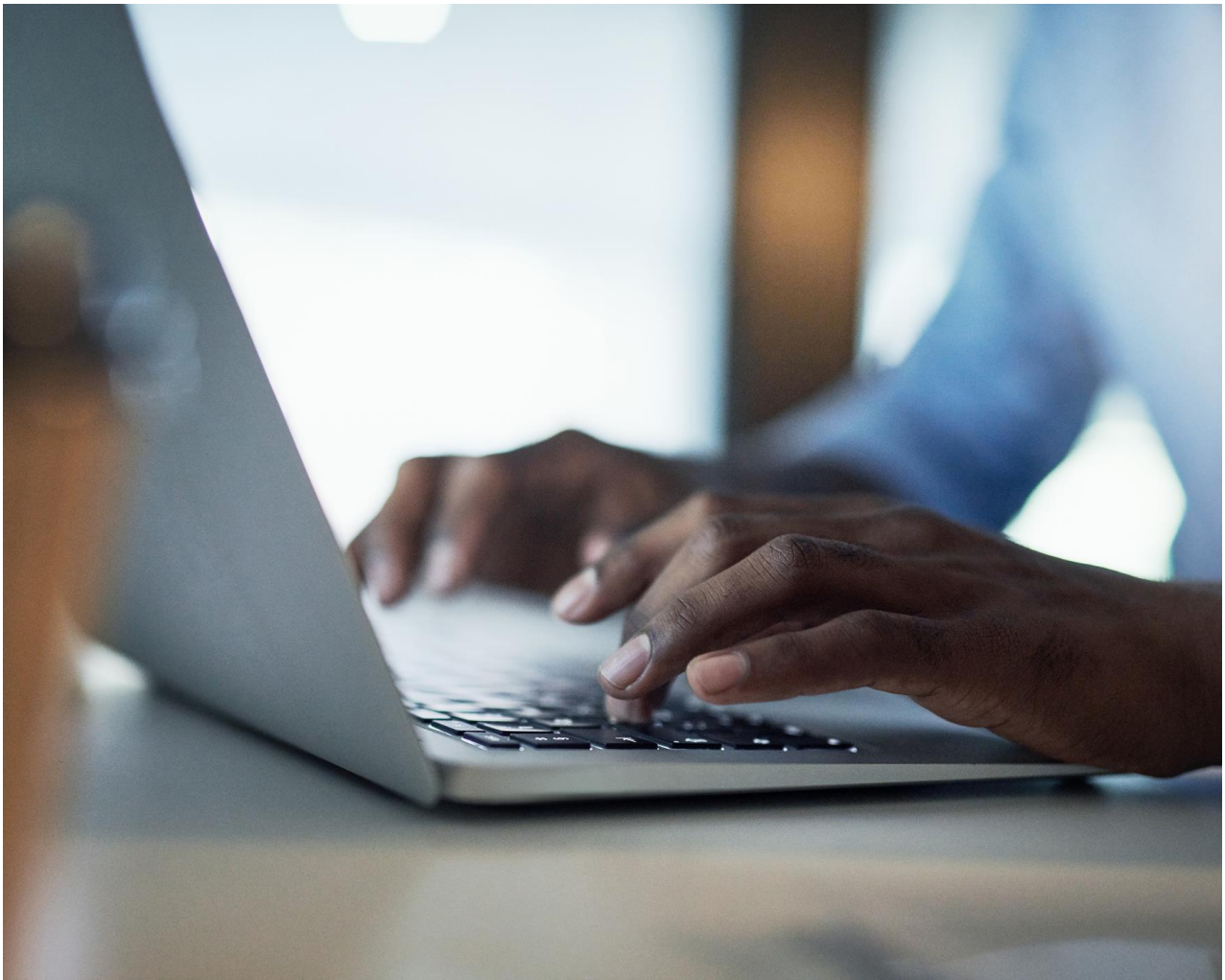
Work-related musculoskeletal disorders statistics in Great Britain, 2021

