

## 8.6% of workers in the EU experienced work-related health problems

Results from the Labour Force Survey 2007 ad hoc module on accidents at work and work-related health problems

### Main Findings

#### Accidents at work

- 3.2% of workers in the EU-27 had an accident at work during a one year period, which corresponds to almost 7 million workers.
- Approximately 10% of these accidents were a road traffic accident in the course of work.

#### Work-related health problems

- 8.6% of workers in the EU-27 experienced a work-related health problem in the past 12 months, which corresponds to 20 million persons<sup>1</sup>.
- Bone joint or muscle problems and stress, anxiety or depression were most prevalent.

#### Exposure to risk factors

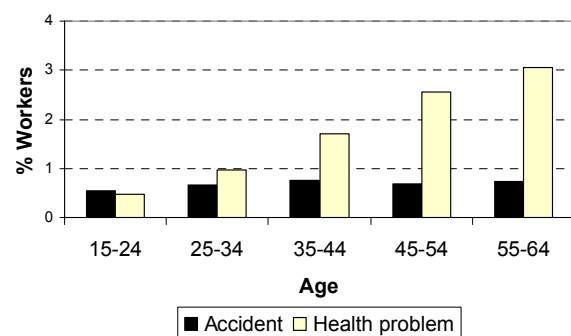
- 40% of workers in the EU-27, i.e. 80 million workers, are exposed to factors that can adversely affect *physical* health.
- 27% of workers, i.e. 56 million workers, are exposed to factors that can adversely affect *mental* well-being.

### Burden of accidents and work-related health problems

Among workers who had an accident, 73% reported lost work days after the most recent accident<sup>2</sup>, and 22% reported time off that lasted at least one month. Hence, due to an accident at work, 0.7% of all workers in the EU-27 took sick leave for at least one month (Figure 1).

Among workers with work-related health problems, 22% experienced considerable limitations in normal daily activities. Sickness absence was reported by 62% and absence for at least one month by 27% of those with a health problem. Therefore, 1.9% of all workers in the EU-27 were off work for at least one month in the past 12 months due to their most serious work-related health problem<sup>3</sup>. The percentage of workers off work due to work-related health problems increased with age (Figure 1).

**Figure 1: Workers off work at least 1 month due to accidents at work and work-related health problems in the past 12 months**



<sup>1</sup> FR not included

<sup>2</sup> IE not included

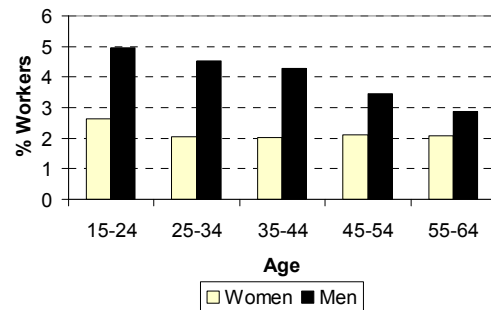
<sup>3</sup> FR not included

## Accidents at work

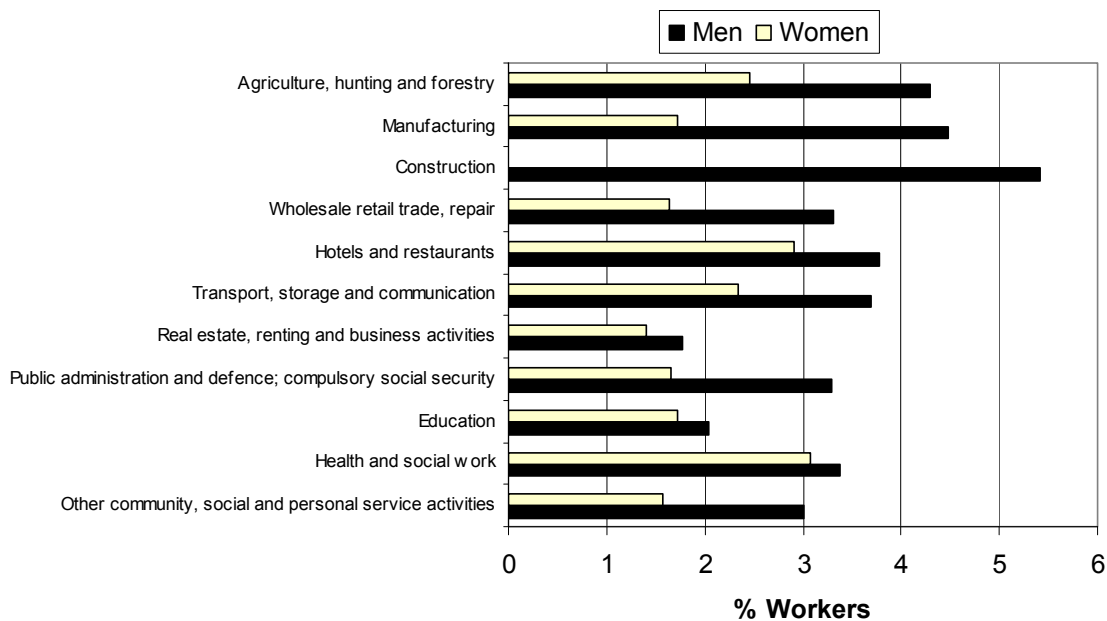
In the EU-27, 3.2% of workers had one or more accidents at work resulting in injury in the 12 months before the survey, which corresponds to 6.9 million workers. Most workers reported one accident, but 0.8 million workers (0.4%) had two or more accidents.

