European Agency for Safety and Health at Work

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

National Report: France

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European Agency for Safety and Health at Work

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

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

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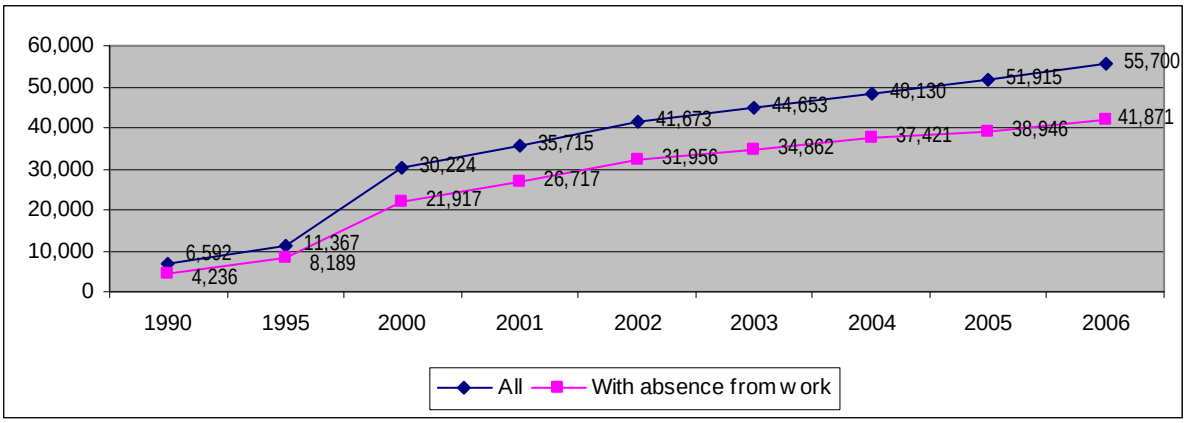
Summary

The number of recognised occupational diseases in France has risen significantly between 1990 and 2006. As shown in the graph, in 1990 6,592 occupational diseases were recognised in France (4,236 with absence from work) whereas by 2006 the figure has risen to 55,700 (41,871 with absence from work). All in all, over 275,000 cases have been recognised and compensated in 10 years.

Figure 1: Number of recognised occupational diseases, all and with absence of work, 1990-2006



CNAMTS, 1990-2006

More specifically, work-related musculoskeletal disorders are recorded in the French statistics under table **T57** “periarticular diseases caused by gestures and postures at work” and **T69** “diseases caused by vibration and shocks due to machines-tools, tools and objects and to iterative shocks at the heel of the hand on fixed elements”.

Diseases caused by postures at work (T57) accounted for 68 % of all occupational diseases in 2003 and regularly increased reach 23,672 cases in 2003. Diseases caused by vibration and shocks (T69), 187 in 2003, show an upward trend.

People aged 40-59 are particularly concerned by these two types of diseases, representing 73% of all cases of vibration and 71% of the total of gestures and postures. Diseases caused by vibration and shocks have affected men (96%) while those caused by gestures and postures concerned women in 57% of the cases.

Diseases caused by postures at work were recorded particularly in manufacture of food products (D) and manufacture of basic metals (A), whereas diseases caused by vibration affected construction sector (B) and the manufacture of basic metals sector (A), in particular. For both types of disease, craft and related trades workers, plant and machine operators and elementary occupations were the occupations the most reported.

According to the Fourth European Survey on Working Conditions (ESWC), over one fifth of French workers (21.6%) complained of work related backache in 2005, while the share of those reporting muscular pain reached 18.8%.

By age, the highest prevalence of MSDs is found among the 40-54 age group workers, whereas by gender, a higher prevalence of backache is found among men (22.2%) than women (20.9%) but muscular pain shows the reverse: 20.3% among women and 17.3% among men.

The ESWC also shows that agriculture, construction and hotels and restaurants are the sectors with the highest prevalence of MSDs. By occupation skilled agricultural and fishery workers (ISCO 6) are the most affected by MSDs, with almost 60% of them reporting both backache and muscular pain (57.1%).

Finally, by employment status, it can be seen that self-employed workers report higher prevalence of MSDs than employees.

Source description

Statistical sources

Title	National statistics for occupational accidents and diseases and accidents to and from work
Institution	CNAMTS – Caisse nationale d'assurance maladie des travailleurs salariés
Country	France
Periodicity	Annual
Type	Financial and technological statistics for occupational accidents and diseases
URL	http://www.risquesprofessionnels.ameli.fr/fr/synthese/statistiques_synthese_1.php
Demographic group	Salaried employees
Objectives	Monitor trends of occupational accidents and diseases and identify indicators that can be used to frame OSH actions.
Description	Data from occupational accident and disease reports, with a listing of the cases recognised and treated.
Content	▪ Financial statistics of occupational accidents and diseases; ▪ Technological statistics of occupational accidents; ▪ Technological statistics of accidents to and from work - Technological statistics of occupational diseases; **Technological statistics of occupational accidents** They are given by category of company activity and list: the number of reportable accidents, the number of accidents leading to permanent disability, the number of fatalities, the number of lost time days. The criteria used are: age, nationality, gender, vocational qualification, the nature of the injury, the location of the injury, the location of the accident, the material factor. **Technological statistics of occupational diseases** They are given by type of disease and list: the number of reportable diseases, the number of diseases leading to permanent disability, the number of fatalities, the number of lost time days. The criteria used are: the syndrome, age, gender, profession, length of exposure.

Title	Enquête sur la Surveillance Médicale des Risques professionnels (Survey about the medical monitoring of risks)
Acronym	SUMER
Institution	Ministère du travail, de l'emploi et de la condition sociale, DARES (Ministry of Labour -Statistical service)
Country	France

