

Work related musculoskeletal disorder statistics (WRMSDs) in Great Britain, 2020

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Summary



Musculoskeletal disorders in Great Britain

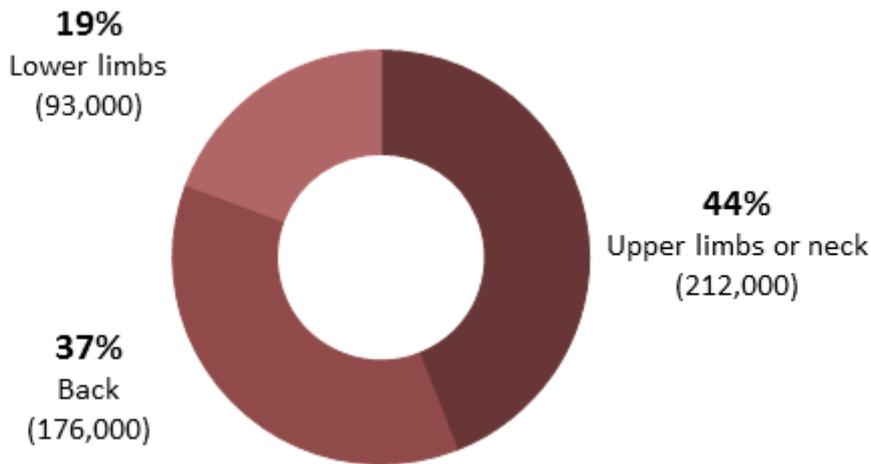
480,000

Workers suffering from work-related musculoskeletal disorders (new or long-standing) in 2019/20 Labour Force Survey (LFS)

8.9 million

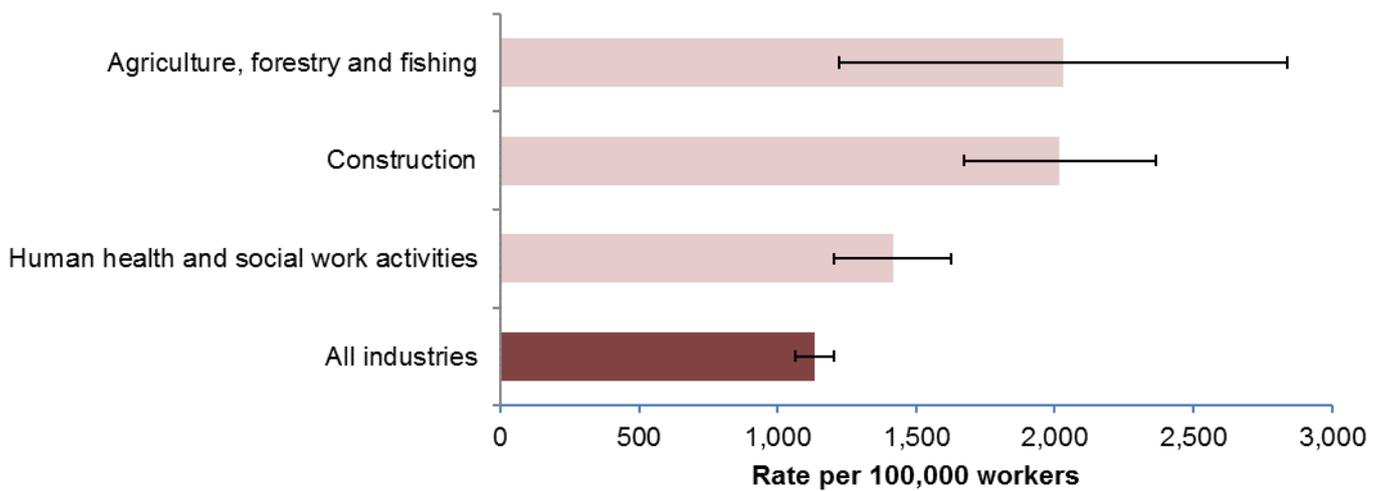
Working days lost due to work-related musculoskeletal disorders in 2019/20 Labour Force Survey (LFS)