Data up to March 2021
Annual statistics
Published 16th December 2021



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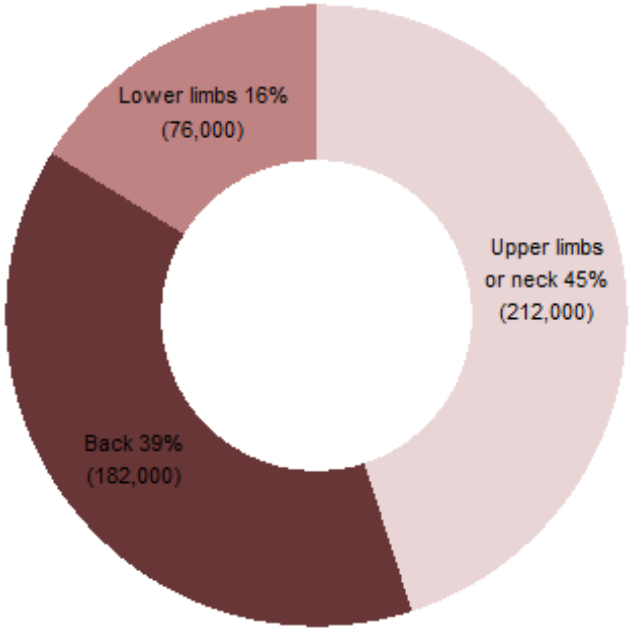
Summary

470,000 workers suffering from work-related musculoskeletal disorders (new or long-standing) in 2020/21.

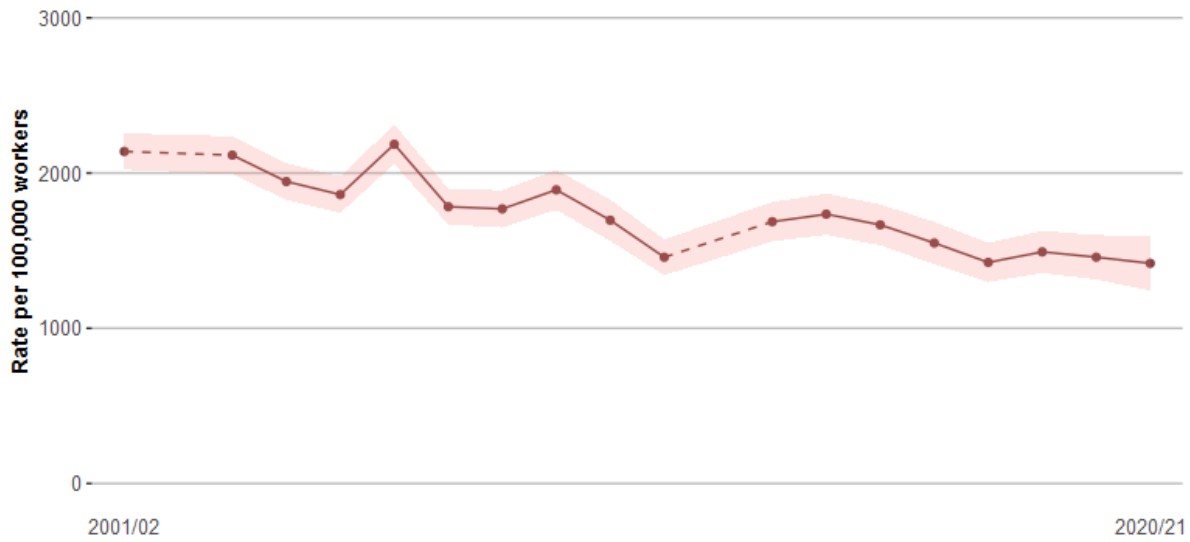
Labour Force Survey (LFS)

Work-related musculoskeletal disorders by affected area, 2020/21



Source: LFS estimate 2020/21

Rate of musculoskeletal disorders per 100,000 workers: new and long-standing



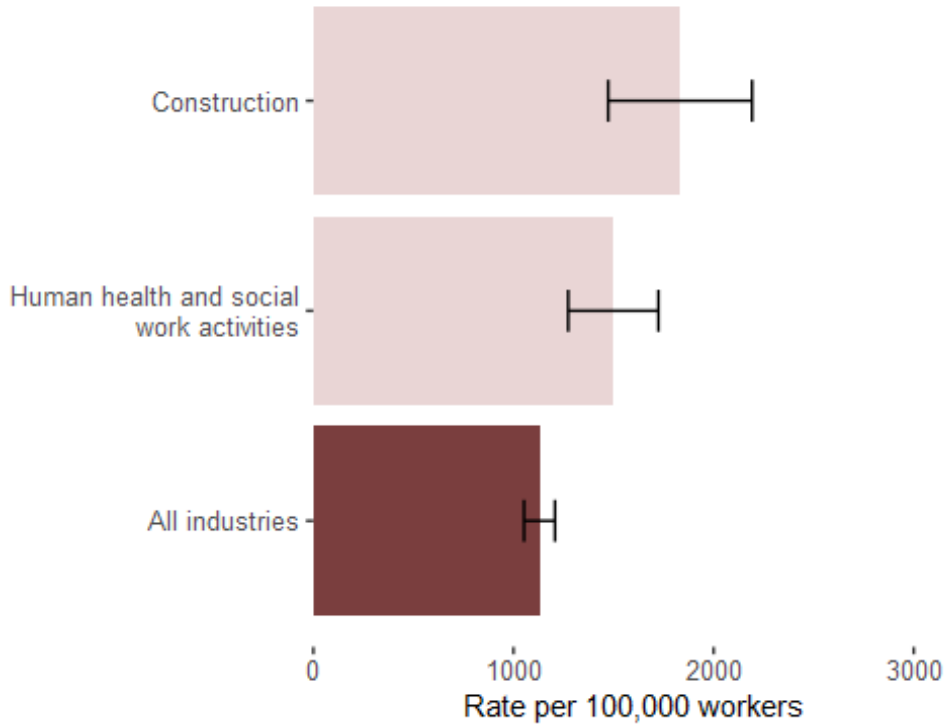
Prior to the coronavirus pandemic, the rate of self-reported work-related musculoskeletal disorders showed a generally downward trend. In 2020/21 the rate was broadly similar to the 2018/19 pre-coronavirus levels.