Title	Enquête sur la Surveillance Médicale des Risques professionnels (Survey about the medical monitoring of risks)
Periodicity	About every 7 to 8 other years: First survey in 1994; Second survey from June 2002 to end of 2003
Type	Questionnaire-based survey: Data collected by occupational physicians in the frame of medical interviews of workers.
URL	http://www.travail-solidarite.gouv.fr/etudes-recherche-statistiques-dares/statistiques/sante-au-travail/
Demographic group	▪ In 1994: 48.000 workers randomly chosen amongst insured of the "Régime Général" (most important group of insured workers from the private sector counting ca. 17 million workers) and of the agricultural sector (insured by "Mutualité Sociale Agricole - MSA"). ▪ In 2002/2003: 56,314 workers randomly pulled out by occupational physicians, of which 49,984 responded to the survey. Additional sectors were covered: public hospitals, EDF-GDF (electricity and gas provider), La Poste (postal services), Air FRANCE (national airline) and SNCF (national railroad company).
Objectives	The aim of the survey is to identify the exposures and constraints affecting workers, the nature and duration thereof, the number of workers affected, their skills and status, the sectors at risk and their evolution.
Description	This cross-survey based on a representative sample of workers describes the exposure to occupational risks by age, gender, sector, occupation and size of company. The occupational physician in charge of the company collects the data in the frame of a medical interview. One advantage of this method is the physician's knowledge of the worker's workplace. Occupational physicians participate in the survey on a voluntary basis. They fill out a main questionnaire during the worker's medical examination. For the first time in 2002, the survey included an additional questionnaire in which the workers were asked for job perception and how they think that it impacts on health. In 1994, 1.200 occupational physicians surveyed 48.000 workers from the private sector (régime general) and agricultural sector. In 2002/2003, 49,984 workers - out of the 56,314 randomly selected - accepted to participate in the medical interview performed by one of the 1,792 occupational physicians (20%) carrying out the survey. Additional sectors were covered by the second survey, such as public hospitals, EDF-GDF (electricity and gas provider), La Poste, Air FRANCE and SNCF. Because of the additional sectors covered by the second survey, the results from are referred to as "extended coverage". In order to compare the data from both surveys, data for the sole sectors covered in 1994 were also calculated and are referred to as "restricted coverage".
Content	Questions on: work organisation, physical working environment (noise, light, atmosphere, loads, etc.), exposure to biological agents and to chemical substances.

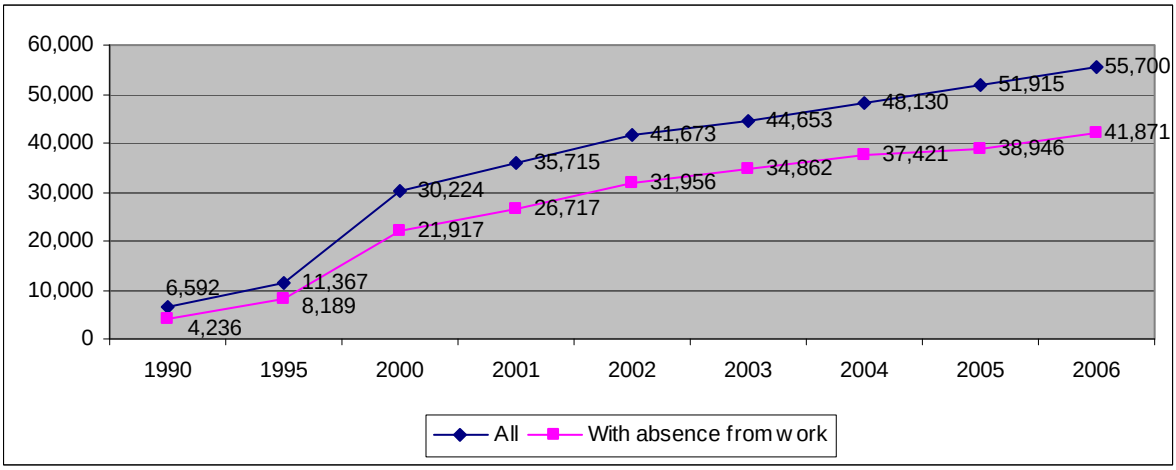
Acronym	ESWC
Institution	European Foundation for the Improvement of Working and Living Conditions (Dublin).
Country	EU

Acronym	ESWC
Periodicity	Every 4 years: 1991-1996-2000-2005
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.
Questions	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).

1 General prevalence

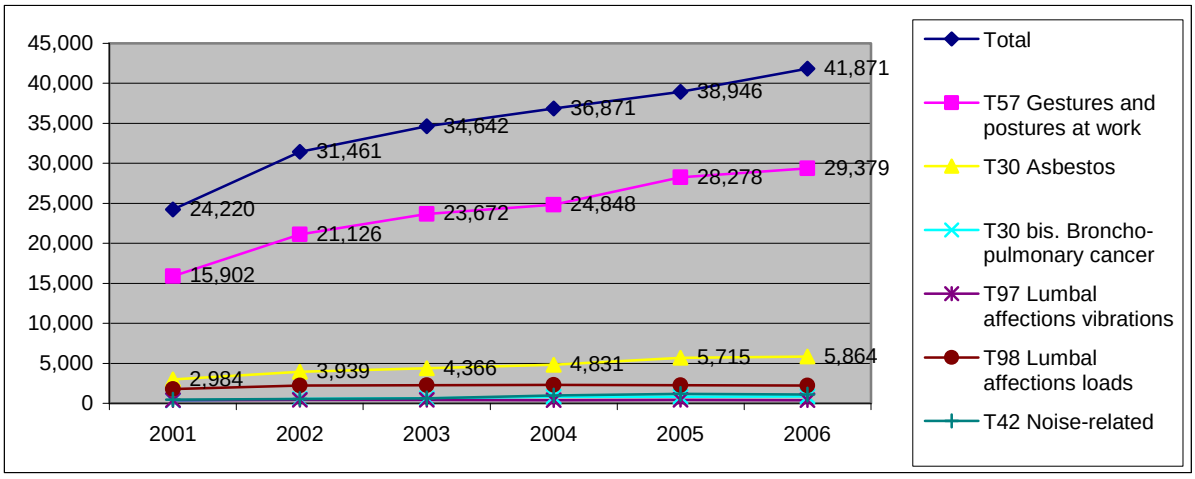
The number of recognised occupational diseases in France has risen significantly between 1990 and 2006. As shown in the graph, in 1990 6,592 occupational diseases were recognised in France (4,236 with absence from work) whereas by 2006 the figure has risen to 55,700 (41,871 with absence from work). All in all, over 275,000 have been recognised and compensated in 10 years.

Figure 2: Number of recognised occupational diseases, all and with absence of work, 1990-2006



CNAMTS, 1990-2006

Figure 3: Number of recognised (major) occupational diseases, with absence of work, 2001-2006

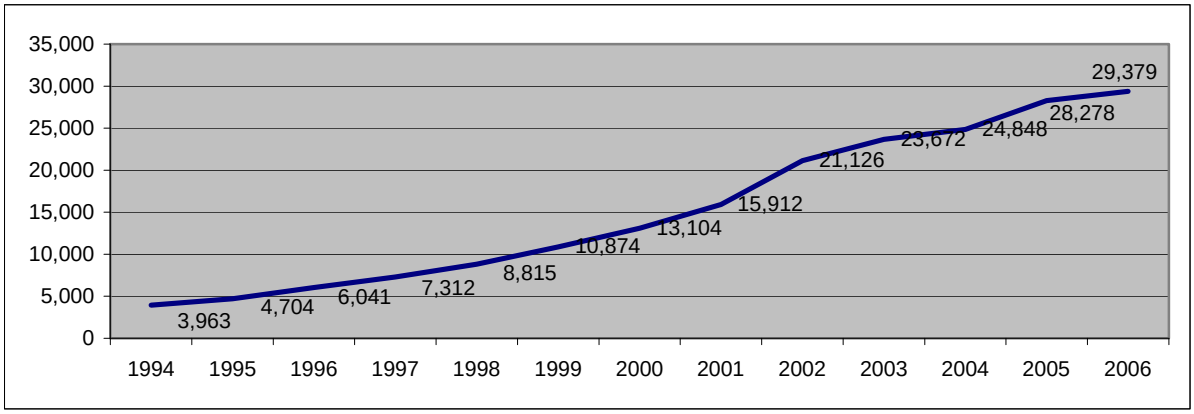


CNAMTS, 2001-2006

Work-related musculoskeletal disorders are recorded in the French statistics under table T57 “periarticular diseases caused by gestures and postures at work” and T69 “diseases caused by vibration and shocks due to machines-tools, tools and objects and to iterative shocks at the heel of the hand on fixed elements”.

