Work related musculoskeletal disorder statistics (WRMSDs) in Great Britain, 2019

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Summary

The document can be found at:

Musculoskeletal disorders in Great Britain

498,000
Workers suffering from work-related musculoskeletal disorders (new or long-standing) in 2018/19
Labour Force Survey (LFS)

6.9 million
Working days lost due to work-related musculoskeletal disorders in 2018/19
Labour Force Survey (LFS)

Musculoskeletal disorders by affected area, 2018/19

- **19%** Lower limbs (95,000)
- **41%** Upper limbs or neck (203,000)
- **40%** Back (200,000)

Source: Labour Force Survey

Industries with higher than average rates of musculoskeletal disorders, averaged 2016/17-2018/19

- Construction
- Agriculture, forestry and fishing
- Human health and social work activities
- All industries

Rate per 100,000 workers

Source: Labour Force Survey
Musculoskeletal disorders per 100,000 workers: new and long-standing

The rate of self-reported work-related musculoskeletal disorders showed a generally downward trend

Source: Labour Force Survey

Background

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 acts separately to cause WRMSDs. They more commonly occur as a result of a combination and interaction among them.

This document cites two main sources for WRMSD statistics. The first is the Labour Force Survey (LFS), an annual survey of 37,000 households in Great Britain. The second is analysis from a survey of occupationally trained General Practitioners across Great Britain called, “The health and occupation reporting network of general practitioners” (THOR-GP).
The latest estimates from the Labour Force Survey show that in Great Britain,

- The total number of WRMSDs cases (prevalence) in 2018/19 was 498,000 out of a total of 1,354,000 for all work-related illnesses, 37% of the total and a rate of 1,490 cases per 100,000 workers. The rate is not statistically significantly different from the previous year.
- The rate of self-reported work-related musculoskeletal disorders showed a generally downward trend.
- An estimated 6.9 million working days were lost due to WRMSDs, an average of 14 days lost for each case. This is not statistically significantly different from the previous year.
- Work-related musculoskeletal disorders account for 29% of all working days lost due to work-related ill health.
- Working days lost per worker due to self-reported work-related musculoskeletal disorders shows a generally downward trend.

Figure 1. Estimated prevalence rates of self-reported WRMSDs in Great Britain, for people working in the last 12 months, 2018/19

Working days lost

An estimated 6.9 million working days were lost due to WRMSDs, an average of 14 days lost for each case. WRMSDs represent 29% of all days lost due to work-related ill health in Great Britain in 2018/19.

Within the total number of 6.9 million days lost due to WRMSDs, Work Related Upper Limb Disorder account for around 2.6m of days lost, with back disorders around 2.8m of days lost and Work Related Lower Limb disorders 1.5m days lost.

Figure 2. Estimated days lost (full-day equivalent) due to self-reported WRMSDs in Great Britain, for people working in the last 12 months 2018/19
WRMSDs by industry and occupation

The industries with the highest rates of WRMSDs averaged over the 3 year period 2016/17-2018/19 are listed below. These industries had rates significantly higher than the all industry rate (see Figure 3).

- Agriculture, Forestry and Fishing
- Construction
- Human Health and social work activities.

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 2016/17-2018/19

In terms of occupation, skilled trades occupations and those in process plant and machine operatives have significantly higher rates than the rate for all occupations.

Figure 4. Estimated prevalence rates of self-reported WRMSDs in Great Britain, for people working in the last 12 months, by occupation, averaged 2016/17-2018/19

*indicates estimate based on fewer than 30 sample cases
WRMSDs by age and gender

The rate of WRMSDs per 100,000 workers for all males was 1,520 cases in 2016/17-2018/19. Males aged 16-34 years had a statistically significantly lower rate of 760 cases per 100,000 workers. Males aged 35-44 did not have a statistically significantly different rate at 1,590 cases per 100,000 workers. Males in the age categories 45-54 and 55+ had statistically significantly higher rates than the all-male rate with 1,960 cases and 2,250 cases per 100,000 workers respectively.

The rate of WRMSDs per 100,000 workers for all females was 1,450 cases in 2016/17-2018/19. The overall rates for men and women were not significantly different. Females aged 16-34 years had a statistically significantly lower rate of 870 cases per 100,000 workers. Females aged 35-44 years did not have a statistically significantly different rate at 1,360 cases per 100,000 workers. Females aged 45-54 and 55+ had statistically significantly higher rates than the all females rate at 1,880 and 2,100 cases per 100,000 workers respectively.

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 2016/17-2018/19
WRMSDs by workplace size

Medium-sized workplaces had a statistically significantly lower average prevalence rate of WRMSDs in the latest three-year period (2016/17-2018/19) compared to all workplace size.

Figure 6. Work related musculoskeletal disorders by workplace size 2016/17-2018/19

Causative factors in the development of WRMSDs

Examining the Labour Force Survey in greater detail (latest analysis a three-year average over the period 2009/10-2011/12) illustrates that manual handling, lifting and carrying and keyboard work were some of the prime causative factors in the development of work-related musculoskeletal disorders particularly the development of back pain. Additionally repetitive movement such as keyboard work or being in awkward or tiring positions were other highlighted factors in WRMSD development. Additionally work may exacerbate a musculoskeletal disorder which was originally caused in non-occupational settings such as physical sport and home and social life.

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
General Practitioners Scheme and WRMSDs.

The THOR-GP scheme sponsored by the Health and Safety Executive from 2005 until 2015 is a survey where a sample of General Practitioners across Great Britain record work-related ill-health from their patients in their local surgeries. The advantage of this survey has been to have a greater understanding of the conditions with which people present symptoms and how the condition might have occurred.

Patients presenting with WRMSDs to their GP’s suggest the majority suffer with back pain or disorders with the hand, wrist or arm. This may be due to repetitive movement and most likely reflects what is suggested in the Labour Force Survey.

Figure 8. Number of cases of WRMSDs by anatomical site reported to THOR-GP, three-year aggregate total 2013 to 2015 in Great Britain

Figure 9. Percentage of WRMSDs reported to THOR-GP according to main attributed task, three-year aggregate total 2013 to 2015 in Great Britain
Conclusion

WRMSDs, while not life threatening, can impair the life quality and mobility of large numbers of the working population. The Labour Force Survey statistics over the last 10 years demonstrate that a significant number of WRMSDs are attributed to working practices across many diverse industries and occupations. In 2018/19, WRMSDs accounted for 37% of the prevalence of all work-related ill-health in Great Britain. WRMSDs working days lost (which place burdens on employers) account for 29% of all working days lost due to work-related illness in 2018/19 in Great Britain. The industries and occupations that have demonstrated the highest rates of musculoskeletal disorders have also remained similar.

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