No ill health data was collected in 2002/03 and 2012/13, represented by the dashed line

Shaded area represents a 95% confidence interval

Source: LFS annual estimate, from 2001/02 to 2020/21

Industries with higher than average rates of musculoskeletal disorders, averaged 2018/19-2020/21.



Source: LFS estimated annual average 2018/19-2020/21
95% confidence intervals are shown on the chart

The latest estimates from the Labour Force Survey (LFS) show:

- The total number of cases of work-related musculoskeletal disorders in 2020/21 was 470,000, a prevalence rate of 1,420 per 100,000 workers. These comprised of 212,000 cases where the upper limbs or neck was affected, 182,000 where the back was affected and 76,000 where the lower limbs were affected.
- Prior to the coronavirus pandemic, the rate of self-reported work-related musculoskeletal disorders showed a generally downward trend. In 2020/21 the rate was broadly similar to the 2018/19 pre-coronavirus levels.
- The number of new cases was 162,000, an incidence rate of 490 per 100,000 workers.
- In 2020/21 musculoskeletal disorders accounted for 28% of all work-related ill health cases.
- By top-level industry, musculoskeletal disorders is most prevalent in:

  - Human health and social work activities

- In terms of occupation, higher than the all jobs average rate of work-related musculoskeletal disorders were found in:
  - Skilled trades occupations.
- The main work factors cited by respondents as causing work-related musculoskeletal disorders were manual handling, working in awkward or tiring positions, and keyboard or repetitive work (2009/10- 2011/12).
- Of the 470,000 workers suffering from a work-related musculoskeletal disorder in 2020/21 an estimated 85,000 reported that this was caused or made worse by the effects of the coronavirus pandemic.
- These estimates of the number of workers who suffered work-related musculoskeletal disorders as a result of the coronavirus pandemic should not be subtracted from the overall estimate of work-related musculoskeletal disorders. It cannot be assumed that those individuals would not have otherwise suffered from work-related musculoskeletal disorders in the absence of coronavirus.

Introduction

Musculoskeletal disorders can affect muscles, joints and tendons in all parts of the body. Most work-related musculoskeletal disorders develop over time. They can be episodic or chronic in duration and can also result from injury sustained in a work-related accident. Additionally, they can progress from mild to severe disorders. These disorders are seldom life threatening but they impair the quality of life of a large proportion of the adult population.

Work-related musculoskeletal disorders can develop in an occupational setting due to the physical tasks with which individuals carry out their normal work activities. WRMSDs are associated with work patterns that include:

- Fixed or constrained body positions.
- Continual repetition of movements.
- Force concentrated on small parts of the body such as the hand or wrist.
- A pace of work that does not allow sufficient recovery between movements.

Additionally, workplace psychosocial factors such as organisational culture, the health and safety climate and human factors may create the conditions for work-related musculoskeletal disorders to occur. Generally, none of these factors act separately to cause work-related musculoskeletal disorders.

HSE's preferred data source for calculating rates and estimates for work-related musculoskeletal disorders are self-reports from the Labour Force Survey (LFS). Previously HSE also collected data on work-related musculoskeletal disorders through The Health and Occupation Research network for general practitioners (THOR-GP). These data although historic provide a general practitioners perspective and are still useful data on work-related causes of musculoskeletal disorders.

