

Self-reported work-related illness and workplace injuries in 2007/08:

Results from the Labour Force Survey



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Introduction

This report presents detailed results from the 'workplace accident' and 'work-related illness' modules of the 2008 Labour Force Survey (LFS)¹. Some broad comparisons of the latest results with those from earlier surveys are also presented.

Whilst results from the 2008 LFS suggest that both workplace injury and work-related illness have decreased since the start of the century, they largely confirm findings from earlier surveys in terms of the relative make-up of injury and illness.

This report is supported by a full range of tables, providing self-reported results from the LFS by a range of demographic and employment-related variables (see <http://www.hse.gov.uk/statistics/lfs/index.htm>).

Background

Each year HSE sponsors two survey modules in the LFS, a national population based government survey providing a wealth of information about the labour force. The 'workplace injury' module, included annually since 1992, allows estimates of the scale of workplace injuries and more recently estimates of the resulting working days lost. The 'work-related illness' module, included annually since 2003/04 and periodically prior to then, allows estimates of the scale of work-related ill health and estimates of the resulting working days lost. Estimates of both workplace injury and work-related illness from the LFS are referred to as 'Self-reported' estimates. This is particularly important for work-related illness, where the estimates represent an individual's perception of the contribution that work made to the illness, rather than a medically verified estimate.

Self-reports of work-related illness whilst not an exact measurement of the 'true' extent of work-related illness, do provide a reasonable indicator. Extensive follow-up work to the 1995 survey confirmed high rates of agreement between individuals and their GPs as to the contribution that work made to the illness. Only in a minority of cases did an individual's GP report that in their opinion work was an unrelated factor to the illness. Whilst agreement between individual and GP was found to be generally good across all illness types, the agreement was particularly high for cases of self-reported stress, depression or anxiety and musculoskeletal disorders.

Information on workplace injuries and work-related illness from the LFS complements information from a range of other sources – there is no one definitive source for either workplace injuries or work-related illness. In the publication 'Health and Safety Statistics 2007/08' a range of data sources are drawn together to present the latest top-level picture of work-related illness and workplace injuries. However, data presented in this report are based solely on self-reported data from the LFS. Whilst this information is valuable in its own right, readers should recognise that the data is from the perspective of individual's perceptions. Other data sources, based on alternative perspectives (e.g. reports from specialist doctors of cases of work-related illness presenting to them) may not always agree entirely with the self-reported data.

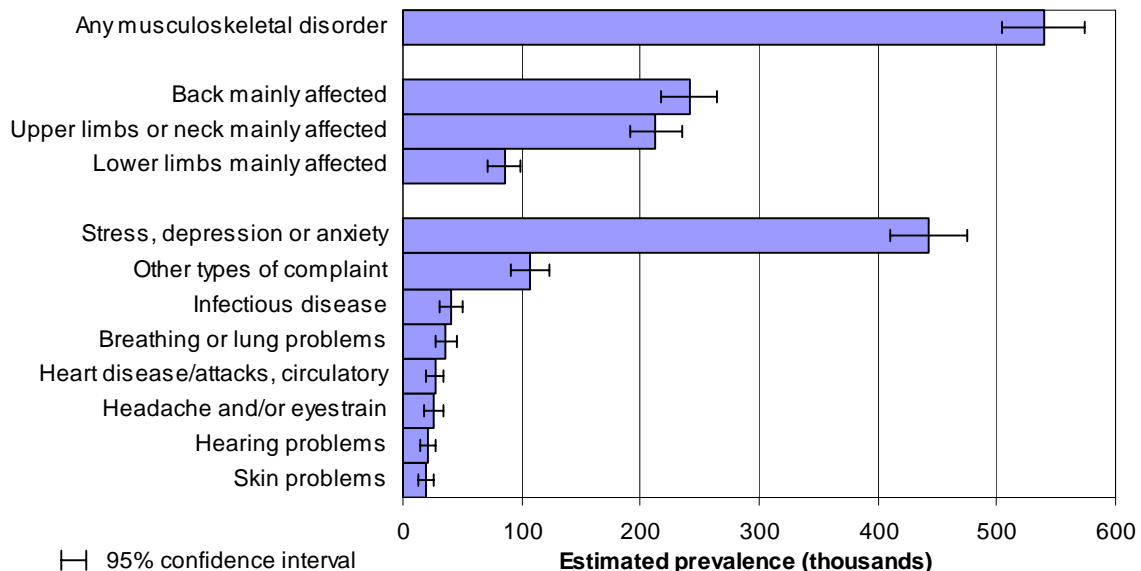
¹ Summary results, relating to work-related illness and workplace injury in 2007/08, have previously been provided in the HSE publication 'Health and Safety Statistics 2007/08'.

Overall picture

Ill health

- In 2007/08 an estimated 2.1 million people in Great Britain were suffering from an **illness** they believe was caused or made worse by their current or past work. This *prevalence* estimate, based on anyone who has ever worked², includes long standing as well as new cases.
- 1.3 million of these estimated cases were suffered by people who had *worked in the last 12 months*, equating to 4200 per 100 000 people (4.2%)
 - **Musculoskeletal disorders** and **stress, depression or anxiety** accounted for just over three-quarters of self-reported work-related **ill health**, 539 000 and 442 000 people respectively (see Figure 1 and <http://www.hse.gov.uk/statistics/lfs/0708/swit3w12.htm>)

Figure 1: Estimated 2007/08 prevalence of self-reported work-related illness, by type of complaint, for people working in the last 12 months



- Just under half of the estimated *prevalent* cases (563 000) were new (*incidence*) cases of work-related **illness**. This equates to a rate of 1900 per 100 000 people (1.9%) who *worked in the last 12 months*.
 - **Stress, depression or anxiety** accounted for an estimated 237 000 new cases of work-related illness and **musculoskeletal disorders** 178 000 (see <http://www.hse.gov.uk/statistics/lfs/0708/swit6w12.htm>)

² A programming error in the computer aided interviewing restricted the coverage of the 'work-related illness' module to people *working in the last 12 months*, rather than people *ever employed* (as in earlier surveys from 2001/02). Therefore, apart from this overall estimate for 2007/08, all other results are based on people who worked in the last 12 months.