Men are more likely to have an accident than women, and accidents occur most often in the youngest age groups (Figure 2). In the older age groups the percentage of accidents remains fairly stable in women, whereas for men the percentage decreases steadily with increasing age.

**Figure 2: Accidents at work in the past 12 months in different age groups**



**Figure 3: Workers reporting one or more accidents in the past 12 months in different sectors**



The following sectors are not included in this figure since the reliability limit for publication is not satisfied: Fishing, Mining and quarrying, Electricity gas and water supply, Construction (women), Financial mediation, Private households with employed persons, Extra-territorial organisations and bodies.

Accidents at work are most common in the sectors Agriculture, Manufacturing, and Construction. There is a clear gender difference. Among men, the highest risk is found in the sectors Construction, Manufacturing, and Agriculture, whereas the highest risk among women is found in the sectors Health and social work, and Hotels and restaurants (Figure 3).

With respect to different types of occupations, skilled manual workers are most likely to have an accident at work (Figure 4). Furthermore, work-related characteristics that increase the likelihood of an accident at work are shift work and atypical working hours.

## Road traffic accidents

In total 9.6% of the most recent accidents were road traffic accident that occurred in the course of work. Men are more likely to have a road traffic accident than women, and 71% of all road traffic accidents are reported by men. About 18% of the road traffic accidents occur in the sector Transport, and 17% in the sector Manufacturing.

In conclusion, 3.2% of workers in the EU-27 had an accident at work during a one year period, and accidents are more likely among men, skilled manual workers, and those working in the sector Construction, Manufacturing or Agriculture.

**Figure 4: Accidents at work in the past 12 months among different occupations**



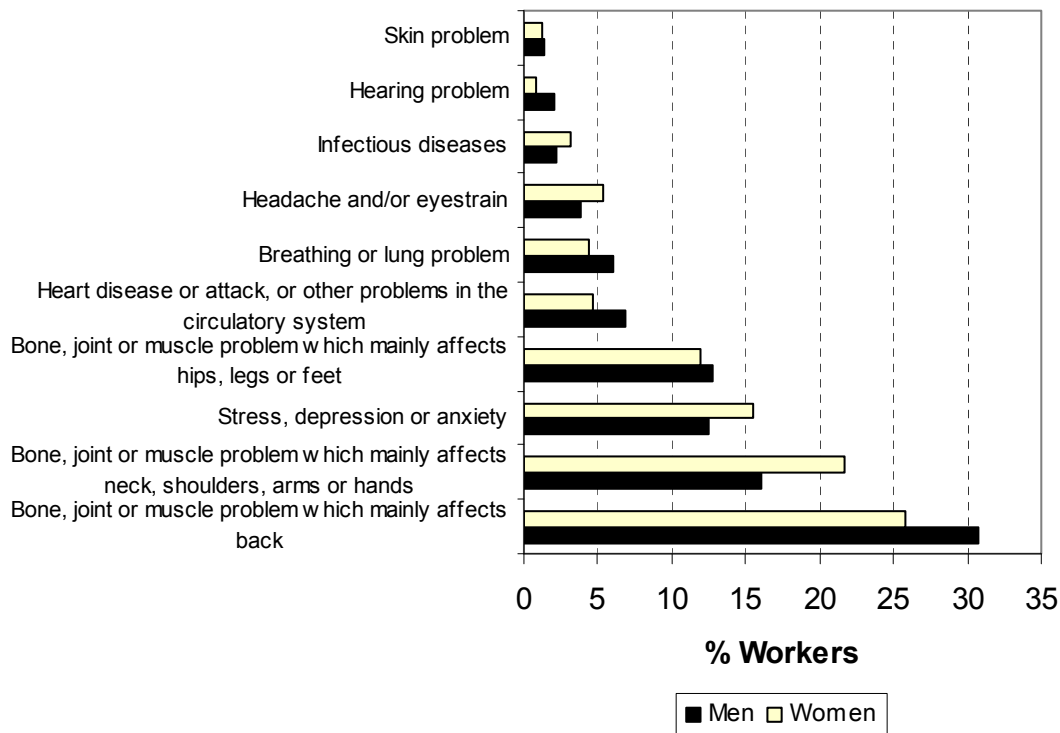
Army was not included in this figure since the reliability limit for publication is not satisfied

## Work-related health problems

In total 8.6% of workers in the EU-27 experienced one or more work-related health problems<sup>4</sup> during the 12 months before the survey, which corresponds to 20 million

persons in the EU-27. Two or more work-related health problems were reported by 2.1% of workers.

