



European Foundation for the Improvement of Living and Working Conditions

Work-related disorders in Sweden

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This report is available in electronic format only.

One in four employed persons in Sweden has suffered from a work-related disorder in the past 12 months, according to the latest Swedish Work-related disorders survey. This survey data report focuses on disorders resulting from occupational accidents, stress and ergonomic factors. It identifies the most common ailments affecting men and women, outlines the occupations most at risk, examines sickness absence rates, and considers the problem of under-reporting.

Introduction

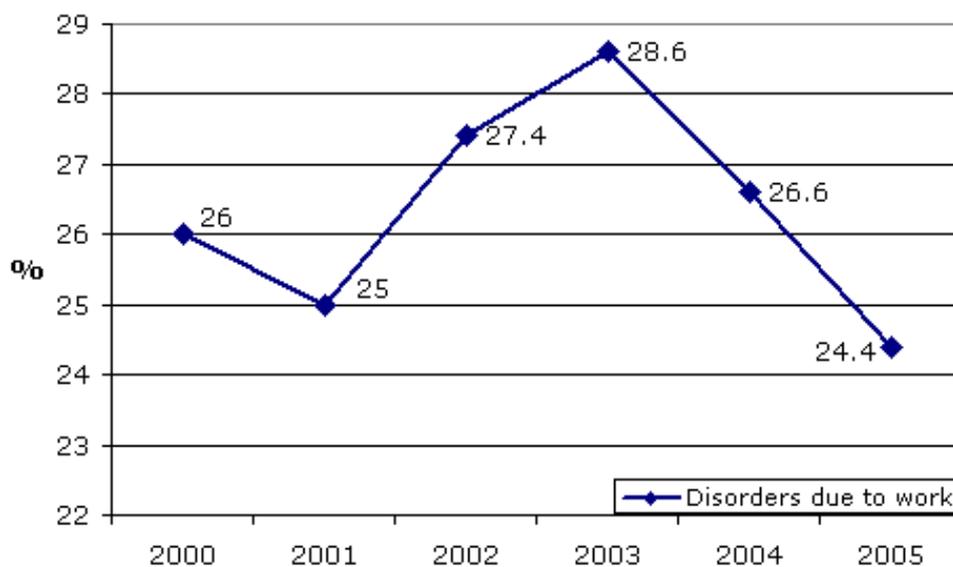
Since 1989, work environment trends in Sweden have been monitored regularly in surveys. Work-related disorders have been monitored in a separate survey since 1991, making it possible to identify trends over the years. The latest Work Environment survey reveals that, in general, there has been a slight improvement in the work situation between 1999 and 2003, although conditions for many remain difficult.

Data in this report are based on the 2005 Work-related disorders survey, unless otherwise stated. The survey is conducted by Statistics Sweden on behalf of the Swedish Work Environment Authority (see appendix for further details on the survey methodology). In order to be able to report by economic activity and sex, data from the last four surveys have been combined. Only occupational groups with at least 400 respondents are included.

Definition and prevalence

Any existing disorder, physical or non-physical, that employees relate to their work situation is classified as a work-related disorder. In 2003, reported work-related disorders peaked at 28.6% of all employed persons. Since then, they have declined to 24.4% in 2005. Over a period of five years, the decrease is 1.6 percentage points. There is no explanation given for the peak in 2003 or the subsequent decline.

Figure 1: Disorders due to work



Source: Work-related disorders, 2000-2005, Swedish Work Environment Authority

More women than men state that they have work-related disorders, generally due to factors other than accidents. Of all people employed in 2004, 27.5% of women and 21.6% of men stated that they had experienced work-related disorders during the last 12 months. That a greater proportion of women than men have had work-related disorders

is in keeping with the preliminary figures on occupational accidents and diseases from 2004 (although the statistics are not entirely comparable - see appendix). Women reported 52% of all occupational accidents and disease, while men reported 48%.