- Industry sectors 'health and social work', 'electricity, gas and water supply' and 'public administration and defence' had *prevalence* rates of **work-related illness** statistically significantly higher than average (three-year average) (see http://www.hse.gov.uk/statistics/lfs/0708/wriind2_3yr.htm).
- Occupation groups with prevalence rates of **work-related illness** statistically significantly higher than average (three-year average) were 'health and social welfare associate professionals', 'protective service occupations', 'skilled agricultural trades', 'teaching and research professionals', 'skilled construction and building trades' and 'skilled metal and electrical trades' (see http://www.hse.gov.uk/statistics/lfs/0708/wriocc2_3yr.htm).

Injury

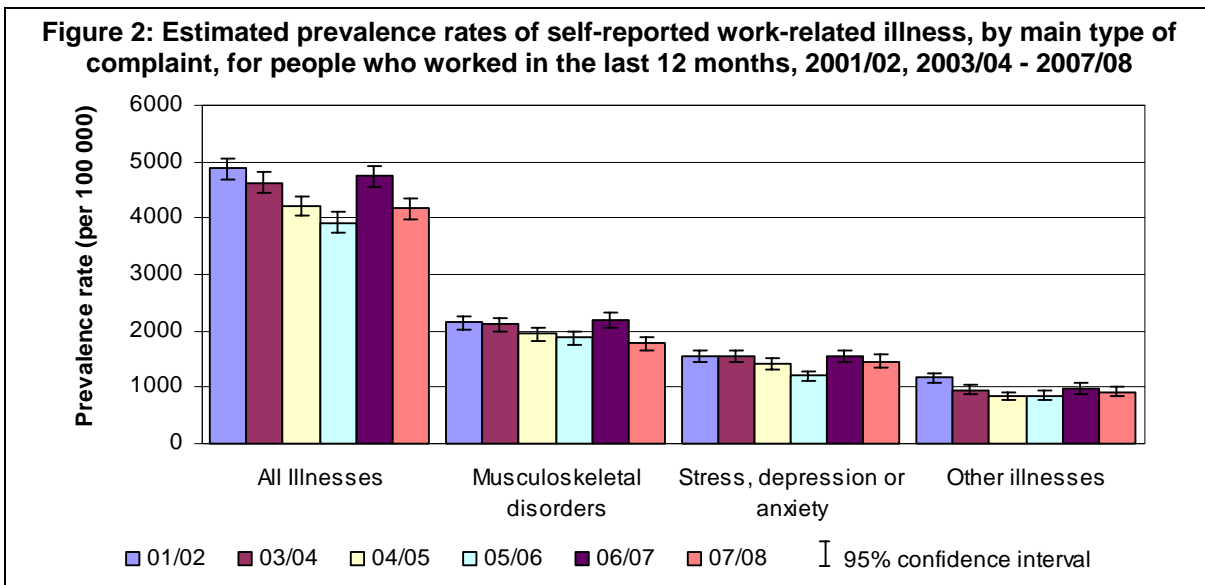
- **Reportable non-fatal injuries** include all those workplace injuries sustained as a result of an accident (excluding road traffic accidents), resulting in over 3 days absence from work. An estimated, 299 000 **non-fatal reportable injuries** occurred in 2007/08, a rate of 1000 per 100 000 workers (1.0%) (see <http://www.hse.gov.uk/statistics/lfs/lfsinj1.htm>).
- Industry sectors with statistically significantly higher than average *incidence* rates (three-year average) of **reportable non-fatal injuries** were 'agriculture, hunting, forestry and fishing', 'construction' and 'transport, storage and communication' (see http://www.hse.gov.uk/statistics/lfs/0708/injind1_3yr.htm).
- Occupation groups carrying statistically significantly higher than average **reportable non-fatal injury incidence** rates (three-year average), (where sample numbers were sufficiently large to provide reliable estimates), were 'protective service occupations', 'skilled agricultural trades', 'elementary trades, plant and storage related occupations', 'skilled construction and building trades', 'skilled metal and electrical trades', 'transport and mobile machine drivers and operatives', 'process, plant and machine operatives', 'caring personal service occupations' and 'elementary administration and service occupations' (see http://www.hse.gov.uk/statistics/lfs/0708/injocc1_3yr.htm).

Days lost

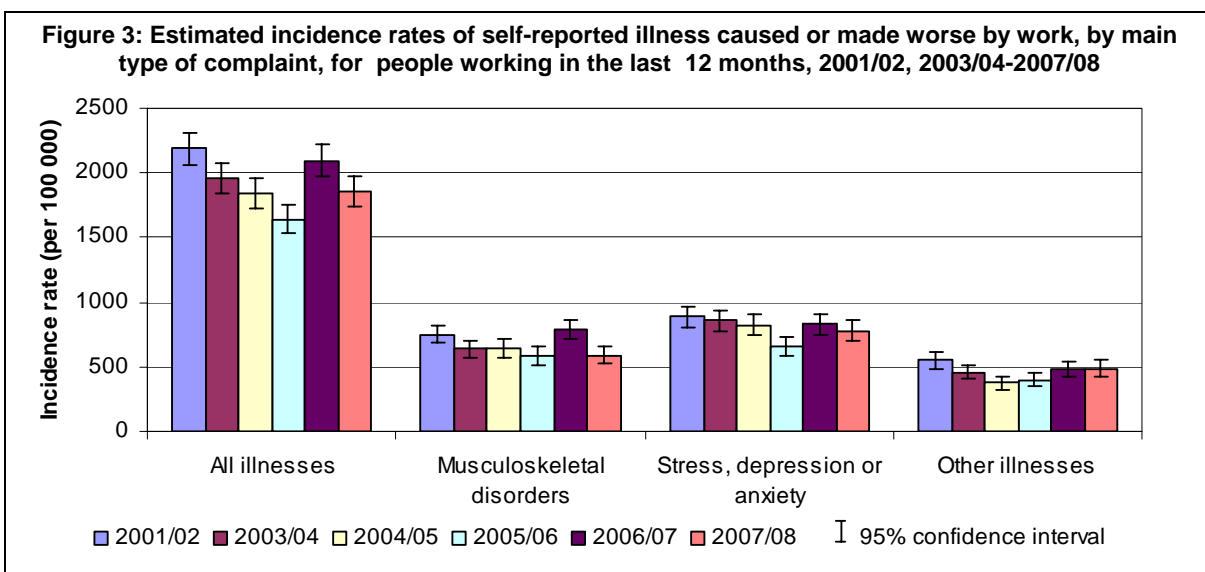
- In 2007/08, 34 million **working days** were lost overall (1.4 days *per worker*), 28 million due to work-related **illness** (1.1 days *per worker*) and 6 million due to workplace **injury** (0.26 days *per worker*). Working days lost are expressed as full-day equivalents, to allow for the variation in daily hours worked (see <http://www.hse.gov.uk/statistics/lfs/0708/swit1.htm>).
- On average, each person suffering from a work-related **illness** or a workplace **injury** took an estimated 16.9 days off work in the last 12 months (on average 21.9 days for **ill health** and 7.7 days for **injury**). (See <http://www.hse.gov.uk/statistics/lfs/0708/swit1.htm>).