Musculoskeletal disorders by affected area, 2019/20



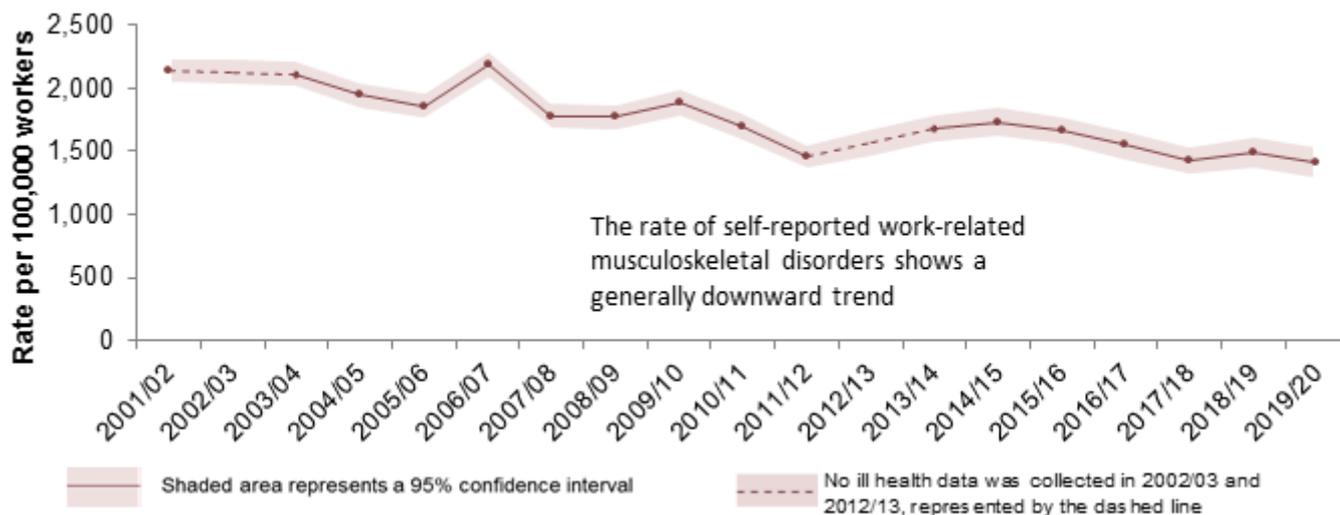
Source: LFS estimate 2019/20

Industries with higher than average rates of musculoskeletal disorders, averaged 2017/18- 2019/20



Source: LFS, estimated annual average 2017/19-2019/20
95% confidence intervals are shown on the chart.

Musculoskeletal disorders per 100,000 workers: new and long-standing



Source: LFS annual estimate, from 2001/02 to 2019/20

- The latest estimates from the Labour Force Survey (LFS) show: The total number of cases of work-related musculoskeletal disorders in 2019/20 was 480,000, a prevalence rate of 1,420 per 100,000 workers. These comprised 212,000 cases where the upper limbs or neck was affected, 176,000 where the back was affected and 93,000 where the lower limbs were affected
- The rate of work-related musculoskeletal disorders shows a generally downward trend.
- The number of new cases was 152,000, an incidence rate of 450 per 100,000 workers. The total number of working days lost due to this condition in 2019/20 was 8.9 million days. This equated to an average of 18.4 days lost per case. Working days lost per worker due to self-reported work-related musculoskeletal disorders shows a generally downward trend.
- In 2019/20 musculoskeletal disorders accounted for 30% of all work-related ill health cases and 27% of all working days lost due to work-related ill health.
- Musculoskeletal disorders are more prevalent within the industry groups Agriculture, forestry and fishing, Construction and Human health and social work activities. Whereas by occupation rates are higher among skilled trades occupations, Caring, leisure and other service occupations, and among Process, plant and machine operatives
- 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).
- Disruption to the economy towards the end of 2019/20 due to the emergence of COVID-19 as a national health issue had the potential to have impacted on workplace injury and work-related ill health data for 2019/20. A paper setting out the issues in more detail along with results of analysis of the headline data from the Labour Force Survey and RIDDOR found that COVID-19 does not appear to be the main driver of changes seen in the latest years data (see Annex 1)

Introduction

Musculoskeletal disorders can affect muscles, joints and tendons in all parts of the body. Most WRMSDs 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 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 WRMSDs to occur. Generally, none of these factors act separately to cause WRMSDs.