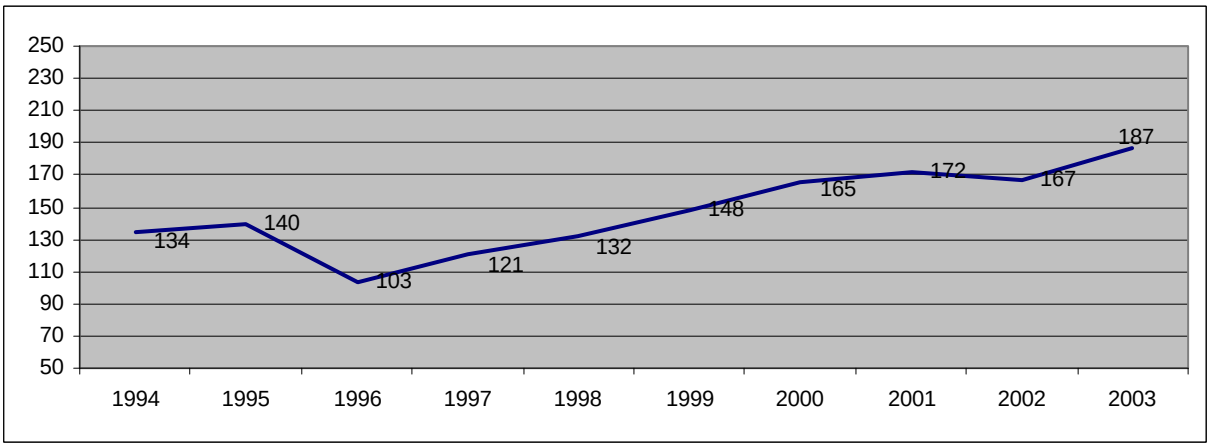
Diseases caused by postures at work (T57) accounted for 70% of all occupational diseases in 2006 with 29,379 cases (53% in 1994 with 3,963 cases). Meanwhile, diseases caused by vibration and shocks (T69) accounted for 1% of all occupational diseases in 2003 (more recent data unavailable) and their number increased regularly from 134 in 1994 to 187 cases in 2003.

Figure 4: Diseases caused by gestures and postures at work (T57). Number of recognised cases, 1994-2006.



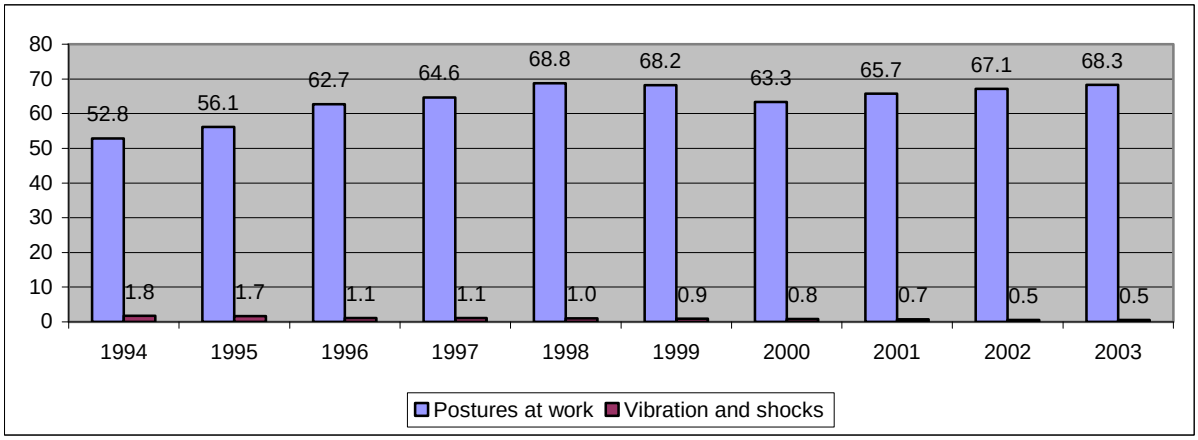
CNAMTS, 1994-2006

Figure 5: Diseases caused by vibration and shock (T69). Number of recognised cases, 1994-2003.



CNAMTS, 1994-2003

Figure 6: Percentage share of occupational diseases caused by postures at work and vibration & shocks, in total occupational diseases, 1994-2003.



CNAMTS, 1994-2003

Regarding the ESWC, 21.6% of French workers reported suffering from work related backache while the share of those complaining of muscular pain reached 18.8%.

2 By age

People aged 40-59 have recorded the highest number of disorders due to both postures at work (71%) and to vibration and shocks (73%). For the postures at work, the share shows an upward trend for this age class and a downward trend for the age class 25-39 (29% in 2001, 26% in 2003). For vibration, the trend is the opposite: people aged 25-39 represented 19% of all suffering from vibration in 2001 while in 2003 their share in the total was almost 22%.

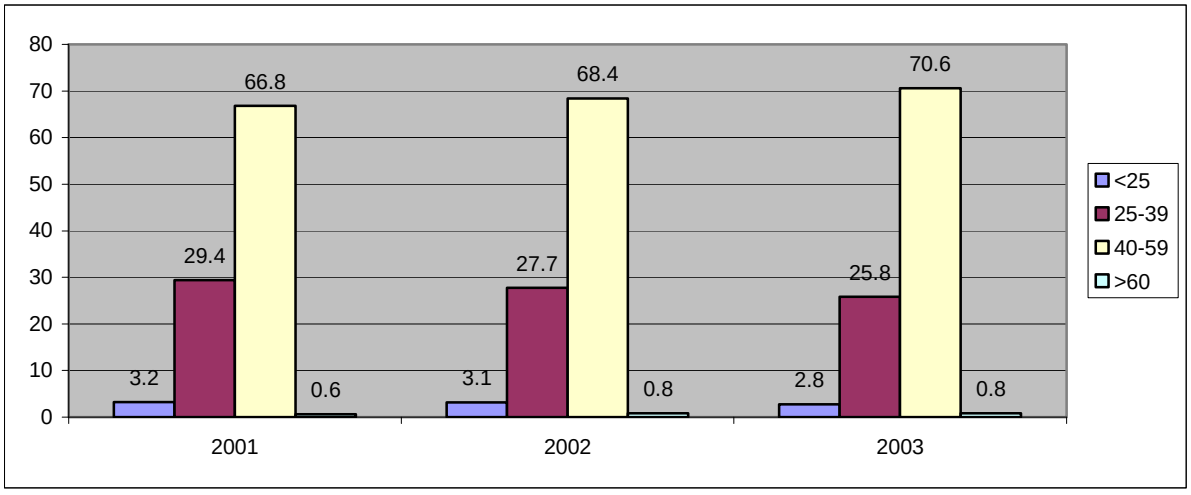
For young people (under 25), the proportion of cases of disorders due to postures at work has remained constant around the 3% mark while their share in the total number of cases due to vibration has increased from 1% in 2001 to 3% in 2003. In any case, it has to be borne in mind that absolute numbers of vibration are very low: 5 cases of people aged under 25.