Comparison with earlier years

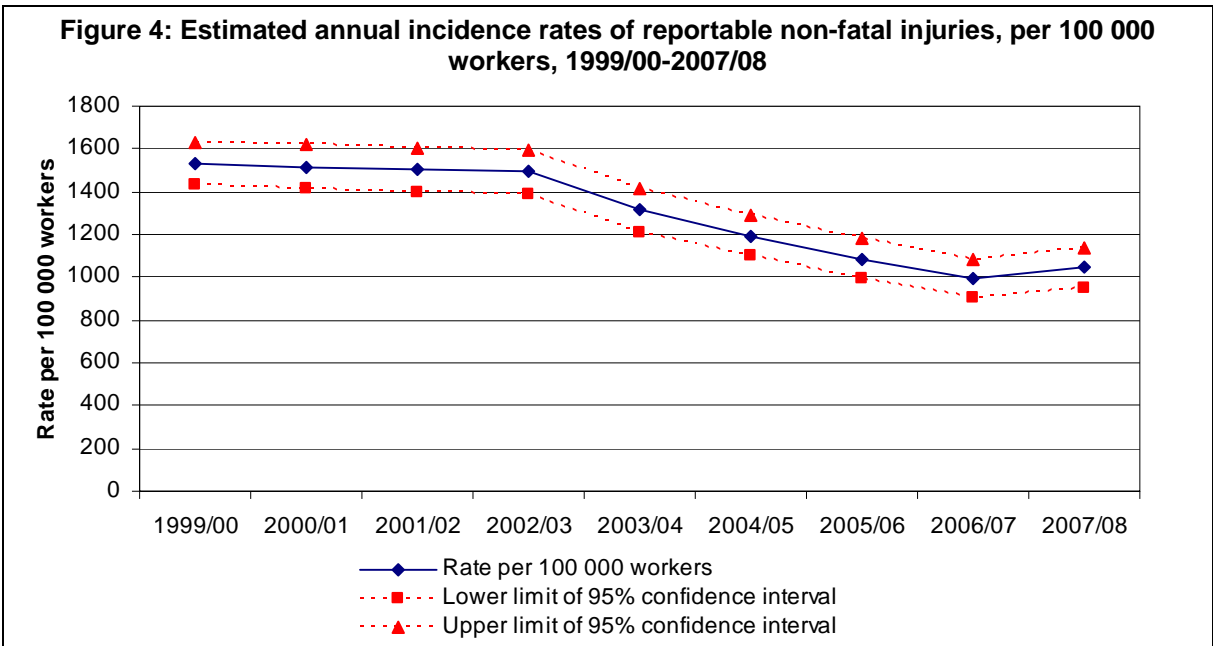
- The *prevalence* rate of self-reported work-related **illness** in 2007/08, for people working in the last 12 months, was similar to those in 2005/06 and 2004/05, but statistically significantly lower than in 2006/07 and 2003/04 and 2001/02 (see Figure 2 and <http://www.hse.gov.uk/statistics/lfs/0708/swit3w12.htm>).



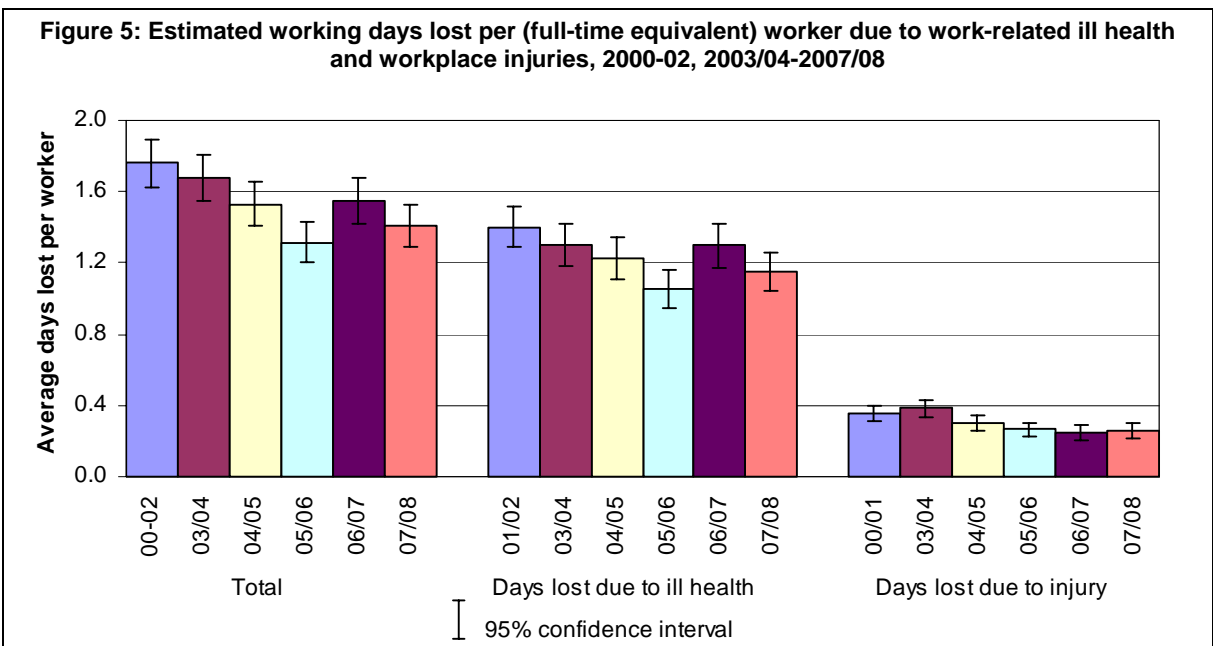
- The *incidence* rate of work-related **illness** showed a sharp increase in 2006/07, despite earlier indications of a downward trend from 2001/02 to 2005/06. However, the rate in 2007/08 was statistically significantly lower than that in 2006/07 and of a similar order to that in 2004/05 (see Figure 3 and <http://www.hse.gov.uk/statistics/lfs/0708/swit6w12.htm>).
 - While the *incidence* rate has fluctuated in recent years, research to date indicates that the discontinuity appears to be genuine. The fall in 2005/06 is driven primarily by a sharp decrease in **stress, depression or anxiety**. The increase in the overall *incidence* rate in 2006/07 is mainly as a result of **stress, depression or anxiety** returning to its previous level and **musculoskeletal disorders** increasing sharply, before reverting to the long term trend in 2007/08.(see <http://www.hse.gov.uk/statistics/pdf/lfsissue1.pdf> for more details of research).