**Figure 5: Work-related health problems experienced in the past 12 months**



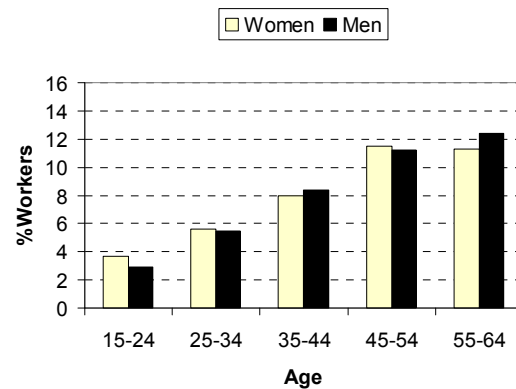
<sup>4</sup> FR not included, EU-27 figures reflect EU-27 without FR (see Methodological Notes)

In workers with a work-related health problem, back problems (28%), neck-, shoulder-, arm- or hand problems (19%), and stress, depression or anxiety (14%) are most often reported as the most serious health problems.

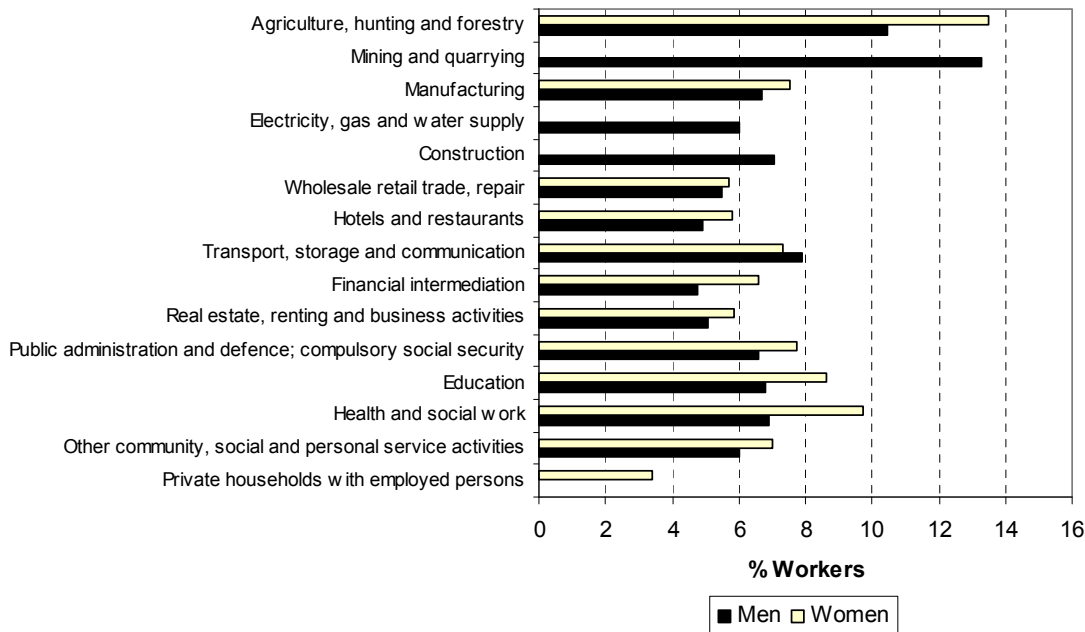
Among the bone, joint and muscle problems, men are more likely to report back problems than women, whereas women are more likely to report neck-, shoulder-, arm- or hand problems (Figure 5).

Figure 6 shows that the proportion of workers with a work-related health problem increases with age. In the younger age groups slightly more work-related health problems are found among women, whereas in the oldest age group slightly more problems are found among men.