Table 1: Diseases (number of cases) caused by gestures and postures at work (T57) and by vibration and shocks (T69), by age, 2001-2003.

	2001		2002		2003	
	T57	T69	T57	T69	T57	T69
< 25	512	2	661	1	658	5
25-39	4,675	33	5,855	37	6,106	41
40-59	10,627	132	14,443	125	16,717	136
> 60	98	5	167	4	191	5
Total	15,912	172	21,126	167	23,672	187

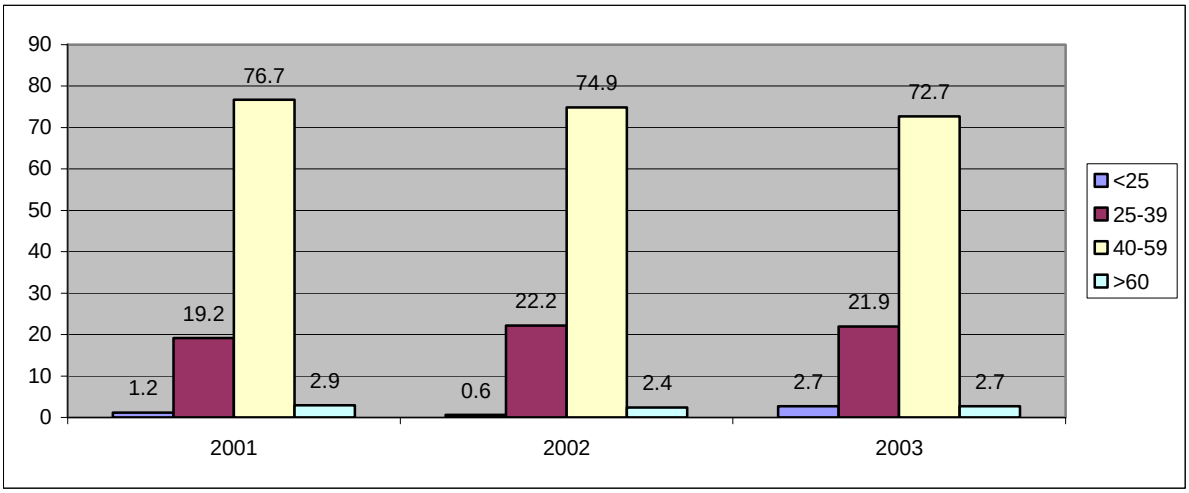
CNAMTS, 2001-2003

Figure 7: Percentage distribution by age of occupational diseases caused by postures at work (T57)



CNAMTS, 2001-2003

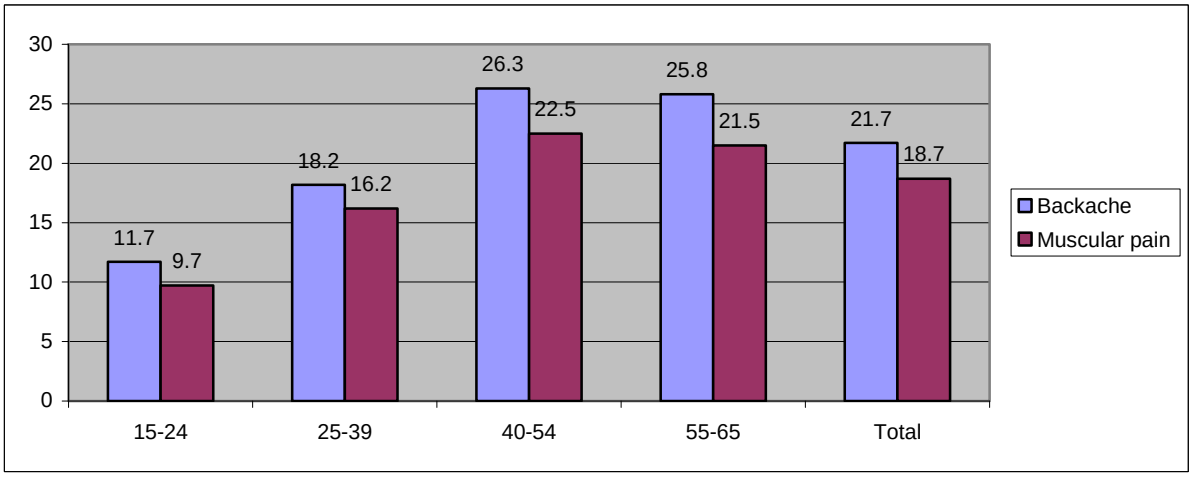
Percentage distribution by age of occupational diseases caused by vibration & shocks, 2001-2003



CNAMTS, 2001-2003

As far as the ESWC is concerned, the highest prevalence of MSDs is found among the 40-54 age group workers. More specifically, 26.3% of workers in this age group report suffering from backache while 22.5% of them complain of muscular pain. The prevalence of MSDs increases with age until this age group and then drops slightly among the 55-65 age group workers, who report a 25.8% of backache and 21.5% of muscular pain.

Figure 8: Percentage share of workers reporting MSDs: backache and muscular pain, by age, 2005



European Survey on Working Conditions, 2005

3 By gender

Diseases caused by postures at work (T57) affected more women (57% of the cases) than men, a trend that has increased slowly since 2002.