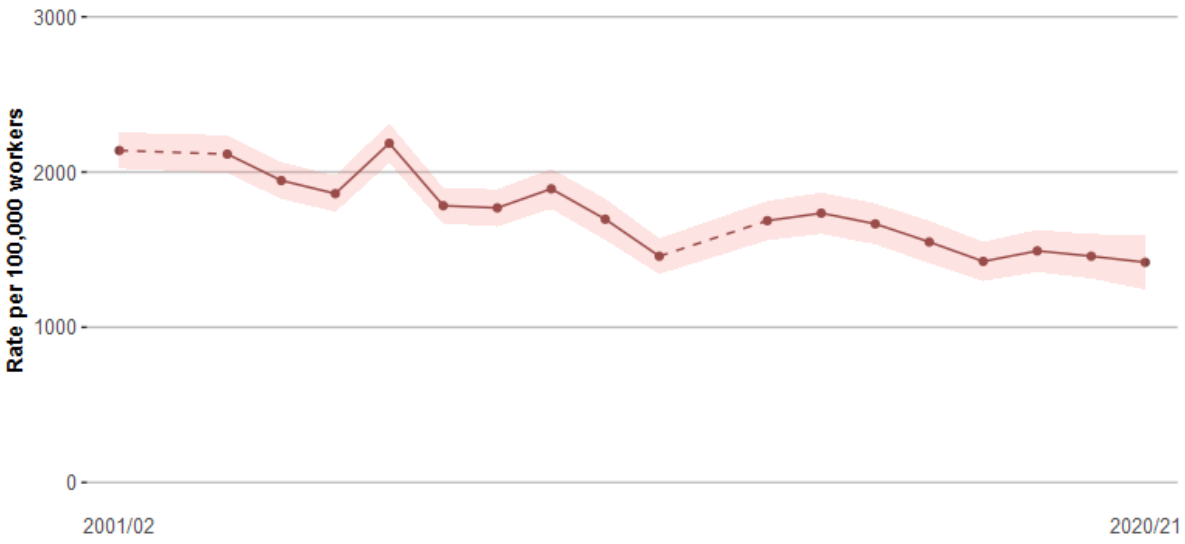
Important Note: The coronavirus (COVID-19) pandemic and the government's response has impacted recent trends in health and safety statistics published by HSE. The coronavirus pandemic has also affected certain data collections and consequently, no new data on working days lost and economic costs is available in 2020/21. In addition, two new measures have been developed to measure the impact of the coronavirus pandemic on self-reported work-related ill health. Our previously published data on working days lost relating to earlier periods can be found in archived tables. www.hse.gov.uk/statistics/lfs/lfs-archive.htm.
More details can be found in our technical report on the impact of the coronavirus pandemic on health and safety statistics.
www.hse.gov.uk/statistics/coronavirus/covid-19.pdf

Scale and trend in work-related musculoskeletal disorders

In 2020/21 there were an estimated 470,000 workers affected by work-related musculoskeletal disorders. This represents 1,420 per 100,000 workers, and thus accounts for 28% of all work-related ill health.

Most of these work-related musculoskeletal disorders affect the upper limb or neck, 45% of all work-related musculoskeletal disorder cases, or the back, 39% of all work-related musculoskeletal disorder cases with the remaining 16% of cases affecting the lower limbs.

Figure 1: Estimated prevalence rates of self-reported work-related musculoskeletal disorders in Great Britain, for people working in the last 12 months



Prior to the coronavirus pandemic, the rate of self-reported work-related musculoskeletal disorders showed a generally downward trend. In 2020/21 the rate was broadly similar to the 2018/19 pre-coronavirus levels.

No ill health data was collected in 2002/03 and 2012/13, represented by the dashed line

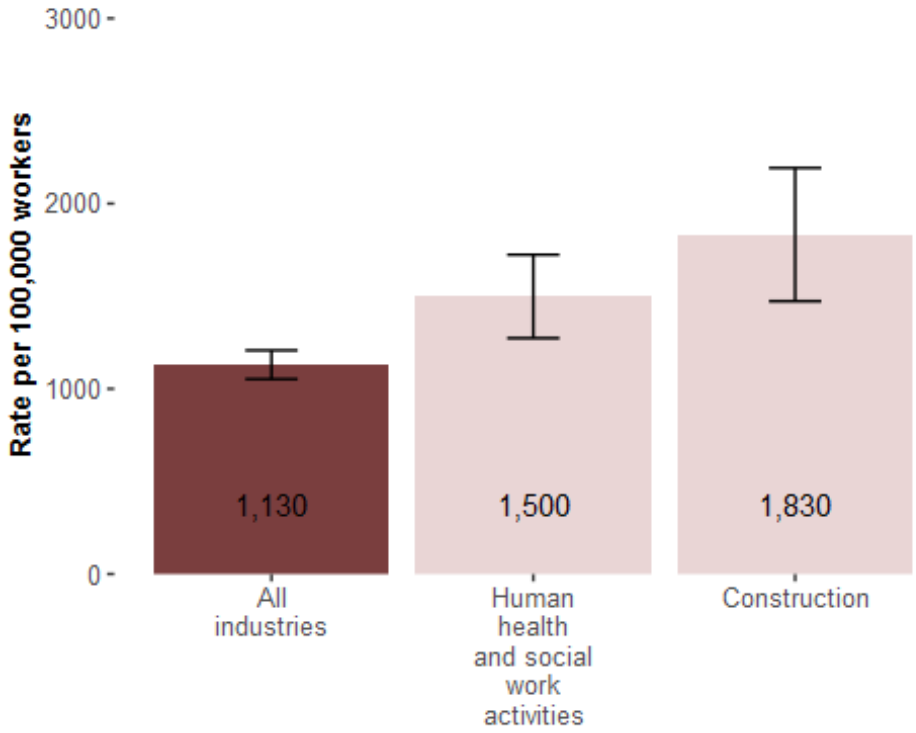
Shaded area represents a 95% confidence interval