**Figure 6: Work-related health problems in the past 12 months in different age groups**



**Figure 7: Work-related health problems in the past 12 months among workers in different sectors**

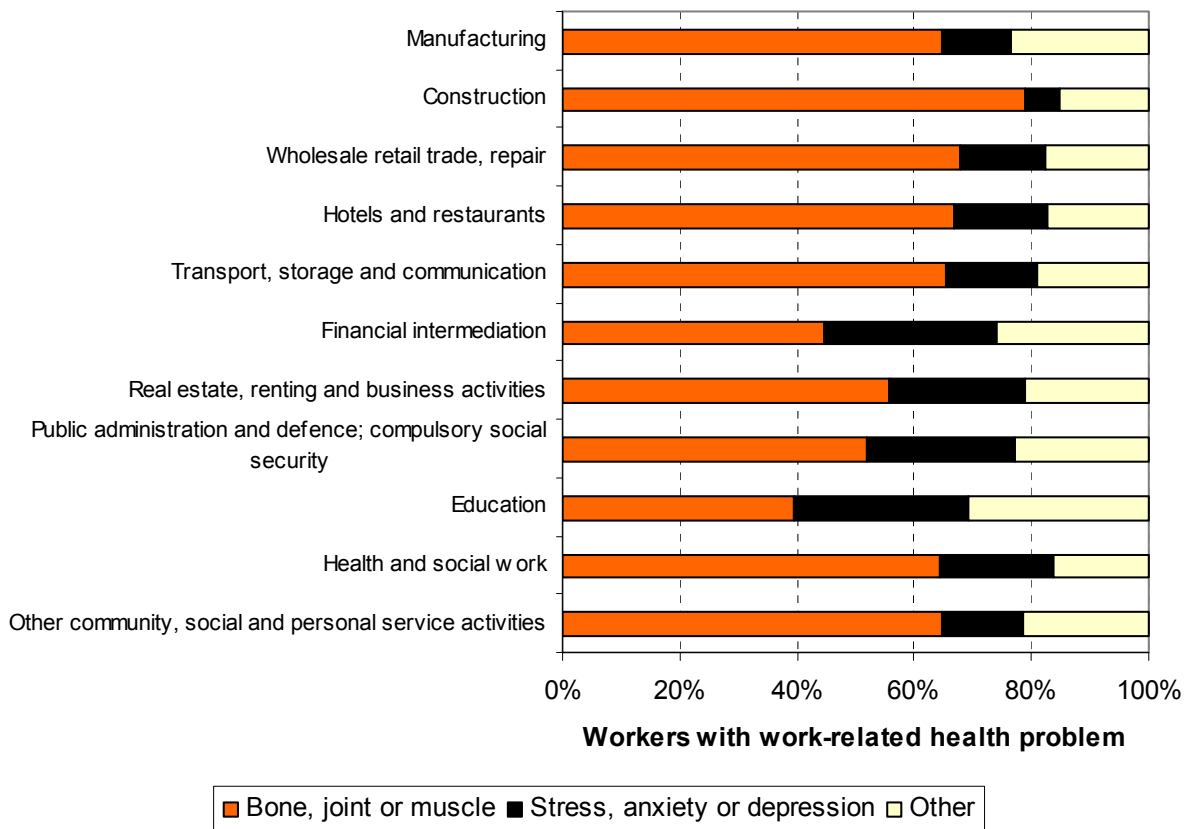


The following sectors are not included in this figure since the reliability limit for publication is not satisfied: Fishing, Mining and quarrying (women), Electricity gas and water supply (women), Private households (men), and Extra-territorial organisations and bodies.

Work-related health problems occur most often in the sectors Agriculture, Mining and quarrying, and Health and social work. In the sectors Agriculture and Health and social work, women are more likely

to experience work-related health problems than men (Figure 7). In both sectors back problems are reported most often as the most serious health problem.

**Figure 8: Type of work-related health problem in the past 12 months in different sectors**



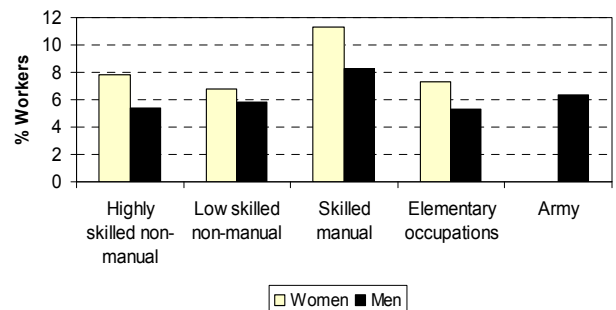
The following sectors are not included in this Figure since the reliability limit for publication is not satisfied: Fishing, Mining and quarrying, Electricity gas and water supply, Private households, and Extra-territorial organisations and bodies.

Figure 8 shows that in all sectors, musculoskeletal conditions in general (i.e. bone, joint and muscle problems affecting the back, neck, shoulders, arms, hands, hips, legs, or feet) are most often described as the most serious work-related health problem. Stress, anxiety, and depression also play an important role in several sectors, most notably in the sectors Financial intermediation and Education.

Skilled manual workers are more likely to experience work-related health problems (Figure 9). In addition, workers with permanent jobs, atypical working hours, or shift work are more likely to report work-related health problems. In conclusion, 8.6% of the workers in the EU-27 experienced one or more work-related health problems during a one year period, and work-related health problems are more likely among older workers, skilled manual workers, and

persons working in the sector Agriculture, Mining and quarrying, or Health and social work.

**Figure 9: One or more work-related health problems in the past 12 months in different occupations**



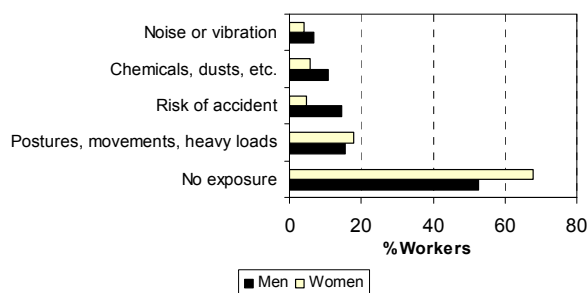
Army (women) was not included in this figure since the reliability limit for publication is not satisfied.

## Exposure to factors that can adversely affect physical health or mental well-being

Exposure to one or more workplace factors that can adversely affect *physical* health was reported by 40% of workers in the EU-27, which corresponds to 80 million workers. The factor selected most often as the main factor was exposure to difficult work postures, work

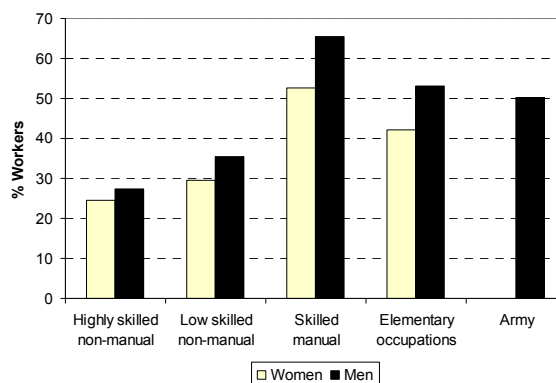
movements or handling of heavy loads (Figure 10). Among men, most exposure was reported in the sectors Mining and quarrying, Fishing, and Construction. Among women, most exposure was experienced in the sectors Agriculture, and Health and social work (Figure 11).