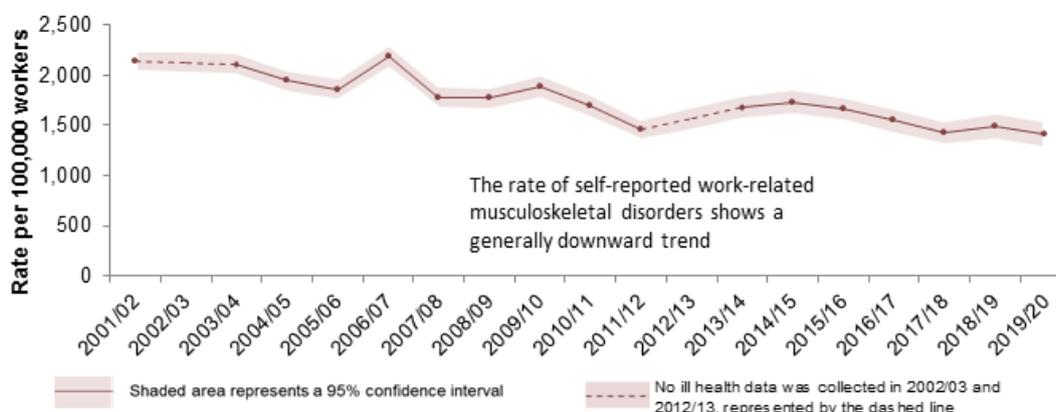
HSE's preferred data source for calculating rates and estimates for WRMSD are self-reports from the Labour Force Survey (LFS). Previously HSE also collected data on WRMSD through The Health and Occupation Research network for general practitioners (THOR-GP). These data although historic provide a general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

Scale and trend in work-related musculoskeletal disorders

In 2019/20 there were an estimated 480,000 workers affected by WRMSDs. This represents 1,420 per 100,000 workers and results in an estimated 8.9 million working days lost. In 2019/20 WRMSDs accounted for 30% of all work-related ill health and 27% of all days lost due to work-related ill-health.

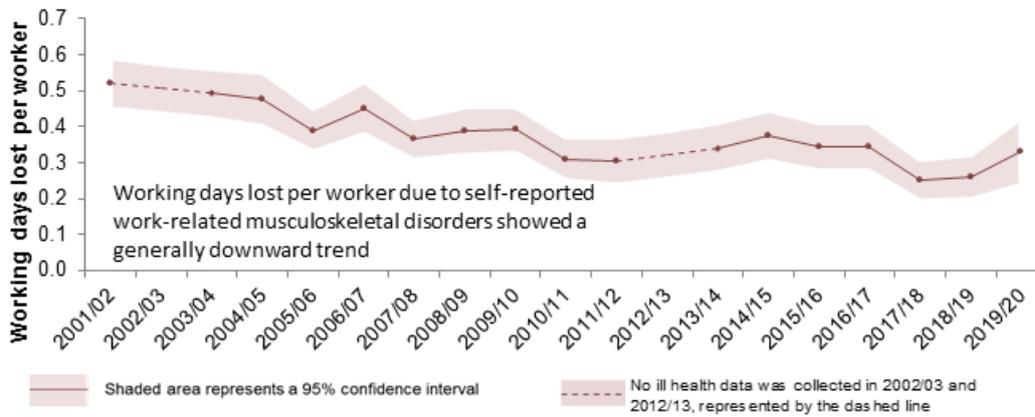
Most of these WRMSDs affect the Upper limbs or neck, 44% of all WRMSD cases, or the Back, 37% of all WRMSD cases with the remaining 19% of cases affecting the lower limbs. However, conditions affecting the back represent a relatively lower proportion of the working days lost than their relative prevalence would suggest. Of all WRMSDs working days lost, conditions affecting the back only account for 22% of these with an estimated 11.2 days lost per case. This compares with conditions affecting the upper limbs and neck that accounts for 50% of these working days lost, (20.8 days lost per case) and conditions affecting the lower limbs that account 28% (26.7 days lost per case).