- The *incidence* rate of **reportable non-fatal injuries** to workers remained relatively stable between 1999/00 to 2002/03, but has since followed an overall downward trend. The rate in 2007/08 whilst of a similar order to those in recent years was statistically significantly lower than that in 2004/05 (see Figure 4 and <http://www.hse.gov.uk/statistics/lfs/lfsinj1.htm>).

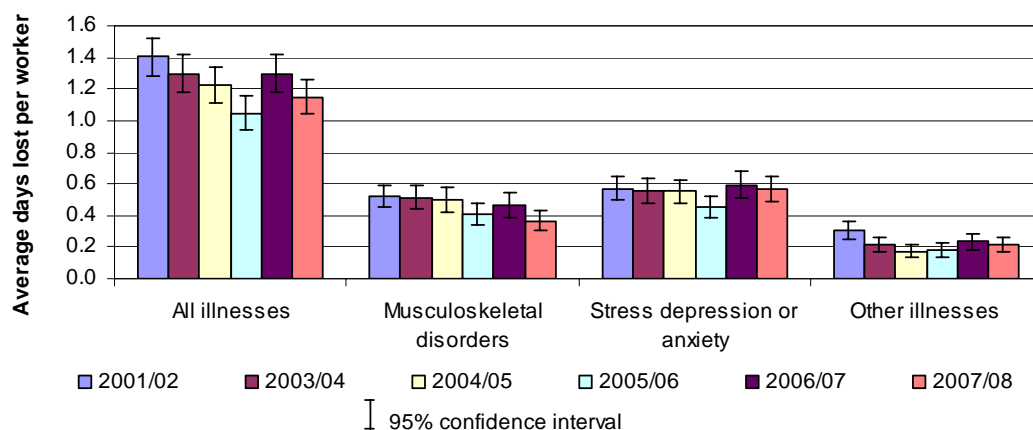


- Working days lost are available for 2000/01 (injuries only), 2001/02 (ill health only) and 2003/04-2007/08 (injuries and ill health). Combined 2000/01 injury data and 2001/02 ill health data is classed as 2000-02. The estimated days lost *per worker* due to **ill health** and **injury** in 2007/08 was similar to those in the three earlier surveys, but statistically significantly lower than in 2003/04 and 2000-02 (see Figures 5 and <http://www.hse.gov.uk/statistics/lfs/0708/swit1.htm>).



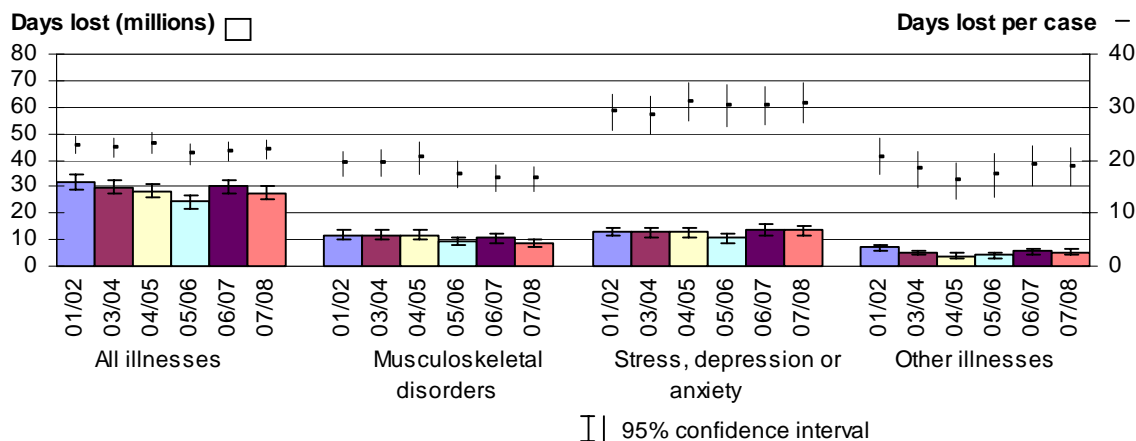
- **Stress, depression or anxiety** and **musculoskeletal disorders** accounted for the majority of days lost in 2007/08, with an estimated 13.5 million and 8.8 million days off work (full-day equivalent) respectively (see Figures 6 and 7 and <http://www.hse.gov.uk/statistics/lfs/0708/swit1.htm>).
- For musculoskeletal disorders, the average days lost per worker has fluctuated in recent years, but the annual loss of 0.37 days per worker in 2007/08 was statistically significantly lower than in each of the 3 years from 2001/02. The 2007/08 rate of 0.56 days *per worker* for stress, depression or anxiety was of a similar order to those in earlier years, with the exception of 2005/06; where the rate was statistically significantly lower (see Figure 6 and <http://www.hse.gov.uk/statistics/lfs/0708/swit1.htm>).

