditions, 2007

Information from the Sixth National Survey of Working Conditions reveals that the most common posture at work is to be standing and walking frequently. This is most frequent in agriculture (52.5%), services (44%) and construction (42.1%). In manufacturing industry standing and rarely walking is the most common posture (36.5%). Sitting postures are most common in services, both getting up (14.5%) and without getting up (20.3%).

Figure 10: Percentage share of workers standing, walking and sitting, by activity sector, 2007



Base: Total of workers

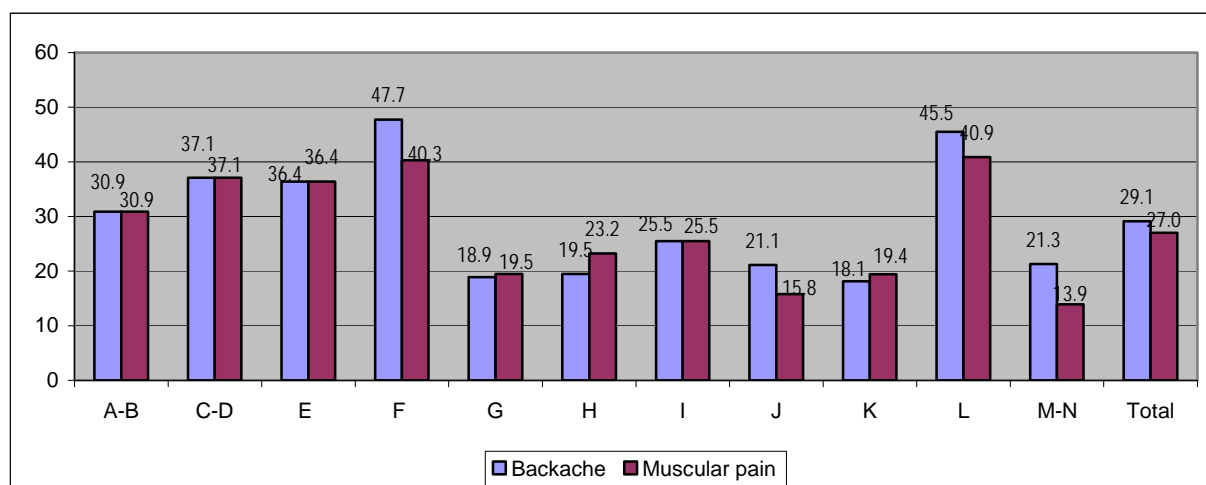
Source: National Survey of Working Conditions, 2007

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: Wholesale 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;
- P: Activities of households;
- Q: Extra-territorial organizations and bodies.

According to the information from the ESWC, the sectors with the highest prevalence of MSDs in Spain are construction and public administration. In this sense, almost half of all construction workers (F) in Spain (47.7%) report suffering from backache, while 40.3% complain of muscular pains. These shares are very similar to those found in public administration (L): 45.5% and 40.9%, respectively. Other sectors with remarkable prevalence of MSDs are manufacturing (C-D), utilities (E) and agriculture (A-B).

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



European Survey on Working Conditions, 2005.