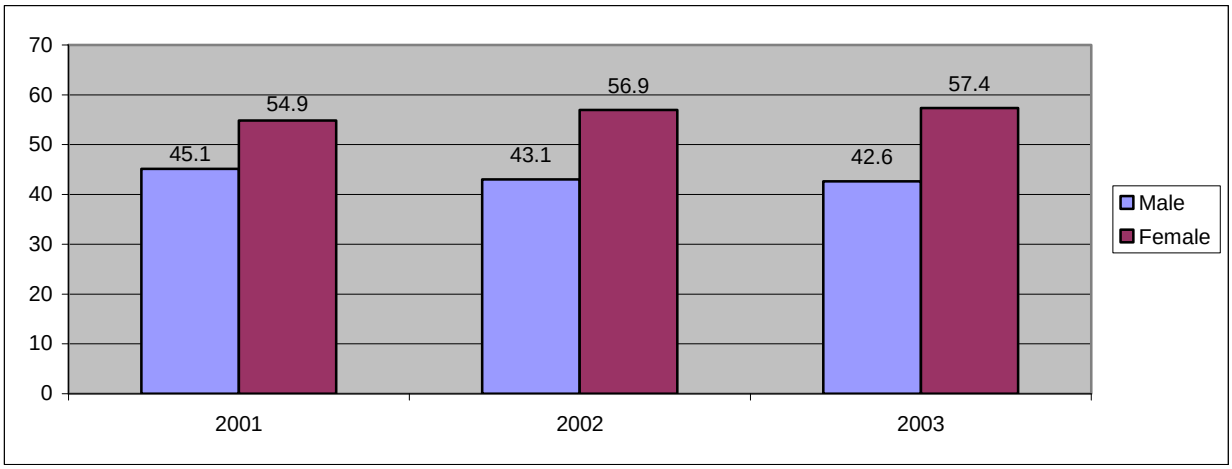
As far as diseases caused by vibration and shocks are concerned, they are significantly higher among men, who concentrated 96% of the total.

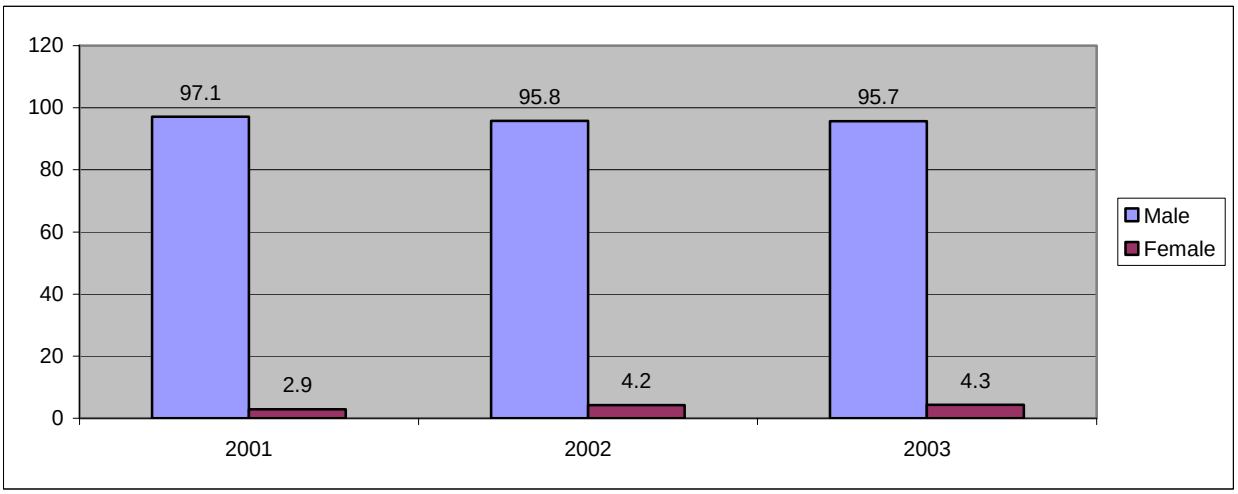
Table 2: Diseases (number of cases) caused by gestures and postures at work (T57) and vibration and shocks (T69), by gender, 2001-2003

	2001		2002		2003	
	T57	T69	T57	T69	T57	T69
Males	7,177	167	9,096	160	10,093	179
Females	8,727	5	12,030	7	13,579	8
Total	15,904	172	21,126	167	23,672	187

CNAMTS, 2001-2003

Figure 9: Percentage distribution by gender of occupational diseases caused by postures at work (T57) and vibration and shocks (T69), 2001-2003

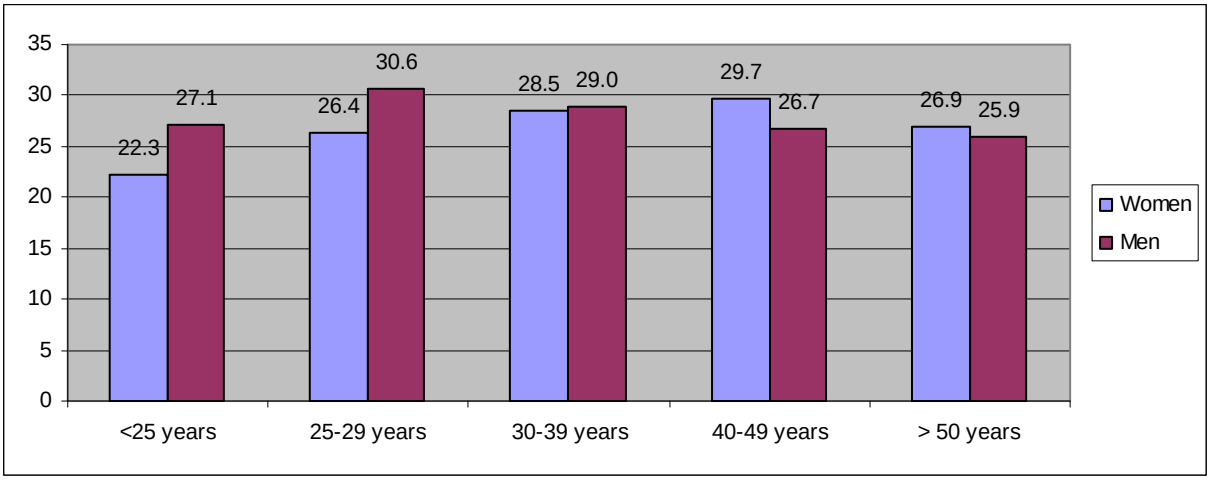




CNAMTS, 2001-2003

An analysis of gender and risk factors shows that the percentage share of male workers who are exposed to two or more risk factors gradually decreases with age, beyond the age of 30. As opposed to this, the situation among women gets gradually worse with age, slightly improving among those aged 50 and over.

