

Work related musculoskeletal disorders in Great Britain (WRMSDs), 2018

Contents

Summary	2
All work-related musculoskeletal disorders	3
Working days lost	4
WRMSDs by industry and occupation	5
WRMSDs by age and gender	6
WRMSDs by workplace size	7
Causative factors in the development of WRMSDs	7
General Practitioners Scheme and WRMSDs.	8
Conclusion	9



Summary

The document can be found at:

The document can be found at: <http://www.hse.gov.uk/statistics/causdis/musculoskeletal/index.htm>



Musculoskeletal disorders in Great Britain

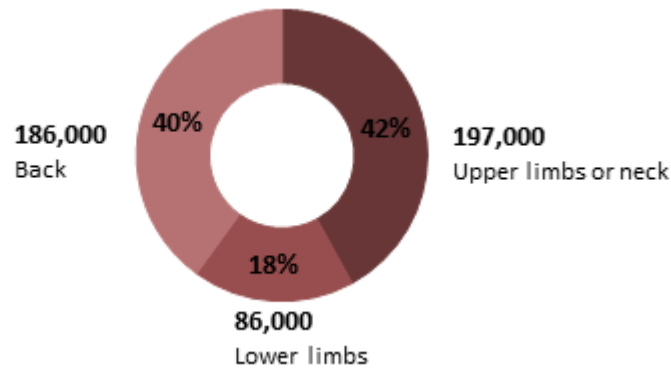
469,000

Workers suffering from work-related musculoskeletal disorders (new or long-standing) in 2017/18
Labour Force Survey (LFS)

6.6 million

Working days lost due to work-related musculoskeletal disorders in 2017/18
Labour Force Survey (LFS)

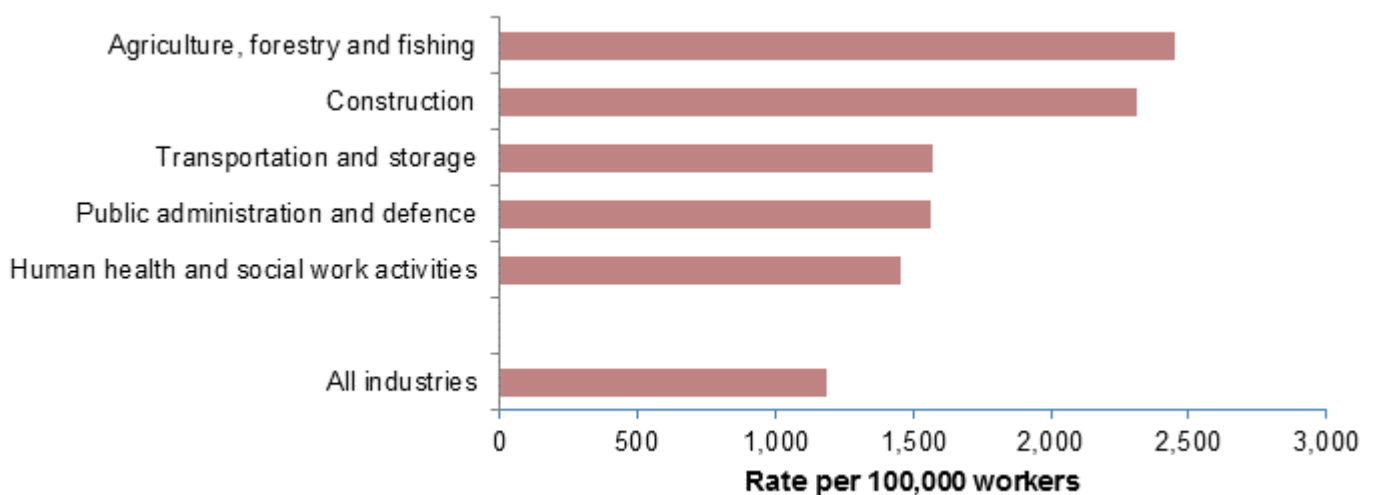
Musculoskeletal disorders by affected area, 2017/18