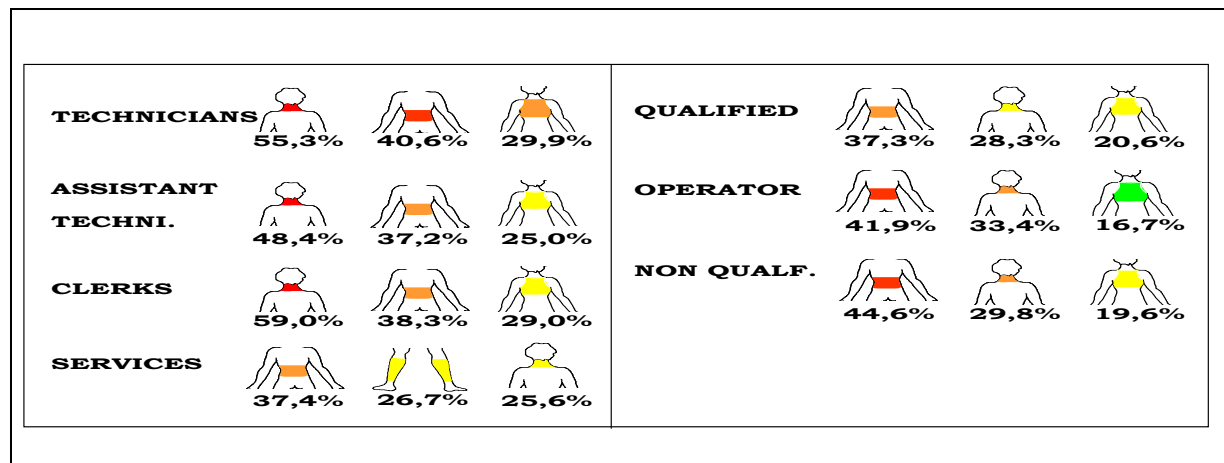
5 By occupation

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.

Whereas among technicians, assistant technicians and clerks the body part most affected is mainly the neck, in the remaining occupations (workers of services, qualified workers, operators and non qualified workers) the most frequent complains refer to lower back pains. The figure below shows the high percentage of neck pain among clerks (59%) and technicians (55.3%).

Body part affected by MSDs in workers from Industry and Services, by occupation, 2003.

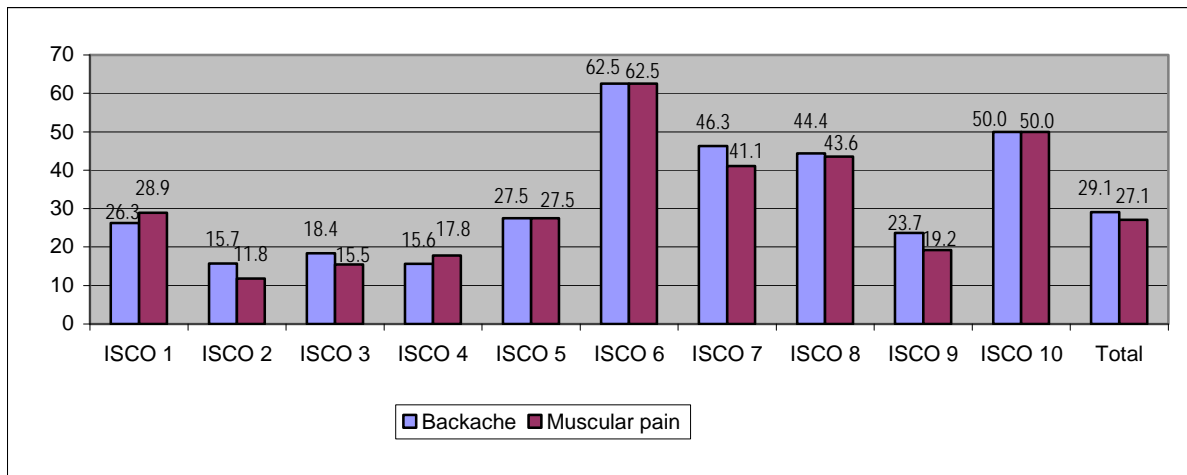


Base: Workers from Industry and Services

Source: National Survey of Working Conditions, 2003

Data from the ESWC reveal that skilled agricultural and fishery workers (ISCO 6) report the highest prevalence of MSDs: 62.5% of both backache and muscular pains. Craft and related trades workers (ISCO 7) and plant and machine operators and assemblers (ISCO 8) also report significant shares with more than 40% of workers in these occupations suffering from MSDs.

Figure 12: Percentage share of workers reporting backache and muscular pain in Spain, by occupation, 2005