Figure 6: Estimated average days lost per (full-time equivalent) worker due to self-reported illness caused or made worse by work, by main type of complaint, 2001/02, 2003/04-2007/08



- In 2007/08, the average days lost *per case* for stress, depression or anxiety, at 30.6 days, was statistically significantly higher than that for musculoskeletal disorders, at 16.4 and also than that for 'other illnesses' (illnesses other than musculoskeletal disorders and stress, depression or anxiety), at 18.8 days. This pattern was also true in the earlier surveys. However, across the five surveys, the respective rates for musculoskeletal disorders, stress, depression or anxiety and 'other illnesses' remained broadly constant (see Figure 7 and <http://www.hse.gov.uk/statistics/lfs/0708/swit1.htm>)

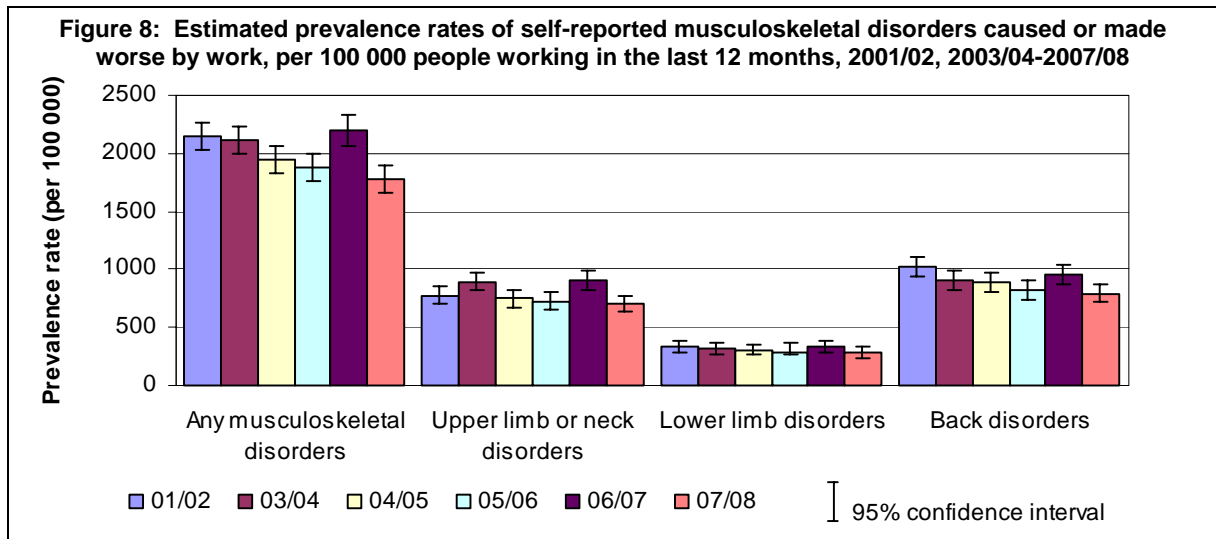
Figure 7: Estimated days (full-day equivalent) off work and average days lost per case due to self-reported illness caused or made worse by work, by main type of complaint, 2001/02, 2003/04-2007/08



All musculoskeletal disorders (bone, joint or muscle problems)

Prevalence

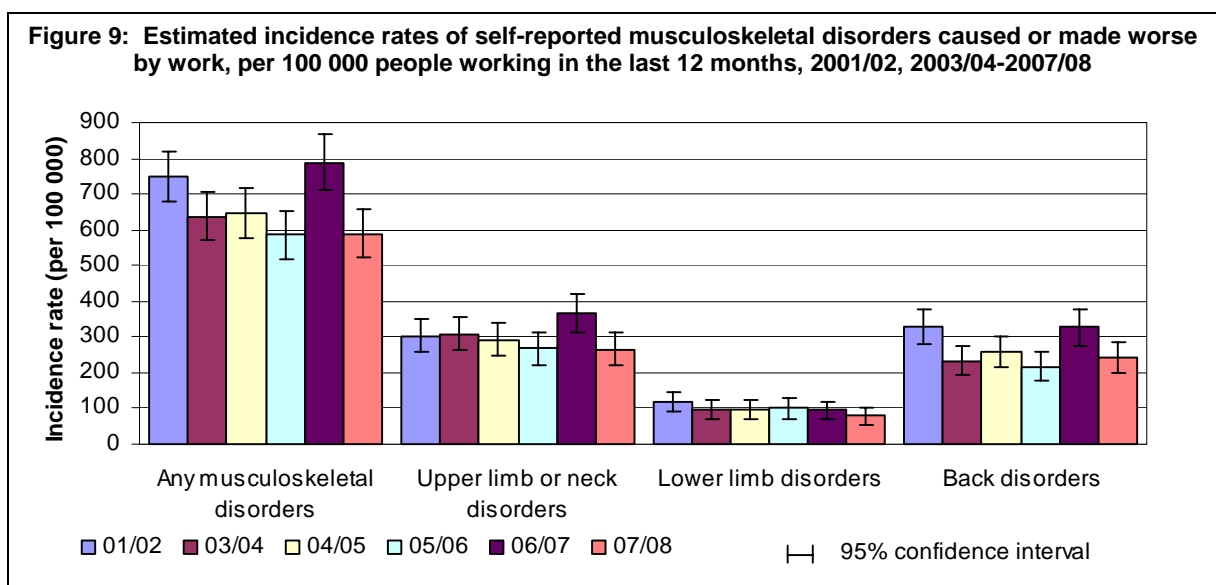
- In 2007/08 an estimated 539 000 people in Great Britain, who worked in the last year, suffered from a musculoskeletal disorder they believe was caused or made worse by their current or past work. This equates to 1800 per 100 000 people (1.8%) who worked in the last 12 months in Great Britain, statistically significantly lower than in earlier years, except in 2005/06, where the rate was of a similar order (see Figures 1 and 8 and <http://www.hse.gov.uk/statistics/lfs/0708/swit3w12.htm>).



- Of the estimated *prevalence* of individuals suffering from a work-related **musculoskeletal disorder** in 2007/08, an estimated 241 000 (45%) suffered from a disorder **mainly affecting their back**, 213 000 (40%) from a disorder **mainly affecting their upper limbs or neck**, and 86 000 (16%) **mainly affecting their lower limbs** (see Figure 1 and <http://www.hse.gov.uk/statistics/lfs/0708/swit3w12.htm>).