Figure 1. Estimated prevalence rates of self-reported WRMSDs in Great Britain, for people working in the last 12 months, 2019/20



Source: LFS annual estimate, from 2001/02 to 2019/20

Figure 2. Estimated days lost (full-day equivalent) due to self-reported WRMSDs in Great Britain, for people working in the last 12 months 2019/20

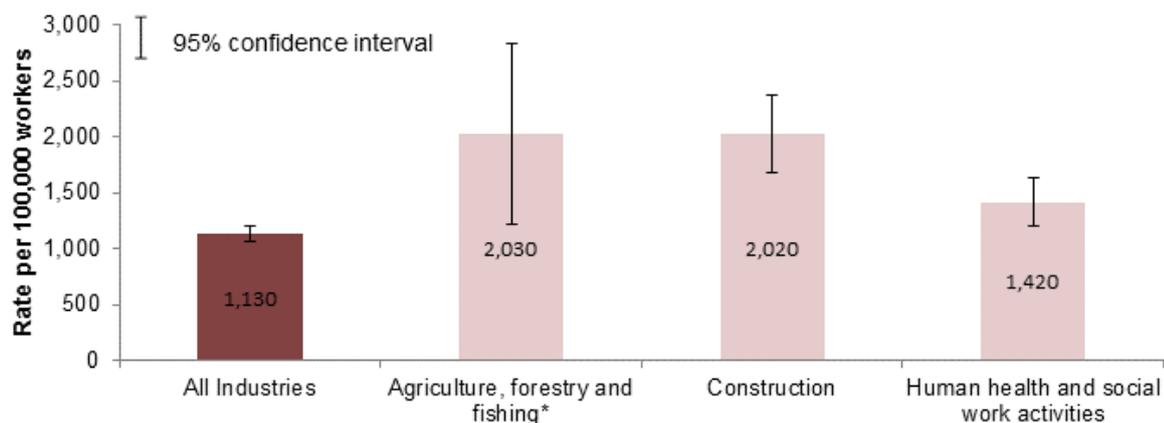


Source: LFS annual estimate, from 2001/02 to 2019/20

Work-related musculoskeletal disorders by industry

The average prevalence rate of WRMSD across all industries was 1,130 cases per 100,000 workers averaged over the period 2017/18-2019/20. The broad industry categories of: Agriculture, forestry and fishing with a rate of 2,030 cases per 100,000 workers; Construction with a rate of 2,020 cases per 100,000 workers, and Human health and social work activities with a rate of 1,420 cases per 100,000 workers all had significantly higher rates than the average for all industries.

Figure 3. Estimated prevalence rates of self-reported WRMSDs in Great Britain, for people working in the last 12 months, by industries with higher rates averaged 2017/18-2019/20



* indicates estimate based on fewer than 30 sample cases

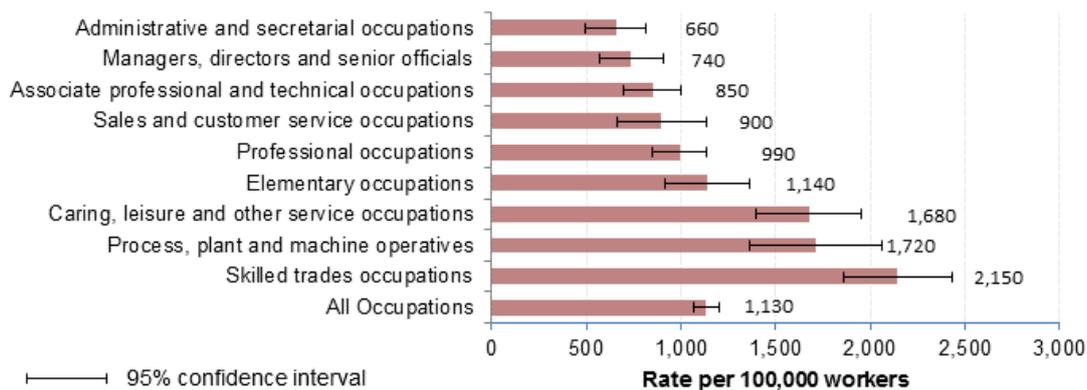
Source: LFS, estimated annual average 2017/19-2019/20
 95% confidence intervals are shown on the chart

Work-related musculoskeletal disorders by occupation

Skilled trades occupations, Process, plant and machine operatives, and Caring, leisure and other service occupations all had statistically significantly higher rates of WRMSD than the rate for all occupations. For the three-year period averaged over 2017/18-2019/20, Skilled trades occupations had 2,150 cases per 100,000 people employed, Process, plant and machine operatives had 1,720 cases per 100,000 people employed and Caring, leisure and other service occupations had 1,680 cases per 100,000 people employed. This compares with 1,130 cases per 100,000 people employed for all occupational groups over the same period.