**Figure 10: Main factor adversely affecting physical health**



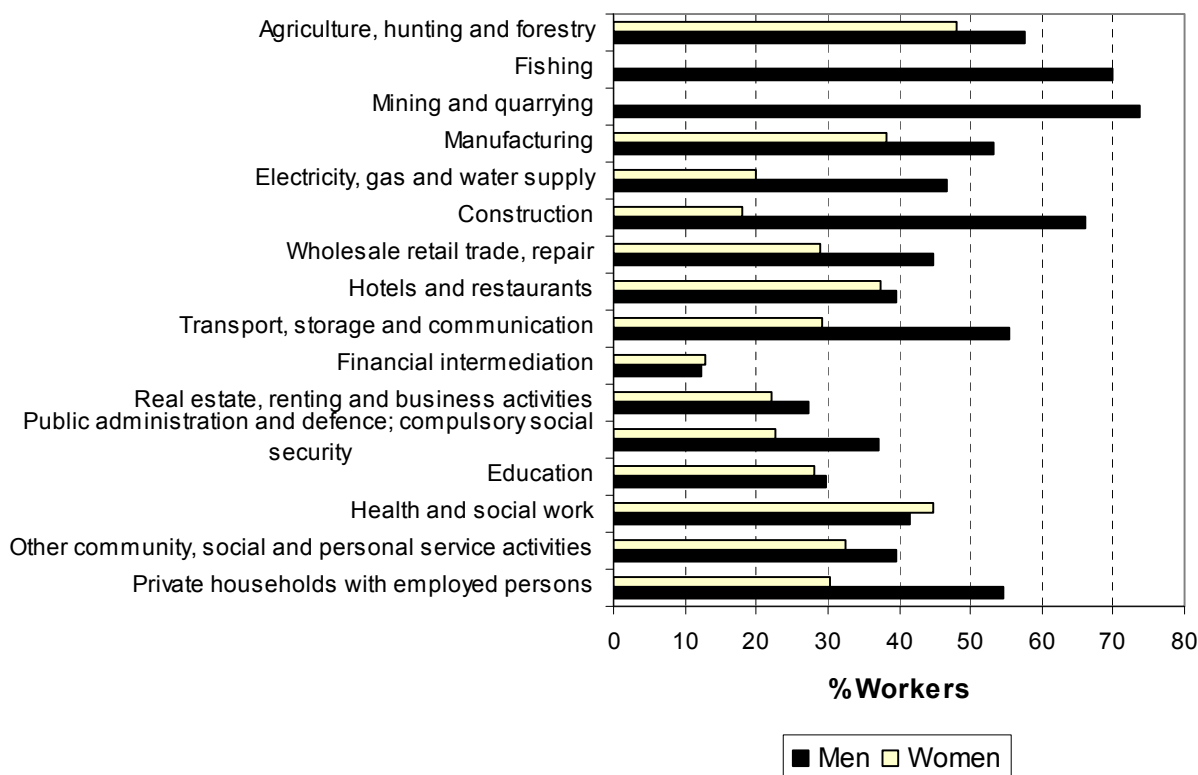
MT and SI not included (See methodological notes)

**Figure 12: Exposure to one or more factors adversely affecting physical health among different occupations**



Army (women) was not included in this figure since the reliability limit for publication is not satisfied

**Figure 11: Workers exposed to one or more factors adversely affecting physical health in different sectors**

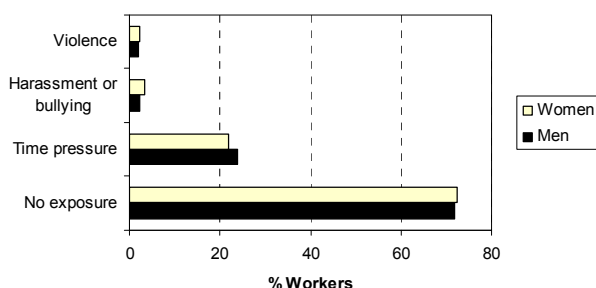


The following sectors were not included since the reliability limit for publication is not satisfied: Fishing (women), Mining and quarrying (women), and Extra-territorial organizations and bodies.

Skilled manual workers are most at risk of factors affecting physical health (Figure 12). In addition, workers with shift work or atypical working hours report more exposure.