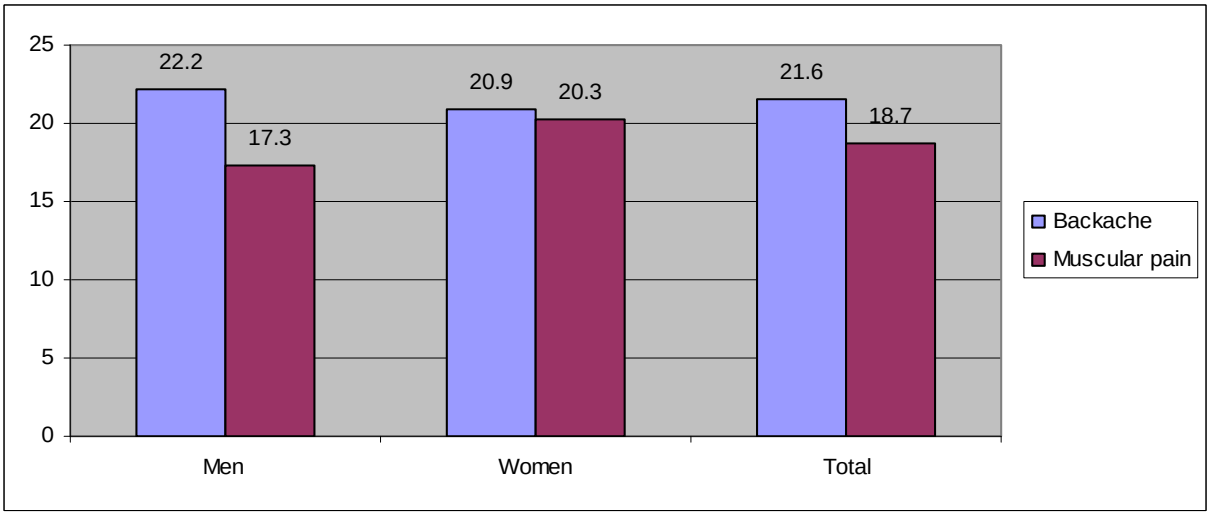
Figure 10: Percentage share of workers with two or more exposures, by gender and age, 2003



Dares – DGT SUMER

The ESWC reveals a higher prevalence of backache among men (22.2%) than women (20.9%) but when it comes to muscular pain the reverse is true and women report a higher share than their male counterparts: 20.3% and 17.3%, respectively.

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



European Survey on Working Conditions, 2005

4 By sector

Sectors in French national data by CNAMTS

A	Manufacture of basic metals;
B	Construction – Building and civil engineering;
C	Transport, storage, communication, electricity, gas, water supply;
D	Manufacture of food products;
E	Manufacture of chemical, rubber and plastic products;
F	Manufacture of wood, textile, paper, leather products;
G	Trade (excepted food trade);
H	Service activities I (financial intermediation, administration…);
I	Service activities II and temporary work (health and social work…).

In 2003, the manufacture of food products (D) and manufacture of basic metals (A) recorded the highest number of diseases caused by postures at work: 4,880 and 3,468 cases, respectively.

Moreover, diseases caused by postures at work in the manufacture of food products (D) represented 90% of all occupational diseases recorded in the sector in 2003.

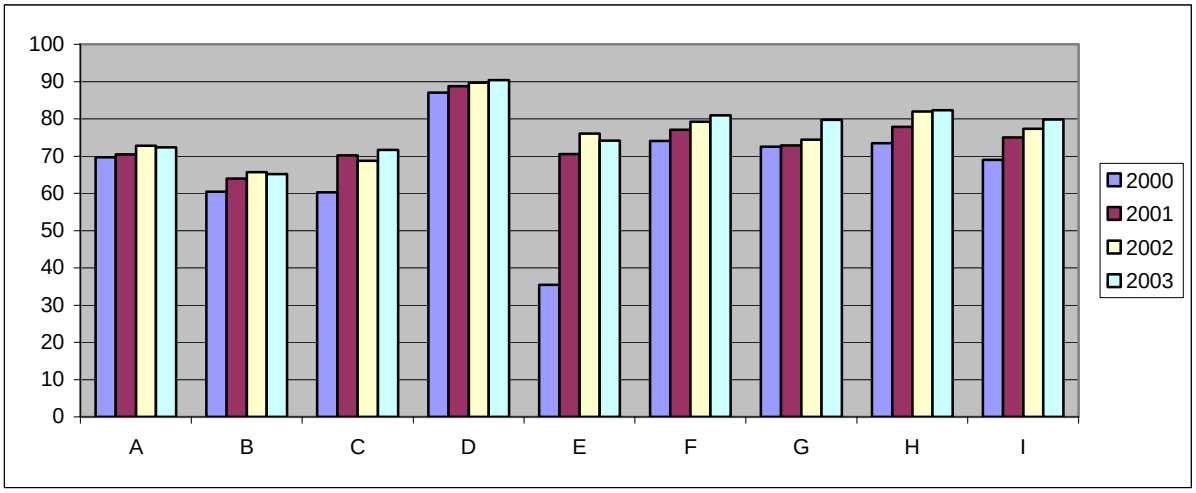
Table 3: Diseases caused by gestures and postures at work (T57). Number of cases and %.

	2000		2001		2002		2003	
	N	%	N	%	N	%	N	%
A	2,296	70	2,686	70	3,398	73	3,468	72
B	1,581	60	1,892	64	2,256	66	2,159	65
C	417	60	563	70	734	69	859	72
D	2,839	87	3,397	89	4,530	90	4,880	90
E	285	35	625	71	903	76	936	74
F	1,428	74	1,619	77	2,078	79	2,046	81
G	414	73	537	73	739	74	877	80
H	338	73	419	78	602	82	665	82
I	1,126	69	1,529	75	1,981	77	2,177	80

% (line): % of the total for each year and for each sector

CNAMTS, 2000-2003

Figure 12: Percentage share of occupational diseases caused by postures at work, in total occupational diseases, by sector, 2000-2003.



CNAMTS, 2000-2003

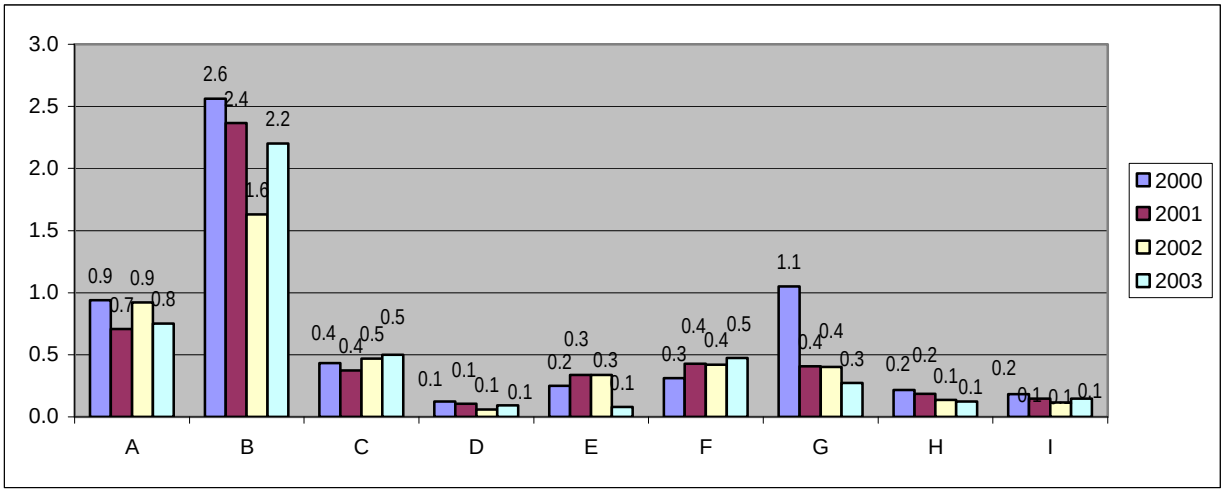
Regarding diseases caused by vibration and shocks in 2003, construction (B) and manufacture of basic metals (A) reported the highest numbers: 73 and 36 cases, respectively.