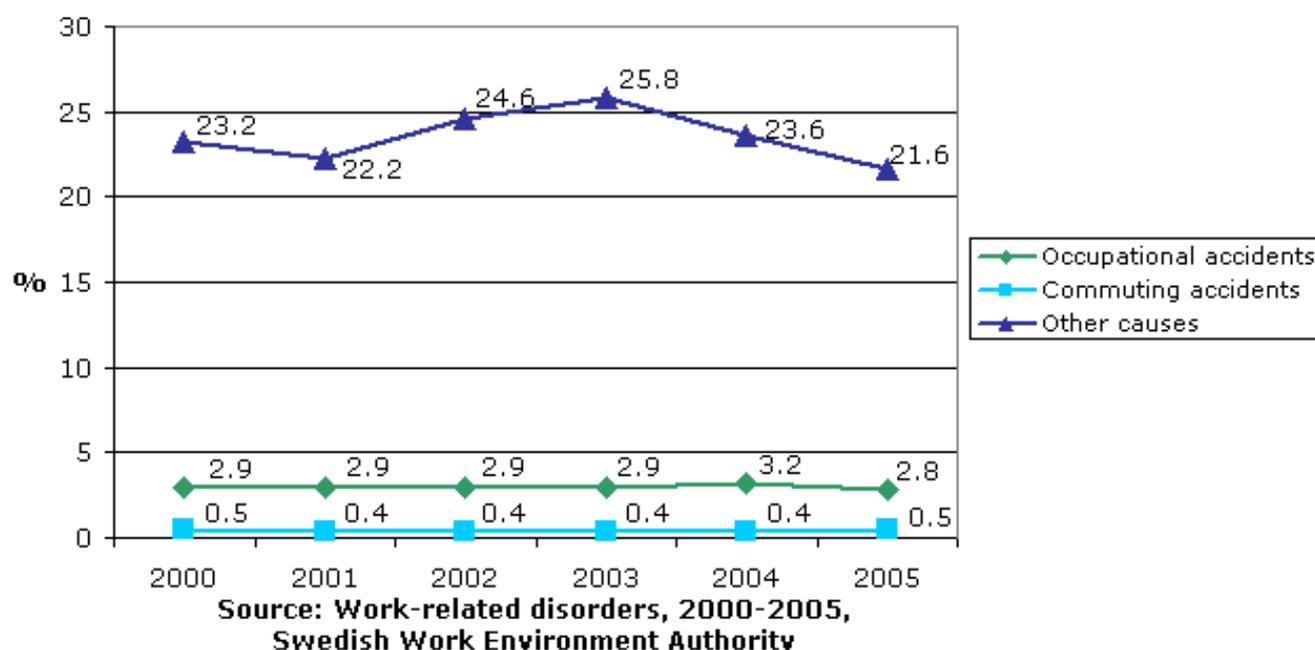
Causes of work-related disorders

Work-related disorders are caused by:

- occupational accidents;
- commuting accidents;
- other causes (such as strenuous working postures, heavy manual handling, repetitive work, mental stress, computer work, harassment, violence, noise, vibrations, heat, cold, draughts, chemical substances, etc.)

As Figure 2 shows, the percentages of work-related disorders caused by occupational accidents and by commuting accidents are quite low in comparison to other causes; they have also been fairly stable over time.

Figure 2: Causes for work-related disorders, 2000-2005



Occupational accidents and fatal accidents

According to the report's preliminary figures on reported occupational accidents and work-related diseases from 2004 (see appendix), 30,484 occupational accidents (employed and self-employed) were reported in that year. This represents a steady decline from the 39,334 occupational accidents reported in 2000. The frequency rate for occupational accidents is 7.4 per 1,000 persons employed in 2004, compared with 8.7 in 2000.