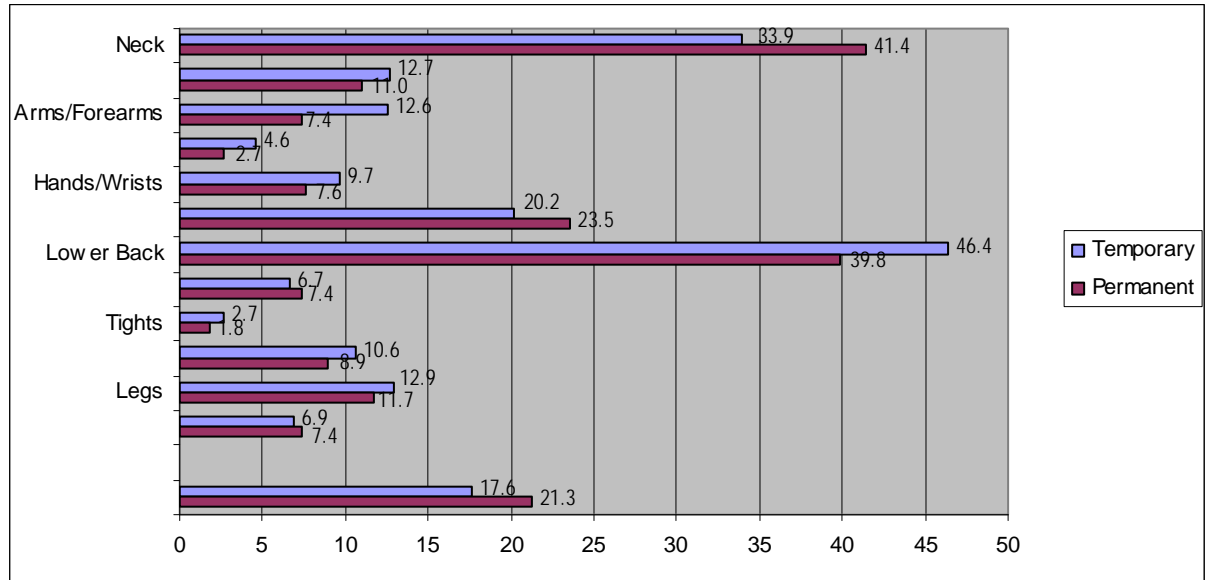


European Survey on Working Conditions, 2005.

6 By employment status

Workers with temporary contracts report suffering from more musculoskeletal disorders (82.4%) than those with a permanent contract (78.7%). The differences are more acute regarding neck pain: 41.4% among workers with a temporary contract as opposed to 33.9% among those with a permanent one. Arms/forearms (12.6% vs. 7.4%) and lower back pain (46.4% vs. 39.8%) also report some differences between temporary and permanent workers.

Figure 13: Body part affected by musculoskeletal disorders, by employment status, 2003

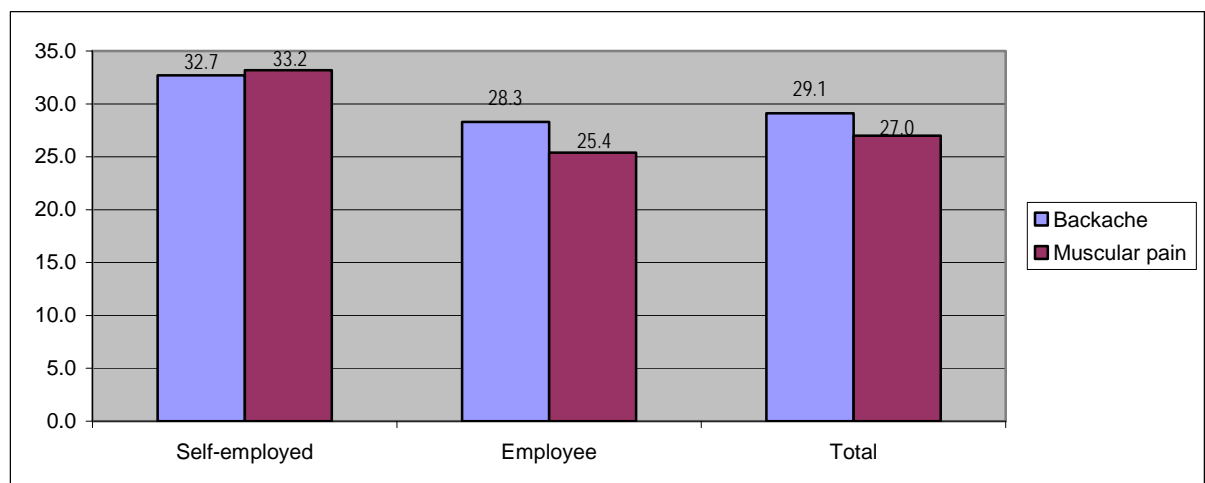


Base: Total of workers

Source: National Survey of Working Conditions, 2003

The ESWC results show a higher prevalence of MSDs among self-employed than employees. One third of self-employed report suffering from backache (32.7%) and muscular pains (33.2%) while the corresponding shares among employees are lower: 28.3% and 25.4%, respectively.

Figure 14: Percentage share of workers reporting backache and muscular pain in Spain, by employment status, 2005



European Survey on Working Conditions, 2005.