Incidence

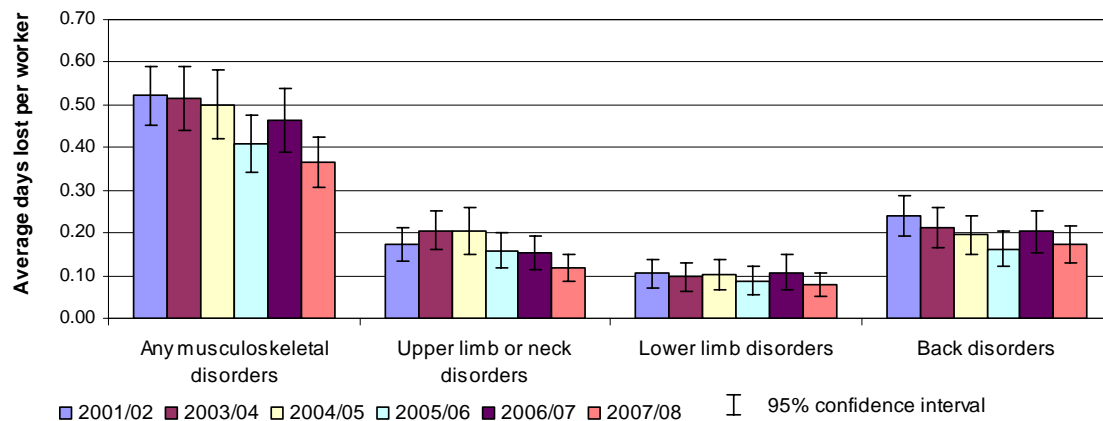
- Around one third (178 000) of the estimated *prevalence* of work-related **musculoskeletal disorders** were new (*incidence*) cases. This equates to an estimated *incidence* rate of 590 per 100 000 people (0.59%). Whilst this rate has fluctuated in recent years, in 2007/08 it was statistically significantly lower than in both 2001/02 and 2006/07(see Figure 9 <http://www.hse.gov.uk/statistics/lfs/0708/swit6w12.htm>).



Days lost

- In 2007/08, an estimated 8.8 million working days (full-day equivalent) were lost through work-related musculoskeletal disorders. Around three-quarters of these were accounted for by conditions **mainly affecting the back and upper limbs or neck**, with 4.1 million days and 2.8 million days respectively. The remaining 1.9 million days was attributed to disorders **mainly affecting the lower limbs** (see <http://www.hse.gov.uk/statistics/lfs/0708/swit1.htm>).
- On average, each person suffering from a work-related **musculoskeletal disorder** took an estimated 16.4 days off in 2007/08. This equates to an annual loss of 0.37 days *per worker*. This rate, which has fluctuated in recent years, is statistically significantly lower than that in earlier years except in 2005/06, where the rate was of a similar order (see Figure 10 and <http://www.hse.gov.uk/statistics/lfs/0708/swit1.htm>).

Figure 10: Estimated average days lost per worker (full-time equivalent) due to self-reported illness caused or made worse by work, by type of musculoskeletal disorder, 2001/02, 2003/04-2007/08



Employment-related details

- Industry sectors 'agriculture, hunting, forestry and fishing', 'construction', 'health and social work', 'transport, storage and communication' and 'other community, social and personal service activities' had *prevalence* rates (three-year average) of **work-related musculoskeletal disorders** statistically significantly higher than average (see http://www.hse.gov.uk/statistics/lfs/0708/msdind2_3yr.htm).
- Occupation groups with *prevalence* rates (three-year average) of **work-related musculoskeletal disorders** statistically significantly higher than average were 'skilled agricultural trades', 'skilled construction and building trades', 'health and social welfare associate professionals', 'skilled metal and electrical trades', 'process, plant and machine operatives', 'transport and mobile machine drivers and operatives', 'textiles, printing and other skilled trades' and 'elementary trades, plants and storage related occupations' (see http://www.hse.gov.uk/statistics/lfs/0708/msdocc2_3yr.htm).

Musculoskeletal disorders (bone, joint or muscle problems) mainly affecting the back

Prevalence

- In 2007/08, an estimated 241 000 people in Great Britain who had worked in the last year believed they were suffering from a **musculoskeletal disorder mainly affecting the back** that was caused or made worse by their current or past work. This equates to 800 per 100 000 people (0.8%) in Great Britain who worked in the last 12 months (see Figures 1 and 8, and <http://www.hse.gov.uk/statistics/lfs/0708/swit3w12.htm>).
- This *prevalence* rate was statistically significantly lower than in both 2001/02 and 2006/07, but of a similar order to those in 2003/04, 2004/05 and 2005/06.

Incidence

- Just under a third of sufferers in 2007/08, an estimated 74 000 people, *first became aware* of their work-related **musculoskeletal disorder mainly affecting the back** in the previous 12 months. This equates to an estimated 240 per 100 000 people (0.24%) with a *new* work-related musculoskeletal disorder mainly affecting the back in this period (see Figure 9 and <http://www.hse.gov.uk/statistics/lfs/0708/swit6w12.htm>).
- This *incidence* rate was statistically significantly lower than in both 2001/02 and 2006/07, but of a similar order to 2003/04, 2004/05 and 2005/06.

Days lost

- An estimated 4.1 million working days (full-day equivalent) were lost in 2007/08 through **musculoskeletal disorders mainly affecting the back** caused or made worse by work. On average, each person suffering took an estimated 17.2 days off in that 12 month period. This equates to an annual loss of 0.17 days *per worker* (see Figure 10 and <http://www.hse.gov.uk/statistics/lfs/0708/swit1.htm>).
- The number of days lost *per worker* in 2007/08 was statistically significantly lower than in 2001/02 but of a similar order to other years over the period 2003/04 to 2006/07 (see Figure 10 and <http://www.hse.gov.uk/statistics/lfs/0708/swit1.htm>).