In the EU-27, 27% of workers are exposed to one or more factors that can adversely affect *mental* well-being in the workplace. This corresponds to 56 million workers. Exposure to time pressure and overload of work was selected most often as the main factor<sup>6</sup>. Men reported in general the same factors as women (Figure 13). Most exposure was reported by workers in the sector Health and social work (Figure 14) and among highly skilled non-manual workers

**Figure 13: Main factor adversely affecting mental well-being**

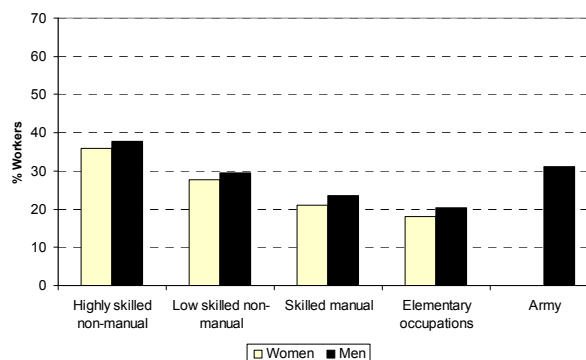


MT and SI not included (see methodological notes)

(Figure 15). Workers with atypical working hours, with a permanent contract, or in a firm larger than 11 persons are the most likely to report exposure to factors affecting mental well-being.

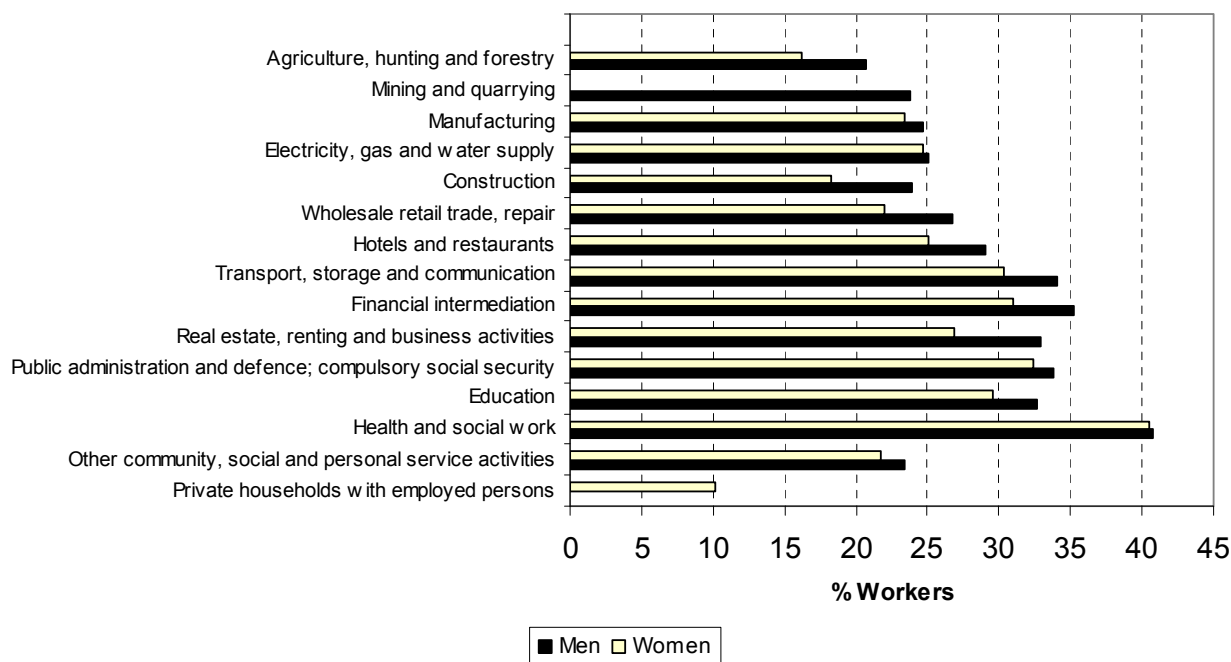
In conclusion, exposure to factors affecting physical health is more likely among men and skilled manual workers, whereas exposure to factors affecting mental well-being is more likely among highly skilled non-manual workers.

**Figure 15: Exposure to one or more factors adversely affecting mental well-being among different occupations**



Army (women) was not included in this figure since the reliability limit for publication is not satisfied

**Figure 14: Workers exposed to one or more factors adversely affecting mental well-being in different sectors**



The following sectors were not included since the reliability limit for publication is not satisfied: Fishing, Mining and quarrying (women), Private households (men), and Extra-territorial organizations and bodies.

## Accidents at work, work-related health problems and hazardous exposure in the workplace by country

In Tables 1 to 3, data on accidents at work, work-related health problems and exposure to factors in the workplace that can adversely affect

physical health and mental well-being are presented for the EU-15, EU-27, by country, and for Norway and Croatia.

**Table 1: Accidents at work and resulting sick leave in all participating countries**

who had	% of workers an accident	% of workers who had an accident resulting in sick leave (%)	% of workers who had an accident resulting in sick leave ≥1 month (%)	% of accidents that were a road accident
EU-15	3.6	72.1*	21.0	9.2
EU-27	3.2	73.4*	22.0	9.6
BE	3.2	82.6	31.8	13.3
BG	0.6	(56.8)	u	u
CZ	2.6	94.2	44.4	6.4
DK	4.9	68.6	15.8	(4.6)
DE	2.9	83.2	21.9	17.1
EE	2.3	69.4	21.5	u
IE	1.5	u*	25.0	u
EL	1.9	75.6	8.8	17.1
ES	3.9	81.7	28.5	7.6
FR	5.4	65.8	20.0	(3.1)
IT	2.7	85.2	28.6	13.5
CY	3.0	70.7	19.8	(10.7)
LV	2.2	67.8	(26.8)	u
LT	(1.0)	74.3	u	u
LU	3.4	80.4	18.0	(12.8)
HU	1.0	85.4	20.1	(9.1)
MT	3.4	73.6	u	u
NL	2.5	61.7	14.8	16.2
AT	5.1	77.8	23.1	6.9
PL	1.1	94.1	56.2	28.5
PT	3.0	86.0	38.0	8.1
RO	2.3	75.4	(5.4)	8.5
SI	3.9	87.9	(33.7)	(12.6)
SK	1.6	79.9	23.9	(8.2)
FI	6.3	59.6	12.1	7.2
SE	5.1	34.2	8.6	8.6
UK	3.2	61.5	11.5	7.7
HR	(2.0)	(91.2)	(41.5)	(19.9)
NO	3.1	44.8	13.8	3.5