A number of smaller occupational groupings many included within the larger groups noted above also had significantly high rates, these included, health professionals, care workers, transport and machine operatives and several construction related occupations.

Figure 4. Estimated prevalence rates of self-reported WRMSDs in Great Britain, for people working in the last 12 months, by occupation, averaged 2017/18-2019/20



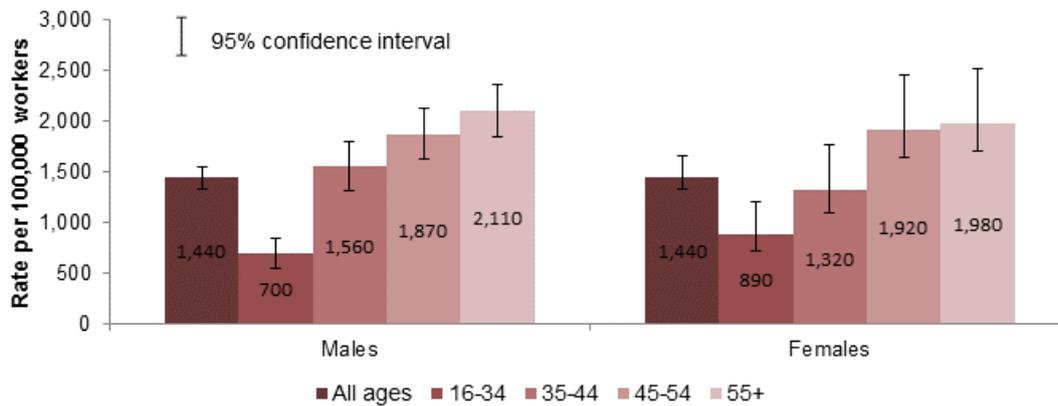
Source: LFS, estimated annual average 2017/19-2019/20
95% confidence intervals are shown on the chart.

Work-related musculoskeletal disorders by age and gender

The rate of WRMSDs in 2017/18-2019/20 was similar for males and females both with 1,440 cases per 100,000 workers.

There is a clear age gradient evident in both genders with the youngest age category 16 to 34 having significantly lower rates of WRMSDs compared to all ages and the oldest age categories 45 to 54 and 55 years plus having higher rates

Figure 5. Estimated prevalence rates of self-reported WRMSDs in Great Britain, by age and gender, for people working in the last 12 months, averaged 2017/18-2019/20

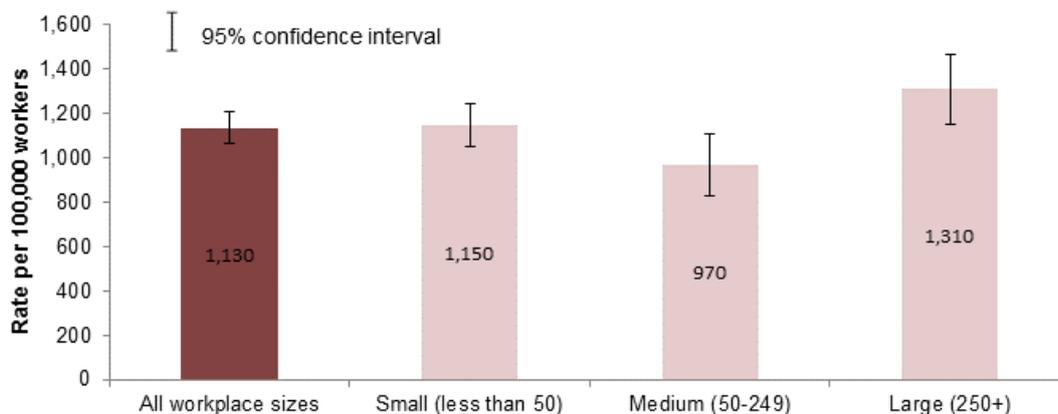


Source: LFS, estimated annual average 2017/19-2019/20
95% confidence intervals are shown on the chart.

Work-related musculoskeletal disorders and workplace size

Medium-sized workplaces had a statistically significantly lower average prevalence rate of WRMSDs and large workplaces significantly higher in the latest three-year period (2017/18-2019/20) compared to all workplace size.