Source: LFS annual estimate, from 2001/02 to 2020/21

Work-related musculoskeletal disorders by industry

The average prevalence of work-related musculoskeletal disorders across all industries was 1,130 cases per 100,000 workers averaged over the period 2018/19-2020/21. The broad industry categories of Construction (1,830 cases per 100,000 workers) and Human health and social work activities (1,500 cases per 100,000 workers) had significantly higher rates than the average for all industries.

Figure 2: Estimated prevalence rates of self-reported work-related musculoskeletal disorders in Great Britain, for people working in the last 12 months, by industries with higher rates averaged 2018/19-2020/21



Source: LFS, estimated annual average 2018/19-2020/21
95% confidence intervals are shown on the chart

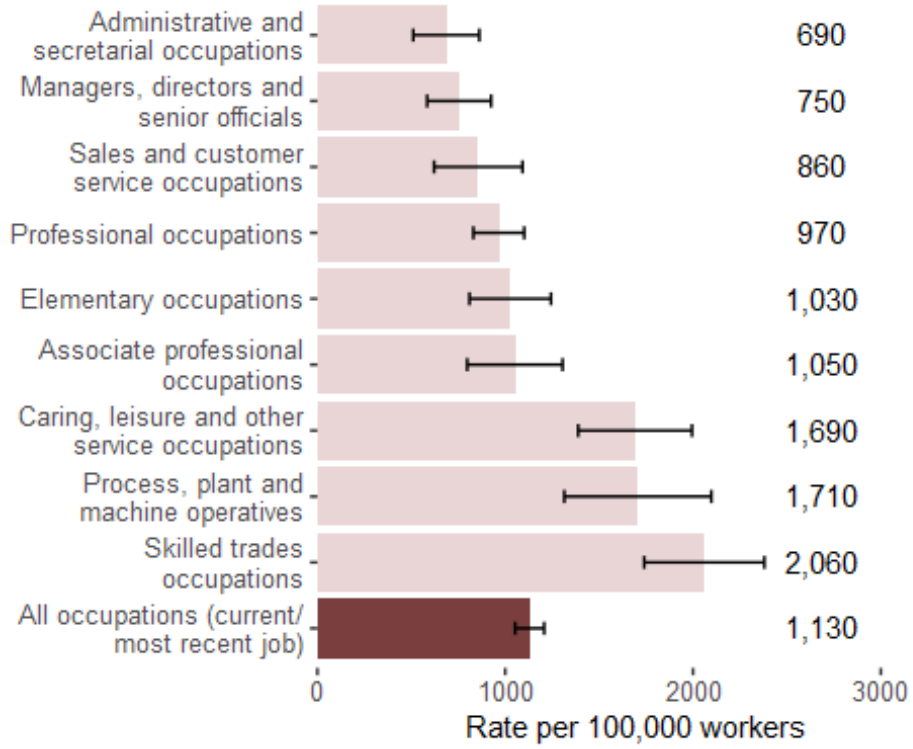
Work-related musculoskeletal disorders by occupation

For the three-year period averaged over 2018/19-2020/21, Skilled trades occupations (2,060 cases per 100,000 workers), Caring, leisure and other service occupations (1,690 cases per 100,000 workers), and Process, plant and machine operatives (1,710 cases per 100,000 workers) had statistically significantly higher rates of work-related musculoskeletal disorders compared to the rate for all occupational groups (1,130 per 100,000 workers).

A number of smaller occupational groups, some part of the above bigger groupings, also had statistically higher rates (averaged over 2018/19-2020/21) including:

- Health professionals.
- Skilled agricultural and related trades.
- Skilled metal, electrical and electronic trades.
- Skilled construction and building trades.
- Caring personal service occupations.
- Process, plant and machine operatives.