\*: IE not included (see Methodological Notes)

(): limited reliability due to small sample size, u: not available or sample size below publication limit



**Table 2: Work-related health problems: limitations and resulting sick leave in all participating countries**

who had	% of workers who experienced one or more work-related health problem			% of workers with work related health problems who experienced limitations in normal daily activities		% of workers with a work-related health problem resulting in sick leave	
	Men (%)	Women (%)	Total (%)	To some extent (%)	Considerably (%)	Sick leave (%)	Sick leave ≥ 1 month (%)
EU-15	7.6*	7.3*	7.5*	48.2*	22.0*	62.3*	29.2*
EU-27	8.6*	8.5*	8.6*	50.1*	22.3*	62.0*	27.0*
BE	12.8	10.6	11.7	45.3	26.8	69.8	40.6
BG	4.7	5.2	4.9	57.9	31.3	50.6	29.1
CZ	8.0	8.9	8.5	26.4	44.9	97.7	36.7
DK	10.8	15.1	12.9	36.5	31.9	67.0	34.3
DE	6.6	5.5	6.1	55.0	13.3	74.7	22.8
EE	9.1	8.8	9.0	50.0	24.3	58.2	25.9
IE	3.5	2.9	3.2	36.4	26.0	54.2	25.2
EL	7.0	5.9	6.6	58.8	17.1	47.1	15.2
ES	5.6	6.0	5.8	41.6	29.9	72.8	46.2
FR	*	*	*	*	*	*	*
IT	7.4	6.3	6.9	60.6	7.7	47.3	16.7
CY	8.9	7.9	8.4	44.7	36.8	65.7	26.8
LV	4.1	4.0	4.1	38.2	54.5	63.6	46.7
LT	4.1	3.9	4.0	62.3	(24.7)	93.2	(33.5)
LU	4.2	3.3	3.8	40.0	20.0	80.1	48.5
HU	5.8	5.0	5.4	44.8	28.4	44.9	12.5
MT	5.8	(1.9)	4.0	50.0	(20.00)	47.2	u
NL	11.2	10.7	11.0	37.4	34.4	97.9	66.8
AT	16.3	13.6	15.0	57.7	26.1	61.4	31.3
PL	21.9	22.4	22.2	55.9	17.5	54.0	17.8
PT	7.4	8.1	7.8	38.4	48.2	41.7	21.4
RO	5.0	5.4	5.2	65.4	30.2	66.0	21.5
SI	9.3	11.1	10.2	45.2	47.6	98.1	(32.2)
SK	6.2	5.8	6.0	55.2	26.0	89.7	46.4
FI	20.6	28.4	24.5	51.0	15.8	43.0	18.7
SE	11.7	17.0	14.3	29.3	24.6	38.0	17.0
UK	5.3	4.8	5.1	42.1	31.4	62.5	31.2
HR	9.1	6.9	8.1	49.7	45.2	70.6	39.5
NO	10.2	13.3	11.7	46.9	25.4	58.4	28.1

\*: FR not included (see Methodological Notes)

( ): limited reliability due to small sample size, u: not available or sample size below publication limit

**Table 3: Exposure to one or more factors adversely affecting mental well-being and physical health in all participating countries**

who had	% of workers who are exposed to factors affecting mental well-being			% of workers who are exposed to factors affecting physical health		
	Men (%)	Women (%)	Total (%)	Men (%)	Women (%)	Total (%)
EU-15	28.8	28.7	28.7	46.5	32.5	40.2
EU-27	27.0	26.5	26.8	46.9	31.7	40.1
BE	14.7	14.4	14.6	23.5	14.2	19.4
BG	13.3	12.1	12.8	55.3	32.8	44.5
CZ	15.8	12.9	14.5	39.6	19.3	30.8
DK	19.1	23.9	21.3	26.0	28.3	27.1
DE	17.1	14.2	15.8	16.7	10.9	14.0
EE	16.0	18.8	17.4	53.7	32.7	43.3
IE	13.3	13.4	13.4	30.6	13.7	23.2
EL	15.7	13.7	14.9	50.7	26.9	41.4
ES	26.7	24.0	25.6	56.7	35.2	47.8
FR	48.5	49.7	49.0	76.7	62.3	70.0
IT	18.2	17.1	17.7	45.6	27.3	38.3
CY	45.1	40.7	43.1	59.1	34.1	47.8
LV	(u)	(u)	0.9	29.0	10.5	19.8
LT	18.3	20.0	19.1	38.9	18.9	29.0
LU	6.0	6.0	6.0	9.1	5.1	7.3
HU	13.9	14.6	14.3	36.7	18.2	28.3
MT	28.2	26.9	27.8	48.9	27.8	42.1
NL	38.4	34.7	36.7	43.9	32.8	38.8
AT	36.4	27.8	32.5	48.8	35.3	42.8
PL	26.3	23.3	24.9	56.6	33.7	46.3
PT	20.7	17.4	18.9	50.2	33.5	40.8
RO	18.2	18.4	18.3	47.5	34.5	41.6
SI	39.8	40.7	40.2	59.8	42.1	51.8
SK	15.6	11.3	13.7	35.8	13.8	26.1
FI	34.1	46.8	40.3	54.6	46.7	50.8
SE	37.9	42.7	40.2	50.4	45.0	47.8
UK	37.6	38.5	38.0	50.9	32.3	42.2
HR	16.7	14.4	15.7	46.0	20.7	34.9
NO	8.9	11.4	10.1	18.1	19.1	18.6