The number of fatal accidents has also steadily decreased, from 89 in 1995 to 56 in 2004. For 2004, the frequency rate was 1.2 fatal accidents per 100,000 employees. Looking at the number of fatal accidents by economic activity over the past 10 years, four sectors stand out. Out of 688 accidents, 73% were within the following sectoral groupings:

- agriculture, hunting, forestry and fishing (160);
- manufacturing (107);
- construction (111);
- transport, storage and communication (125).

Causes other than accidents

Stress and mental strain are the most common cause of work-related disorders among women and the third most common for men. Among men, the most frequent cause of work-related disorders is strenuous working postures, which is the second most frequent for women. Heavy manual labour is the third most prevalent cause among women and the second most prevalent among men. When combining all musculoskeletal disorders, these types of disorders are more common than disorders caused by stress or other psychosocial factors.

Work-related disorders caused by stress have increased significantly for employed women since 1996, although the proportion declined from 13.4% of all employed women in 2004 to 12.1% in 2005. For men, there has also been an increase since 1996, though not as large as for women. In absolute figures, the increase is greater for women than for men, since the mid 1990s. However, in relative terms, the increase is similar for men and women.

For women, work-related disorders caused by strenuous working postures reached a level of 12% in 2003 but are now down to almost the same level as in 1996. For men, there was an increase from 1996 to 2003 when it reached 9.2%, though it has declined since then.

Table 1: Common causes of work-related disorders (%)

Year	Strenuous working postures		Heavy manual labour		Stress and mental strain	
	Men	Women	Men	Women	Men	Women
1996	7.5	10.1	5.1	6.4	3.6	5.8
1999	6.7	10.1	5.2	6.8	5.1	9.3
2000	8.0	11.2	5.6	7.4	6.5	11.8
2003	9.2	12.0	7.4	8.8	8.2	13.6
2004	8.4	10.6	6.5	7.8	7.2	13.4
2005	8.3	10.2	6.5	7.5	6.4	12.11

Source: Work-related disorders, Work Environment Authority, 2005

Other causes of work-related disorders include work on computer/display screens and repetitive tasks, each of which was reported by 4.1% of all those employed. Factors such as noise, vibrations, exposure to chemical substances, heat/cold, etc. were responsible for a minor proportion of the disorders in 2005.

A comparison can be made with preliminary figures on work-related diseases reported to the social insurance office (Försäkringskassan) in 2004. Chemical or biological substances account for 9% of all work-related diseases reported for that year. The main difference between a work-related disease and a work-related disorder is that the latter can be any disorder caused by the work situation, while work-related diseases are injuries that are reported to the social insurance office. In other words, even though only 3% of work-related disorders are caused by exposure to chemical substances, such exposure accounts for almost one in 10 of all work-related injuries being reported.

Musculoskeletal disorders

Over the last 10 years, musculoskeletal disorders have more or less remained at a constant level. The only statistically significant increase is in disorders of the back (except the neck), which is also the most common disorder, together with ailments of the shoulders and arms. Disorders of hips, joints, legs and knees are the only musculoskeletal disorders that are more common among men than women.

Table 2: Musculoskeletal disorders (%)

	Neck	Shoulders/arms	Hands, wrists, fingers	Back (except neck)	Hips, joints, legs, knees

Year	Men	Women								
1996	2.6	5.8	5.3	9.6	2.3	2.8	7.2	8.6	2.6	2.1
1999	2.4	6.6	5.2	10.5	1.8	2.9	7.0	9.6	2.4	2.0
2002	3.6	7.7	7.0	11.4	2.4	3.1	8.9	10.6	3.0	2.7
2005	2.8	6.0	6.2	9.8	2.2	2.7	7.9	9.8	2.6	2.2

Source: Work-related disorders, Work Environment Authority, 2005

A comparison can be drawn with the preliminary figures for 2004 of work-related diseases. Some 58% of all reported cases are stated to be due to ergonomic factors. This is also the single most common cause of work-related disorders for both men and women.

Occupations most at risk

From an overall occupational perspective, the share of work-related disorders (due to circumstances other than accidents) is highest among female machine operators, 34% of whom have had work-related disorders during the last 12 months. They are followed closely by women working in the service and care sector, such as medical care nurses, nursing assistants, restaurant staff, etc.