Figure 3: Estimated prevalence rates of self-reported work-related musculoskeletal disorders in Great Britain, for people working in the last 12 months, by occupation, averaged 2018/19-2020/21



Source: LFS estimated annual average 2018/19-2020/21
95% confidence intervals are shown on the chart

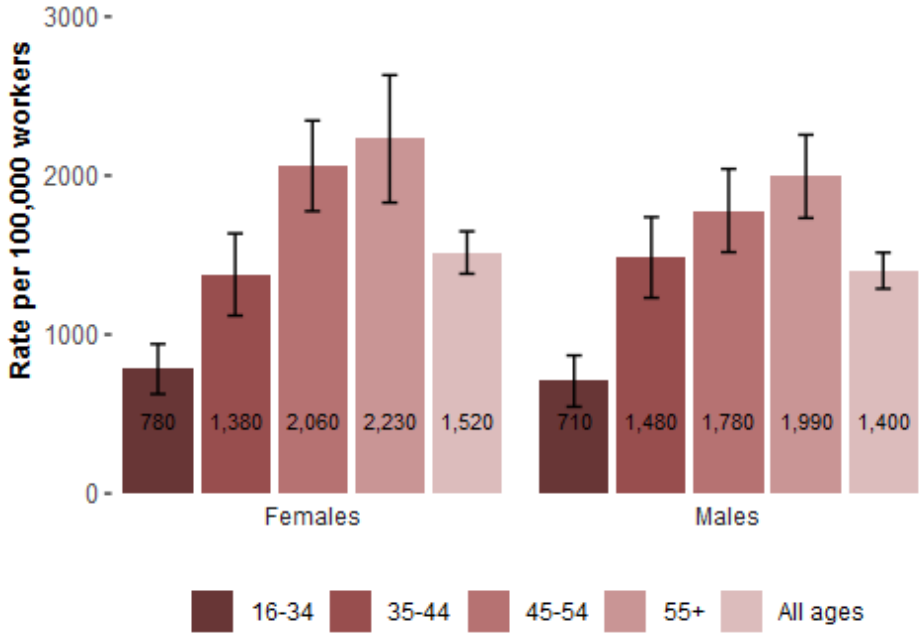
Work-related musculoskeletal disorders by age and gender

The most recent data shows that compared to all workers, both males and females overall did not have statistically different rates of work-related musculoskeletal disorders.

Compared to all workers:
- Males aged 16-34
- Females aged 16-34
had significantly lower rates of work-related musculoskeletal disorders.

By contrast:
- Males aged 45-54
- Males aged 55+
- Females aged 45-54
- Females aged 55+
had significantly higher rates.

Figure 4: Prevalence rate of self-reported work-related musculoskeletal disorders in Great Britain, by age and gender per 100,000 workers averaged over the period 2018/19-2020/21

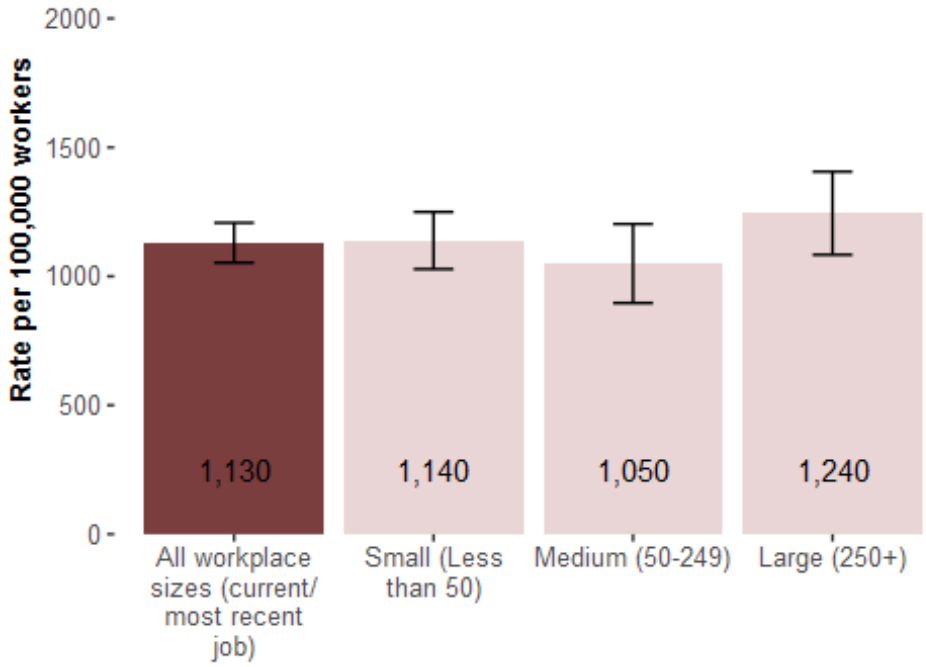


Source: LFS estimated annual average 2018/19-2020/21
95% confidence intervals are shown on the chart

Work-related musculoskeletal disorders and workplace size

Compared with the rate of all workplaces size, small, medium, and large workplaces did not show a statistically significant difference.