Employment-related details

- Industry sectors with statistically significantly higher than average *prevalence* rates (three-year average) of **work-related musculoskeletal disorders mainly affecting the back**, (where sample sizes were large enough to provide reliable estimates), were 'agriculture, hunting, forestry and fishing', 'health and social work', 'construction' and 'transport, storage and communication' (see http://www.hse.gov.uk/statistics/lfs/0708/backind2_3yr.htm).
- Occupation groups with *prevalence* rates (three-year average) of **work-related musculoskeletal disorders mainly affecting the back** statistically significantly higher than average, (where sample numbers were sufficiently large to provide reliable estimates), were 'skilled agricultural trades', 'health and social welfare associate professionals', 'skilled construction and building trades', 'transport and mobile machine drivers and operatives', 'skilled metal and electrical trades', 'caring personal service occupations' and 'elementary trades, plant and storage related occupations' (see http://www.hse.gov.uk/statistics/lfs/0708/backocc2_3yr.htm).

Musculoskeletal disorders (bone, joint or muscle problems) mainly affecting the upper limbs or neck

Prevalence

- In 2007/08, an estimated 213 000 people in Great Britain who had worked in the last year believed they were suffering from a **musculoskeletal disorder mainly affecting the upper limbs or neck** that was caused or made worse by their current or past work. This equates to 700 per 100 000 people (0.7%) in Great Britain who worked in the last 12 months. (see Figures 1 and 8, and <http://www.hse.gov.uk/statistics/lfs/0708/swit3w12.htm>)
- This *prevalence* rate was statistically significantly lower than in both 2003/04 and 2006/07, but of a similar order to those in 2001/02, 2004/05 and 2005/06.

Incidence

- Just over a third of sufferers in 2007/08, 81 000 people, *first became aware* of their work-related **musculoskeletal disorder mainly affecting the upper limbs or neck** in the previous 12 months. This equates to an estimated 270 per 100 000 people (0.27%) with a *new* work-related **musculoskeletal disorder mainly affecting the upper limbs or neck** in this period (see Figure 9 and <http://www.hse.gov.uk/statistics/lfs/0708/swit6w12.htm>).
- This *incidence* rate was statistically significantly lower than in 2006/07, but of a similar order to other years over the period 2001/02 to 2005/06.

Days lost

- An estimated 2.8 million working days (full-day equivalent) were lost in 2007/08 through **musculoskeletal disorders mainly affecting the upper limbs or neck** caused or made worse by work. On average, each person suffering took an estimated 13.3 days off in that 12 month period. This equates to an annual loss of 0.12 days *per worker* (see Figure 10 and <http://www.hse.gov.uk/statistics/lfs/0708/swit1.htm>).
- The number of days lost per worker in 2007/08 was of a similar order to the two previous years, but statistically significantly lower than in each of 2001/02, 2003/04 and 2005/06 (see Figure 10 and <http://www.hse.gov.uk/statistics/lfs/0708/swit1.htm>).

Employment related details

- Industry sectors with statistically significantly higher than average *prevalence* rates (three-year average) of work-related **musculoskeletal disorders mainly affecting the upper limbs or neck**, (where sample sizes were large enough to provide reliable estimates), were 'other community, social and personal service activities', 'manufacturing' and 'construction' (see http://www.hse.gov.uk/statistics/lfs/0708/ulnind2_3yr.htm).
- Occupation groups with statistically significantly higher than average *prevalence* rates (three-year average) of **work-related musculoskeletal disorders mainly affecting the upper limbs or neck**, (where sample numbers were sufficiently large to provide reliable estimates), were 'process, plant and machine operatives', 'culture, media and sports occupations', 'skilled construction and building trades' and 'health and social welfare associate professionals' (see http://www.hse.gov.uk/statistics/lfs/0708/ulnocc2_3yr.htm).

Stress, depression or anxiety

Prevalence

- In 2007/08 an estimated 442 000 people in Great Britain, who worked in the last year, believed that they were suffering from **stress, depression or anxiety** caused or made worse by their current or past work. This equates to 1500 per 100 000 people (1.5%) who worked in the last 12 months in Great Britain (see Figures 1 and 2, and <http://www.hse.gov.uk/statistics/lfs/0708/swit3w12.htm>)
- This *prevalence* rate of self-reported work-related **stress, depression or anxiety** has been broadly level over the years 2001/02 to 2007/08, with the exception of 2005/06 where the *prevalence* rate was statistically significantly lower than all other years (see Figure 2 and <http://www.hse.gov.uk/statistics/lfs/0708/swit3w12.htm>).

Incidence

- An estimated 237 000 people, first became aware of work-related **stress, depression or anxiety** in 2007/08, giving an annual incidence rate of 780 cases per 100 000 people (0.78%). (See Figure 3 and <http://www.hse.gov.uk/statistics/lfs/0708/swit6w12.htm>).
- The incidence rate of self-reported work-related **stress, depression or anxiety** has been broadly level over the years 2001/02 to 2007/08, with the exception of 2005/06 where the incidence rate was statistically significantly lower than all other years (see Figure 3 and <http://www.hse.gov.uk/statistics/lfs/0708/swit6w12.htm>).

Days lost

- An estimated 13.5 million working days (full-day equivalent) were lost in 2007/08 through self-reported **stress, depression or anxiety** caused or made worse by work. On average, each person suffering took an estimated 30.6 days off in that 12 month period. This equates to an annual loss of 0.56 days *per worker* (see Figures 6 and 7, and <http://www.hse.gov.uk/statistics/lfs/0708/swit1.htm>).
- The number of days lost per worker in 2007/08 was of a similar order to those in earlier years, with the exception of 2005/06, where the rate was lower than in 2007/08 (see Figure 6 and <http://www.hse.gov.uk/statistics/lfs/0708/swit1.htm>).

Employment related details

- Industry sectors with statistically significantly higher than average prevalence rates (three-year average) of work-related **stress, depression or anxiety**, (where sample sizes were large enough to provide reliable estimates), were 'public administration and defence', 'health and social work', 'education' and 'financial intermediation' (see http://www.hse.gov.uk/statistics/lfs/0708/strind2_3yr.htm).
- Occupation groups with statistically significantly higher than average *prevalence* rates (three-year average) of self-reported work-related **stress, depression or anxiety**, (where sample numbers were sufficiently large to provide reliable estimates), were 'teaching and research professionals', 'health and social welfare associate professionals', 'protective service occupations', 'customer service occupations', 'business and public service associate professionals', 'corporate managers' and 'business and public service professionals'. (See http://www.hse.gov.uk/statistics/lfs/0708/strocc2_3yr.htm).