Table 4: Diseases caused by vibration and shocks (T69). Number of cases and %.

	2000		2001		2002		2003	
	N	%	N	%	N	%	N	%
A	31	1	27	1	43	1	36	1
B	67	3	70	2	56	2	73	2
C	3	0	3	0	5	0	6	1
D	4	0	4	0	3	0	5	0
E	2	0	3	0	4	0	1	0
F	6	0	9	0	11	0	12	0
G	6	1	3	0	4	0	3	0
H	1	0	1	0	1	0	1	0
I	3	0	3	0	3	0	4	0

CNAMTS, 2000-2003

Figure 13: Percentage share of occupational diseases caused by vibration & shocks, in total occupational diseases, by sector, 2000-2003



CNAMTS, 2000-2003

Sector groups (sections in NACE Rev 1.1) used in ESWC 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;

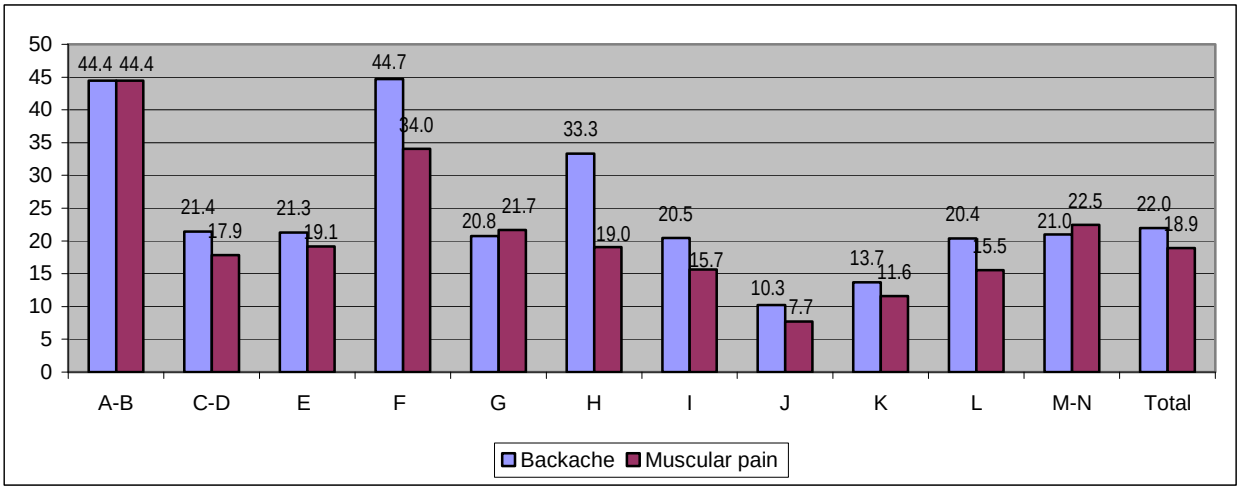
P: Activities and households;

Q: Extra-territorial organizations and bodies.

The ESWC shows that agriculture, construction and hotels and restaurants are the sectors with the highest prevalence of MSDs. In this sense, almost half of all workers in construction (44.7%) and agriculture and fisheries (44.4%) report suffering from backache while the share is a bit lower among workers in hotels and restaurants (33.3%).

Regarding muscular pain, again agriculture reports the highest share (44.4%), followed by construction (34%) and education and health (22.5%).

Figure 14: Percentage share of workers reporting MSDs: backache and muscular pain, 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.

Three categories concentrated the bulk of diseases caused by postures at work in 2003: craft and related trades workers (37% of all cases), plant and machine operators (23%) and elementary occupations 22%.

These three occupations are also significant for diseases caused by vibration and shocks, especially for the craft and related trades workers, which accounted for 76% in 2003 with 143 cases.

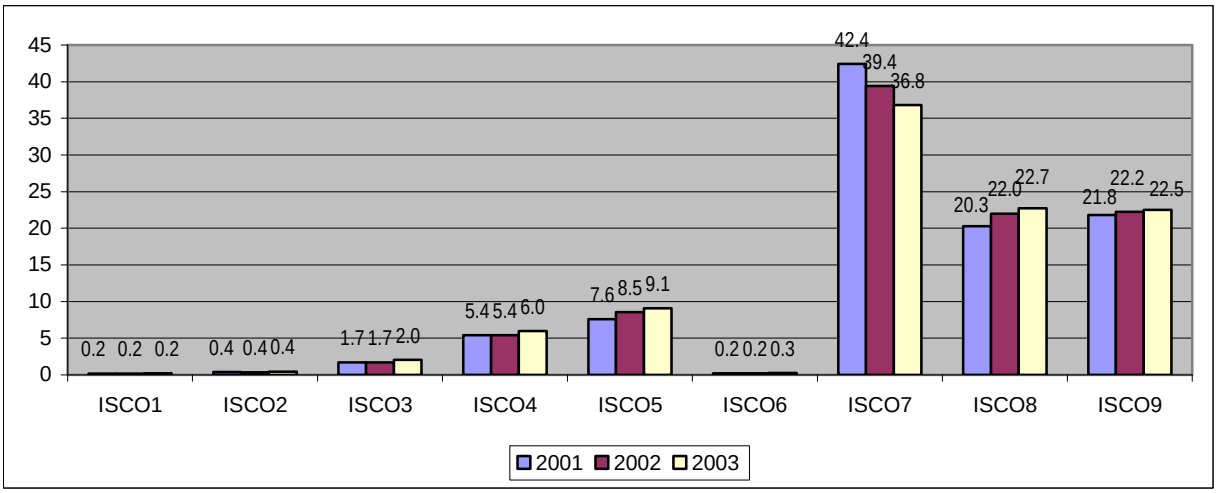
Table 5: Diseases caused by gestures and postures at work (T57). Number of cases.