u: not available or sample size below publication limit

## METHODOLOGICAL NOTES

### Data source

The source of all data in this publication is the European Labour Force Survey 2007 (EU LFS). The EU LFS is conducted in all Member States of the European Union and the EFTA countries (excluding Liechtenstein).

The 2007 EU-LFS included an Ad Hoc Module consisting of 4 variables on accidents at work, 5 variables on work-related health problems, and 2 variables on factors that can adversely affect mental well-being or physical health. The module refers to a 12-months' retrospective period, relative to the date of the interview.

Data are available in Eurostat's online database for most of the variables covered by the EU LFS. For further information and publications see also the European Labour Force Survey website:

[http://circa.europa.eu/irc/dsis/employment/info/data/eu\\_lfs/index](http://circa.europa.eu/irc/dsis/employment/info/data/eu_lfs/index).

### Basic concepts and definitions

#### *Accidents at work*

An accident or an accidental injury is a discrete occurrence. Illnesses and other health conditions which develop over a time period are excluded. It includes cases of acute poisoning and wilful acts of other persons. Only those accidents that occurred at work or in the course of work during the past 12 months are considered, even if it has not occurred in the usual workplace, for example during road traffic. Commuting accidents are excluded.

#### *Work-related health problems*

This includes illnesses, disabilities or other physical or psychic health problems, apart from accidental injuries. The main inclusion criterion is that the person considers this health problem as caused or made worse by work (past or current). This means that the problems asked for are not restricted to cases reported or recognized by the authorities. The onset of the problem could have been more than a year before the interview, but the person must have suffered from the problem during the 12-month reference period.

#### *Factors that can adversely affect mental or physical well-being*

The questions concern workplace exposure to a number of mentioned factors that a person is clearly exposed to more frequently or more intensively than people experience in general day to day life. The factors relating to mental well-being include:

- harassment and bullying
- violence or threat of violence
- time pressure or overload of work

The factors relating to physical well-being include:

- chemicals, dusts, fumes, smoke or gases
- noise or vibration

- difficult work postures, work movements or handling of heavy loads
- risk of accident.

### Target population and non-response

The analysis in this *Statistics in Focus* is limited to persons aged 15-64 (16-64 for ES, UK and NO) who are or have been employed or self-employed.

Of the ad hoc module target population, 1.5% did not answer the questions of the ad hoc module on accidents at work, 3.4% did not answer the questions on work-related health problems, 2.4% did not answer the question on exposure to factors affecting mental well-being, and 2.5% did not answer the question on exposure to factors affecting physical health. There was no evidence for selective non-response.

### Countries

The LFS 2007 covers the 27 Member States (Belgium (BE), Bulgaria (BG), the Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), the Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE) and the United Kingdom (UK)) and Norway (NO) and Croatia (HR).

Comparability among countries is safeguarded by the use of the same definitions and classifications and close guidance and monitoring by Eurostat. However, because national statistical institutes are responsible for sample selection, preparation of questionnaires and conducting the interviews, differences between Member States exist that may decrease the comparability between countries. In fact, these differences resulted in the exclusion of FR from results on work-related health problems, IE from results on accidents resulting in sick leave of one or more days, and MT and SI from results on the type of exposure adversely affecting mental well-being and physical health.

### Sectors and occupation

Sectoral data are presented according to the NACE Rev. 1.1 classification system.

Data on occupation are presented according to ISCO-88(COM) classification system.

### Authors

This publication was prepared for Eurostat by Anita Venema, Swenneke van den Heuvel and Goedele Geuskens (TNO Quality of Life | Work and Employment, Hoofddorp, the Netherlands).

## Further information

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Data: [Eurostat Website: http://ec.europa.eu/eurostat](http://ec.europa.eu/eurostat)

Data on "Population and social conditions: Health":

[http://epp.eurostat.ec.europa.eu/portal/page/portal/health/health\\_and\\_safety\\_at\\_work/database](http://epp.eurostat.ec.europa.eu/portal/page/portal/health/health_and_safety_at_work/database)

More information about "Population and social conditions: Health":

<http://epp.eurostat.ec.europa.eu/portal/page/portal/health/introduction>

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