Figure 5: Prevalence rates of self-reported work-related musculoskeletal disorders in Great Britain, by workplace size per 100,000 workers, averaged over the period 2018/19-2020/21



Source: LFS estimated annual average 2018/19-2020/21
95% confidence intervals are shown on the chart

Causes of work-related musculoskeletal disorders

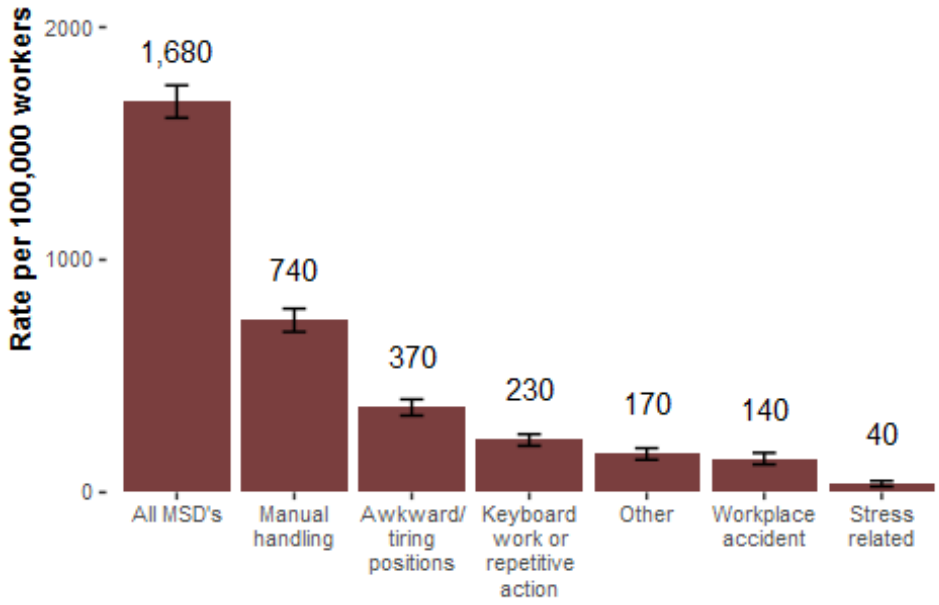
Of the 470,000 workers suffering from work-related musculoskeletal disorders in 2020/21 an estimated 85,000 reported that this was caused or made worse by the effects of the coronavirus pandemic.

Source: LFS

These estimates of the number of workers who suffered work-related stress, depression or anxiety as a result of the coronavirus pandemic should not be subtracted from the overall estimate of work-related stress, depression or anxiety. It cannot be assumed that those individuals would not have otherwise suffered work-related stress, depression or anxiety in the absence of coronavirus.

Prior to the coronavirus pandemic the main causes of work-related musculoskeletal disorders from the Labour Force Survey (2009/10-2011/12) were manual handling, working in awkward or tiring positions and repetitive action or keyboard work.

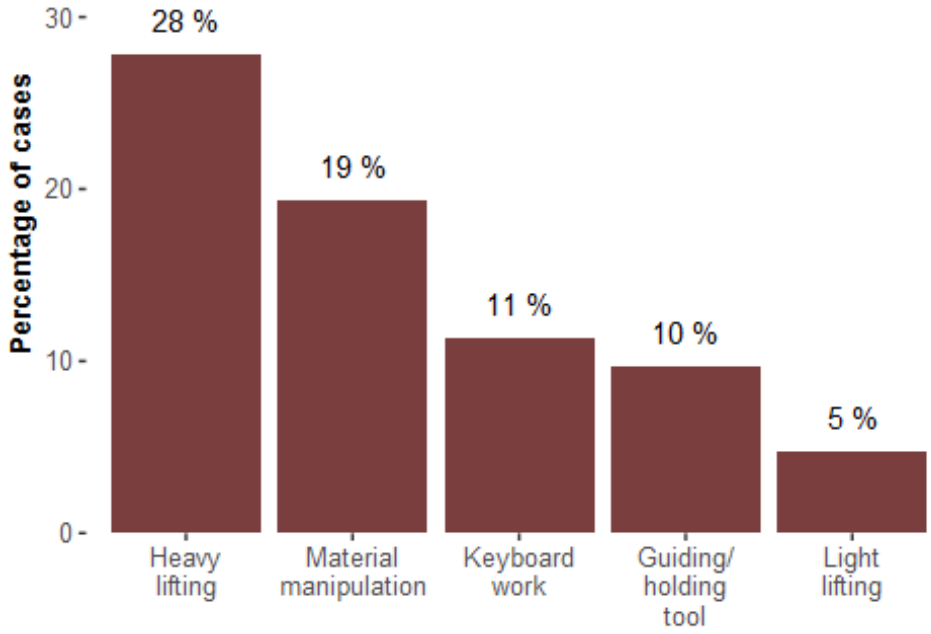
Figure 6: Estimated prevalence rates of self-reported musculoskeletal disorders in Great Britain, by how caused or made worse by work, averaged 2009/10-2011/12