Figure 6. Work related musculoskeletal disorders by workplace size 2017/18-2019/20

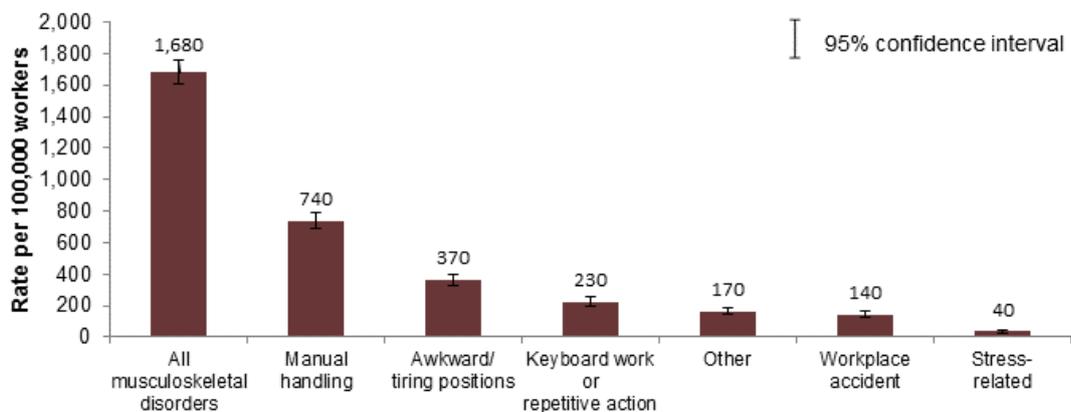


Source: LFS, estimated annual average 2017/19-2019/20
95% confidence intervals are shown on the chart

Causes of work-related musculoskeletal disorders

The main causes of WRMSD from the Labour Force Survey (2009/10-2011/12) were manual handling, working in awkward or tiring positions and repetitive action or keyboard work.

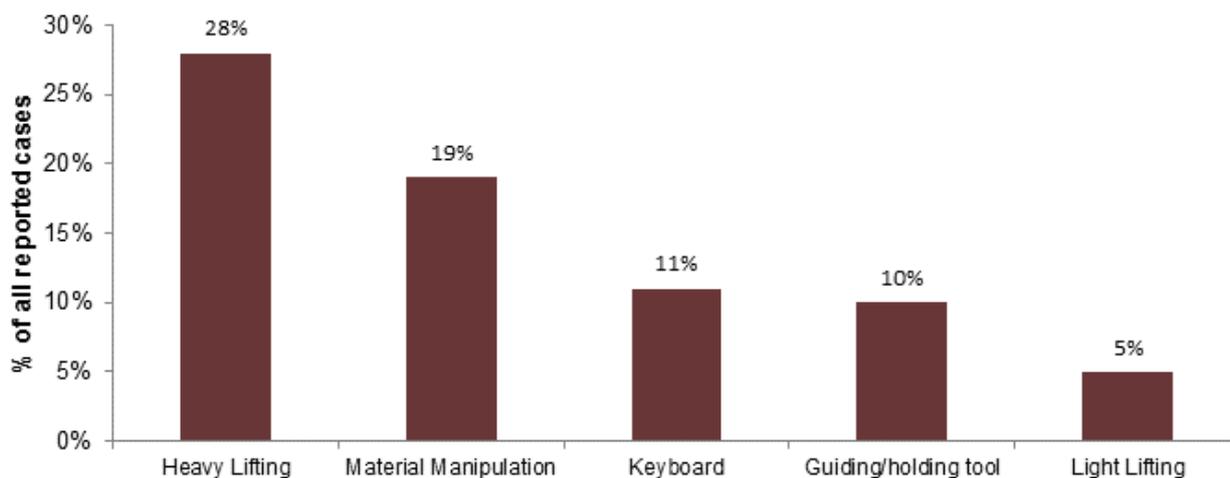
Figure 7. Estimated prevalence rates of self-reported WRMSDs in Great Britain, by how caused or made worse by work, for people working in the last 12 months, averaged (LFS) 2009/10-2011/12



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

The general practitioner's network (THOR-GP) from 2013-2015 reported with cases of work-related musculoskeletal disease the main task contributing to the condition. These medical assessed cases indicate a similar pattern to self-reported data from the labour force survey. Heavy lifting akin to manual handling represents the biggest cause in reported cases.

Figure 8. Percentage of WRMSDs reported to THOR-GP according to main attributed task, three-year aggregate total 2013 to 2015 in Great Britain



Source: THOR(GP), data 2013-2015

National Statistics

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First published 11/20.