Among men, workers in crafts and related trades have the highest percentage of work-related disorders, at 25%. Within this group, carpenters and joiners report the highest percentage, at 31%.

Table 3 shows which occupations are most likely to experience work-related disorders caused by stress and mental strain, strenuous working postures, and/or manual heavy work. Only the two occupations in each 'cause' group that scored highest are presented. As noted earlier, data from the last four surveys (2002-2005) have been combined for more specific reporting by occupation and sex. Only occupational groups with at least 400 respondents are included. It should be noted that other occupations with high percentages may also be found in groups with less than 400 respondents.

Table 3: Occupations and common causes of work-related disorders

Cause	Occupations (%)	
	Men	Women
Stress and mental strain	School teachers within compulsory school system (15.9)	Social work professionals (27.7) and psychologists and social workers (26.0)
	Upper secondary school teachers (14.6)	Upper secondary school teachers (24.6)
Strenuous working postures	Painters, lacquer workers and chimney sweepers (23.2)	Hairdressers and skin therapists (27.0) and other personal services (26.5)
	Carpenters and joiners (21.2)	Cooks (22.3)
Manual heavy labour	Building trades workers (specifically working on scaffolding) (19.7)	Cooks (22.1)
	Carpenters and joiners (19.5)	Nursing assistants (21.7)

Source: Work-related disorders, Work Environment Authority, 2005

In relation to stress and mental strain, a parallel can be drawn with the latest Work Environment report from 2003. One question asks whether the workers feel that they have too much to do. The education sector scored highest with 68% of 'yes' answers. Furthermore, this sector also has the second highest score in terms of mentally stressful work. The highest score in this regard is found among employees working in health and social work.

Sick leave

The percentage of employed men and women taking sick leave due to work-related disorders increased between 1996 and 2005.

Some 11.2% of all employed women and 7.4% of all employed men went on sick leave in 2005 due to work-related disorders. However, between 2004 and 2005, there has been a statistically significant decrease in both short-term sick leave and sick leave of five weeks and more. Nonetheless, sick leave due to occupational accidents continues to rise.

Table 4: Work-related disorders and sick leave (%)

	Disorders without sick leave		Sick leave of at least one day		Sick leave of five weeks or more		Sick leave due to occupational accidents		Sick leave due to other conditions	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
1996	12.6	15.2	6.0	7.4	2.4	3.8	1.4	0.9	4.6	6.4
1999	13.7	18.2	6.1	9.0	2.5	4.6	1.6	1.1	4.5	7.8
2004	15.6	18.0	7.8	12.1	3.5	6.9	1.7	1.5	6.1	10.7
2005	14.2	16.3	7.4	11.2	2.9	6.5	1.9	1.2	5.5	10.0

Source: Work-related disorders, Work Environment Authority, 2005

A parallel can be made with the preliminary figures from 2004 on reported occupational accidents and work-related diseases, which show that 40% of all reported occupational accidents (with at least one day's absence) are expected to lead to more than 14 days' sick leave. The length of the sick leave is also used as an indication of the seriousness of an occupational accident. The proportion of more serious accidents increases with age, which can also be seen in the number of sick leave days.

Reporting occupational accidents and diseases

The respondents reporting work-related disorders were asked if an occupational injury report was submitted to the social insurance office. Some 18% responded that the disorder was reported as an occupational injury. Where relevant, the respondents were asked why the disorder was not reported: 31% responded that they did not think that the injury was serious enough. It should be noted that there is probably still a high level of under-reporting, partly due to changes in the national health and work injury insurance which took place during the 1990s. Before these changes were instigated, the incentive to report accidents was stronger, in terms of higher financial compensation levels.

Measures to improve working conditions

Few of the employees with work-related disorders state that any measures have been taken to improve working

conditions.