Source: LFS estimated annual average 2009/10-2011/12
95% confidence intervals are shown on the chart

The general practitioner's network (THOR-GP 2013-2015) reported with cases of work-related musculoskeletal disease the main task contributing to the condition. These medically assessed cases indicate a similar pattern to self-reported data from the Labour Force Survey.

Figure 7: Percentage of work-related musculoskeletal disorders reported to THOR-GP according to main attributed task, three-year aggregate total 2013-2015 in Great Britain



Source: THOR(GP), data 2013-2015

Annex 1: Sources and definitions

The Labour Force Survey (LFS): The LFS is a national survey run by the Office for National Statistics of currently around 37,000 households each quarter. HSE commissions annual questions in the LFS to gain a view of self-reported work-related illness and workplace injury based on individuals' perceptions. The analysis and interpretation of these data are the sole responsibility of HSE.

- Self-reported work-related illness: People who have conditions which they think have been caused or made worse by their current or past work, as estimated from the LFS. Estimated total cases include long-standing as well as new cases. New cases consist of those who first became aware of their illness in the last 12 months.

- It is important to note that an estimate of work-related MSDs for the latest year in the absence of the coronavirus pandemic cannot be derived from the estimates presented in this document. This is due to the fact that it cannot be assumed that any individual case attributed to the coronavirus pandemic would not have developed anyway in the given year.

Reports of ill health by general practitioners (GPs) (THOR GP): THOR GP is a surveillance scheme in which general practitioners (GPs) are asked to report new cases of work-related ill health. It was initiated in June 2005. Participating GPs report anonymised information about newly diagnosed cases to the Centre for Occupational and Environmental Health (COEH), University of Manchester. HSE funding ended in 2016 so the last year of data available to HSE is 2015.

Rate per 100,000: The number of annual workplace injuries or cases of work-related ill health per 100,000 employees or workers.

95% confidence interval: The range of values within which we are 95% confident contains the true value, in the absence of bias. This reflects the potential error that results from surveying a sample rather than the entire population.

Statistical significance: A difference between two sample estimates is described as 'statistically significant' if there is a less than 5% chance that it is due to sampling error alone.

For more information, see www.hse.gov.uk/statistics/sources.pdf

Annex 2: Links to detailed tables

The data in this report can be found in the following tables: LFS tables
Type of illness (LFSILLTYP): www.hse.gov.uk/statistics/lfs/lfsilltyp.xlsx
Age and gender (LFSILLAGE): www.hse.gov.uk/statistics/lfs/lfsillage.xlsx
Industry (LFSILLIND): www.hse.gov.uk/statistics/lfs/lfsillind.xlsx
Occupation (LFSILLOCC): www.hse.gov.uk/statistics/lfs/lfsillocc.xlsx
Workplace size (LFSILLSIZ): www.hse.gov.uk/statistics/lfs/lfsillsiz.xlsx
How caused or made worse by work (LFSILLHOW):
www.hse.gov.uk/statistics/lfs/lfsillhow.xlsx

THOR GP tables
THORGP11-Musculoskeletal disorders: by task/movement:
www.hse.gov.uk/statistics/tables/thorgp11.xlsx

More data tables can be found at:www.hse.gov.uk/Statistics/tables/index.htm

National Statistics

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An account of how the figures are used for statistical purposes can be found at www.hse.gov.uk/statistics/sources.htm.

For information regarding the quality guidelines used for statistics within HSE see www.hse.gov.uk/statistics/about/quality-guidelines.htm.

A revisions policy and log can be seen at www.hse.gov.uk/statistics/about/revisions/ Additional data tables can be found at www.hse.gov.uk/statistics/tables/.

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