	2001		2002		2003	
	T57	T69	T57	T69	T57	T69
ISCO 1	28	0	35	1	50	0
ISCO 2	61	0	76	0	103	1

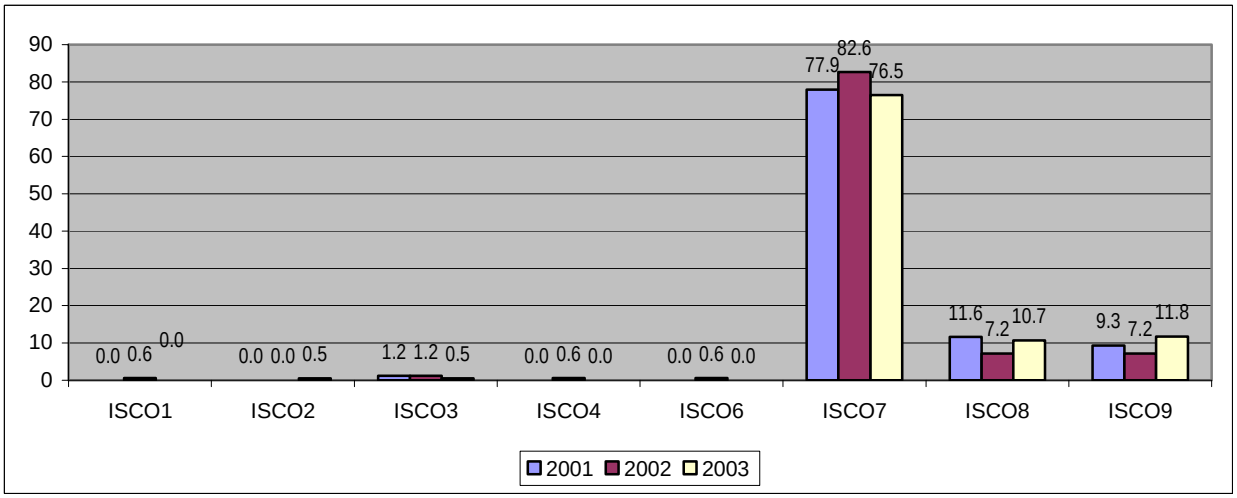
	2001		2002		2003	
	T57	T69	T57	T69	T57	T69
ISCO 3	269	2	363	2	481	1
ISCO 4	861	0	1,142	1	1,418	0
ISCO 5	1,204	0	1,804	0	2,148	0
ISCO 6	38	0	44	1	62	0
ISCO 7	6,751	134	8,325	138	8,712	143
ISCO 8	3,228	20	4,642	12	5,376	20
ISCO 9	3,472	16	4,695	12	5,322	22
Total	15,912	172	21,126	167	23,672	187

CNAMTS, 2001-2003

Figure 15: Percentage distribution by occupation of occupational diseases caused by postures at work (T57) and vibration and shocks (T69), 2001-2003.



Percentage distribution by occupation of occupational diseases caused by vibration and shocks (T69), 2001-2003.

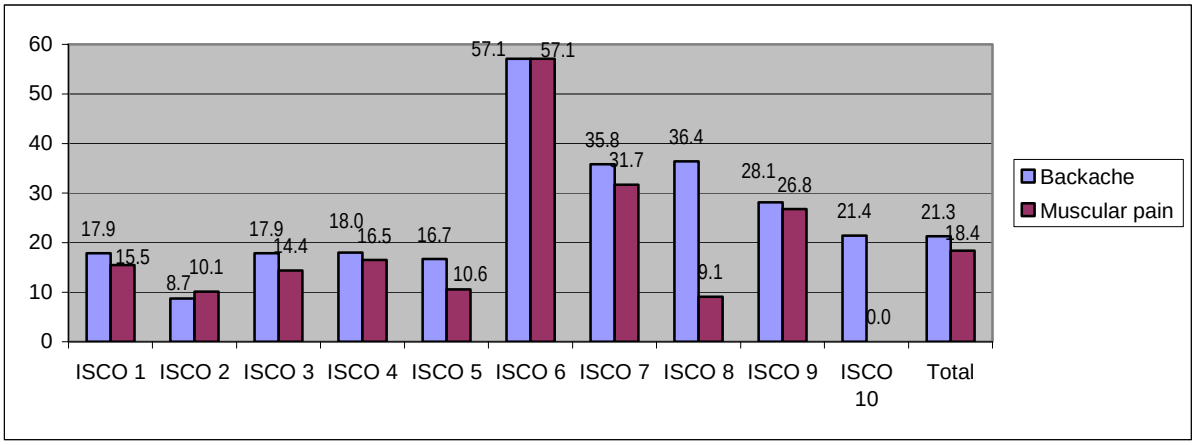


CNAMTS, 2001-2003

The ESWC results show that skilled agricultural and fishery workers (ISCO 6) are the most affected by MSDs, with almost 60% of them reporting both backache and muscular pain (57.1%). Backache is particularly frequent too among plant and machine operators and assemblers (36.4%), craft and related trades workers (35.8%) and elementary occupations (28.1%).

Regarding muscular pain, the most affected occupations, after skilled agricultural and fishery workers, are craft and related trades workers (31.7%) and elementary occupations (26.8%).

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

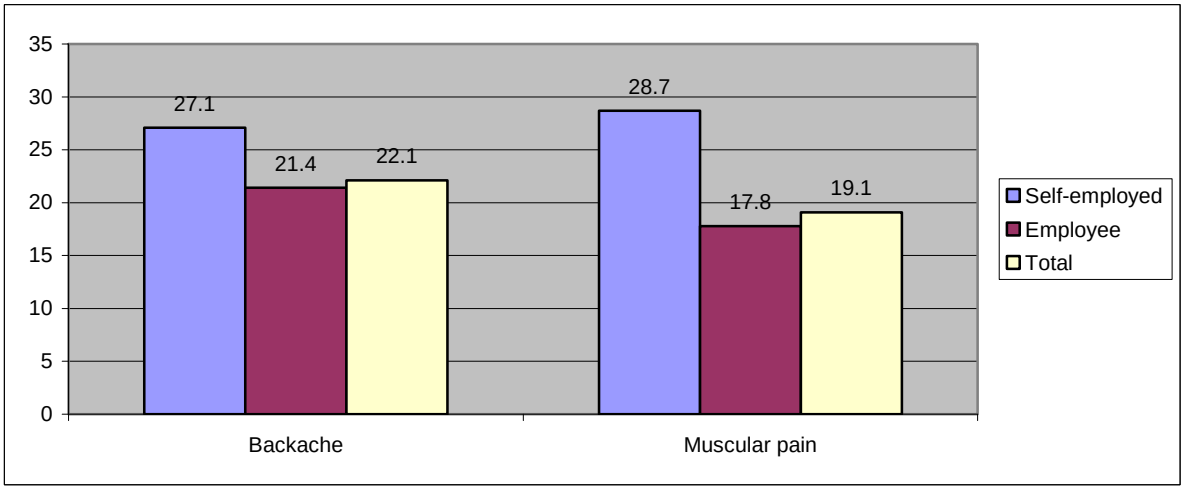


European Survey on Working Conditions, 2005

6 By employment status

ESWC information on employment status reveals that self-employed report higher prevalence of MSDs than employees. For instance, 27.1% of them complain of backache as opposed to 21.4% among employees. The gap is slightly greater when it comes to muscular pain as 28.7% of French self-employed report suffering from muscular pain while the figure drops to 17.8% among employees.

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



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