Among the employed persons reporting disorders, 7% of men and 9% of women report that their work duties have been changed because of their problems. The working hours for 3% of men and 5% of women have been reduced. About 2% of both men and women state that they have been transferred within the organisation and around 3% have left the company.

When asked whether measures had been taken in the workplace to prevent problems from worsening, recurring or affecting other workers, 31% of women and 24% of men responded that this was so.

Commentary

The long tradition of monitoring the working environment in Sweden makes it possible to follow both general trends as well as specific developments. The surveys and reports available cover a broad field of working environment topics and, to some extent, complement each other. The report on occupational accidents and work-related diseases focuses on new injuries, while the survey on work-related disorders covers a broader scope by investigating occupational accidents, stress and ergonomic factors. Although they complement each other, it is important to note that the surveys and the reports each have their own prerequisites and specificities.

Despite efforts to make data comparable over time by keeping surveys identical from year to year, this has become more difficult due to the changing nature of questionnaires as well as new and altered classifications of occupations and of economic activities. However, such changes are necessary in order to improve the quality and coverage of the surveys.

As previously mentioned, a decline in the number of reported occupational accidents was observed following modifications to the national health and work injury insurance system in the 1990s which resulted in lower compensation levels. In 2002, further changes to the insurance system were made, aimed at a more lenient assessment of reported cases. These changes are believed to be encouraging an increased tendency to report work-related diseases. Nevertheless, the results from the 2005 survey on work-related disorders indicate that there is still a high level of under-reporting. To get a fuller picture of work-related disorders, data from the work-related disorders survey could serve as a complement to data from the Swedish information system for occupational accidents and work-related diseases (ISA - see appendix for further details).

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Appendix: About the surveys

There are three main statistical sources covering many key aspects of the working environment in Sweden: the Work Environment survey (Arbetsmiljöundersökningen), Work-related disorders survey (Undersökning om arbetsorsakade besvär) and annual statistics on occupational accidents and work-related diseases (Årlig statistik om arbetsskador). The [Swedish Work Environment Authority](#) publishes all three sources.

Work-related disorders survey

The main part of this report is based on data from the survey on work-related disorders. Since its inception in 1991, it has been conducted each year by Statistics Sweden on behalf of the Work Environment Authority. The main focus of the survey is on causes of work-related disorders and what parts of the body are affected. Data have been collected by supplementary questions to the national labour force survey ([AKU](#)). Data in the AKU survey are collected by telephone interviews. After the AKU interview is finished, the respondents are asked if they have had physical disorders or other disorders. Those who answer yes to one or both of the questions receive 23 additional questions. The latest survey included just over 19,000 respondents to these additional questions on disorders.

The population in the AKU survey includes people between 16-64 years of age and who are employed at the time of the interview. The sample is stratified by region, sex, citizenship and occupation. Statistics Sweden's register on the total population (RTB) is used to draw the sample. A part of the AKU sample is used for the Work-related disorders survey. In the 2005 disorders survey, 19,717 individuals were included in this sub-sample.

Work Environment survey

The Work Environment survey has been carried out every second year since 1989. It is conducted by Statistics Sweden on behalf of the Work Environment Authority. Data have been collected by asking supplementary questions to the national labour force survey (AKU). In addition, the respondents are asked to answer a postal questionnaire. Each survey has been carried out using the same methodology and between 10,000 and 15,000 people have been interviewed. Questions in the survey cover areas such as the use of machines and other equipment, physical pain and fatigue, stress, conflicts, violence, sick leave, training, etc.

Report on occupational accidents and work-related diseases

The report on notified occupational accidents and work-related diseases is published each year by the Swedish Work Environment Authority. For each year, preliminary and final figures are published. The report is based on data from the Swedish information system for occupational accidents and work-related diseases (ISA) ([Informationssystem för arbetsskador, ISA - 91Kb pdf](#)). ISA is an information system based on work injury insurance legislation, which requires employers to report occupational injuries to the social insurance agency.

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