Technical annex

The Labour Force Survey (LFS) is a large nationally representative survey of about 50 000 responding households that provides a wealth of information about the Labour Force. It asks individuals about their current or most recent job, as well as enquiring about related topics such as training, qualifications and income. The survey is managed by the Office for National Statistics in Great Britain and by the Department of Finance and Personnel in Northern Ireland on behalf of the Department of Enterprise, Trade and Investment (DETINI).

The HSE commissions questions in the LFS, taking advantage of existing arrangements for sampling and interviewing a large nationally representative sample, to gain a view of work-related illness and workplace injury based on individual's perceptions. The HSE questions are included in two survey modules - **'The Workplace Injury survey'** module and the **'Self-reported Work-related Illness (SWI) survey'** module. The 'Workplace Injury survey' module has been included annually since 1992/93, whilst the 'SWI survey' module were included on an ad hoc basis until 2003/04, since when questions have appeared annually.

The Workplace Injury survey module, which asks as it's screening question:

"Thinking of the 12 months since [date], have you had any accident resulting in injury at work or in the course of your work?"

is administered to individuals who reported to have worked at some point in the last 12 months, whilst the SWI survey module which asks as its screening question:

"Within the last 12 months have you suffered from any illness, disability or other physical or mental problem that was caused or made worse by your job or by work you have done in the past?"

is intended to be administered to all individuals who reported to have worked at some point during their life. However, due to a routing error in the 2007/08 survey, coverage of the SWI survey module was restricted to people working in the last 12 months rather than people ever employed (as in earlier surveys from 2001/02). For comparability with earlier time periods, a top-level prevalence estimate relating to all work-related ill health for people ever employed has been imputed for 2007/08. However, this imputation has not been made at lower levels since the imputation process becomes less precise at more disaggregated levels. All other published estimates for 2007/08 are restricted to people working in the last 12 months.

Definitions:

For injuries: Information is presented as estimated incidence and rates of reportable non-fatal injuries where:

- **Estimated injury incidence** is the estimated number of people reporting a workplace injury in the 12 months prior to interview (the reference period);
- **Injury Incidence rate** is defined as the injury incidence estimate divided by the annual estimate of employment (this is taken as the number of individuals reporting themselves as currently employed);
- **Reportable non-fatal injury** aligns the estimates with statutory reports of non-fatal workplace injury by employers under HSE's Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (which whilst offering more depth suffers from under-reporting). It includes those self-reported accidents resulting in 4 or more days off work

For illness, the LFS gives estimates of the number of people who have conditions which they think have been caused or made worse by work (regardless of whether they have been seen by doctors). Information is presented as estimated *prevalence* and rates of self-reported illness and estimated *incidence* and rates of self-reported illness where:

- **Estimated prevalence** is the estimated number of people with a work-related illness at any time during the 12-month reference period. It includes the full range of illnesses from *long standing to new cases*;
- **Prevalence rate** is defined as the prevalence estimate divided by the population at risk of having a work-related illness;

- **Estimated incidence** is the estimated number of *new* cases of work-related illness occurring in the 12 month reference period i.e. people first becoming aware of their illness in this 12 month period;
- **Incidence rate** is defined as the incidence estimate (restricted to individuals working in the 12 month period) divided by the population at risk of experiencing a new case of work-related illness during the reference period.

For *working days lost*, the LFS gives estimates and rates of the total number of days off work due to work-related illness and/or workplace injury where:

- **Working days lost** are expressed as full-day equivalent days to allow for variation in daily hours worked and includes days lost due to *all* non-fatal injuries (not just reportable non-fatal injuries) and *all* work-related illness (new and long standing cases);
- **Rates** presented are in the form of average annual working days lost (full-day equivalent) per case of work-related illness and average annual working days lost (full-day equivalent) per full-time equivalent worker.

All estimates are presented by a range of demographic and employment-related variables, with the level dependent on the level at which the data was collected in the LFS (e.g. individual characteristics such as age and sex are available for all survey subjects. Employment related information such as occupation³ and industry⁴ are only available for those who are currently in work or whose most recent job was in the last 8 years).

Statistical significance and confidence intervals

All LFS based population estimates are subject to sampling error, or uncertainty, since they are based on a sample of individuals rather than the whole population. **95% confidence intervals** are quoted to indicate the range of uncertainty due to this: each of these shows the range of values which we are 95% confident contains the true value (i.e. the value that would have been found if the entire population had been surveyed) in the absence of bias. Correspondingly, a difference between two estimates is described as “statistically significant” if there is a less than 5% chance that it is due to sampling error alone.

The main factor that determines the size of the confidence interval around an estimate is the size of the group for which the estimate is being derived – the smaller the group the less precise the estimate. For estimates based on less than 30 sample cases (which equates to an incidence/ prevalence estimate of about 15 000) confidence intervals should be quoted in preference to the prevalence or incidence central estimate or rate i.e. figures shown in italics within the tables. In order to reflect some of the variability in the days lost estimates (measure from person to person) as well as the sample numbers involved, confidence intervals should be quoted for days lost estimates and rates based on fewer than 40 cases taking time off, also shown in italics. Estimates based on fewer than 20 sample cases (which equates to an incidence/prevalence of about 10 000 cases) are not published as they are likely to be unreliable.

Three-year averages

One way of increasing the reliability of survey data is to increase the sample size on which it is based. Whilst the annual sample size is fixed, several years' worth of data can be pooled to produce estimates for the average of the combined years. Some results – particularly for workplace injury but also for work-related illness by industry and occupation where the number of annual sample cases at detailed levels tend to be low - have been produced in this way by pooling the three years worth of data from 2005/06, 2006/07 and 2007/08.

For more details about the survey design and methods used see <http://www.hse.gov.uk/statistics/lfs/technicalnote.htm>

³ The Standard Occupational Classification 2000 (SOC 2000) is used to classify the respondents' *occupation*. For more details please see http://www.statistics.gov.uk/methods_quality/soc/section1.asp.

⁴ The Standard Industrial Classification 1992 (SIC92) is used to classify the respondents' *industry of employment*. For more details please see http://www.statistics.gov.uk/methods_quality/sic/contents.asp.