Source: Labour Force Survey

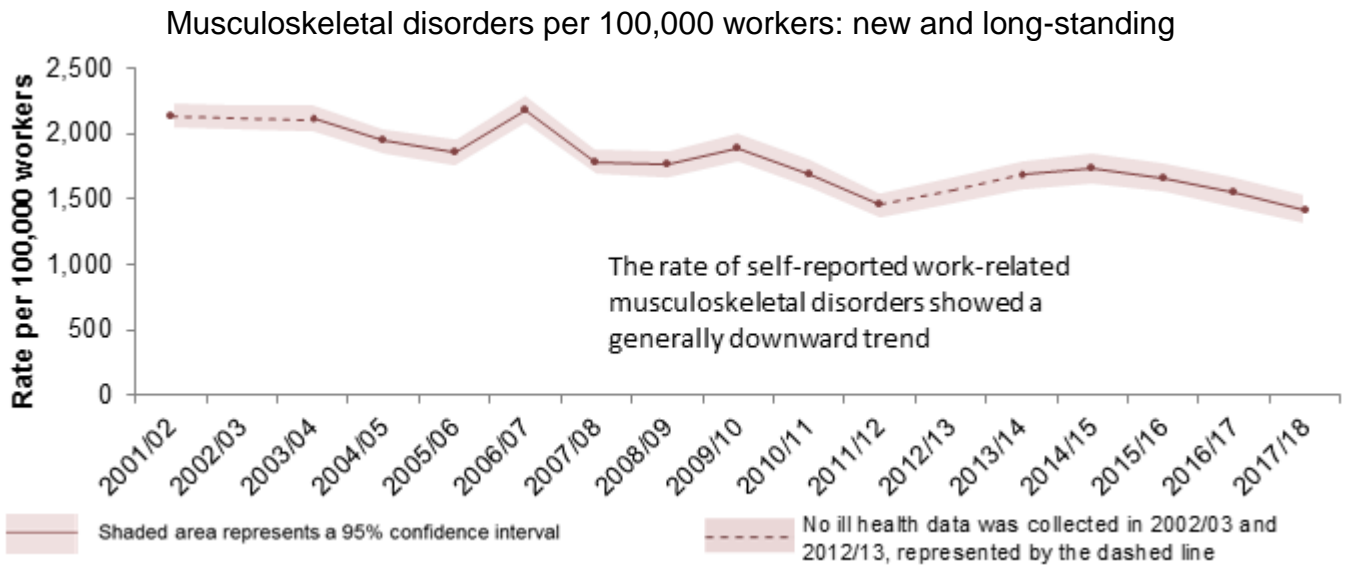
www.hse.gov.uk/statistics/lfs/index.htm

Industries with higher than average rates of musculoskeletal disorders, averaged 2015/16- 2017/18



Source: Labour Force Survey

www.hse.gov.uk/statistics/lfs/index.htm



Source: Labour Force Survey
<http://www.hse.gov.uk/statistics/lfs/index.htm>

All work-related musculoskeletal disorders

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.

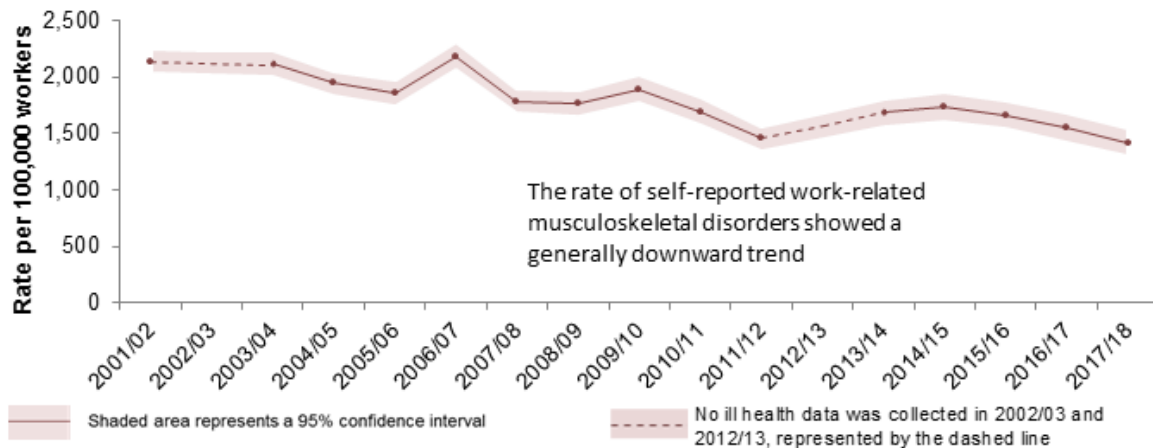
This document cites two main sources for WRMSD statistics. The first is the Labour Force Survey (LFS), an annual survey of 38,000 households in Great Britain. The second is analysis from a survey of occupationally trained General Practitioners across Great Britain called, “The health and occupation reporting 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 2017/18 was 469,000 out of a total of 1,358,000 for all work-related illnesses, 35% of the total and a rate of 1,420 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 6.6 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 24% of all working days lost due to work-related ill health.
- Working days lost per worker due to self-reported work-related musculoskeletal disorders showed a general long-term downward.

Figure 1. Estimated prevalence rates of self-reported WRMSDs in Great Britain, for people working in the last 12 months, 2017/18

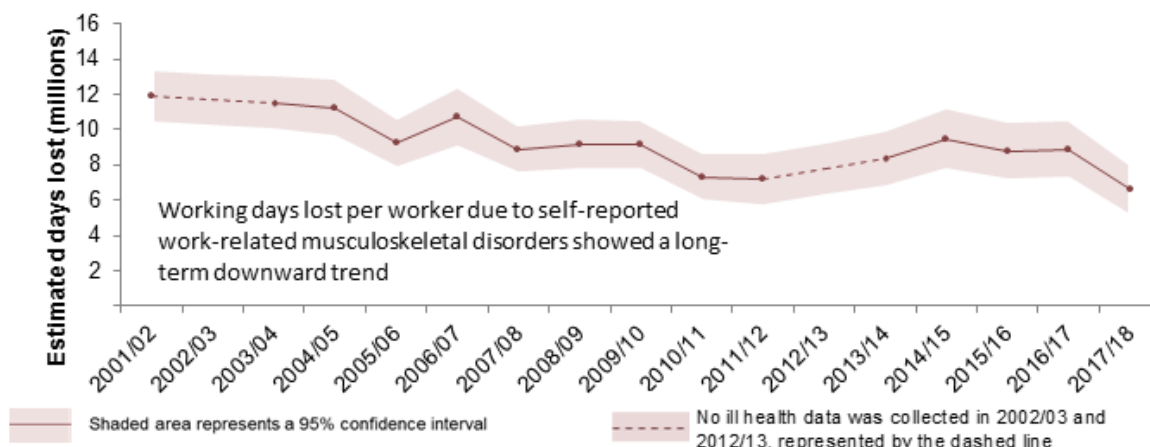


Working days lost

An estimated 6.6 million working days were lost due to WRMSDs, an average of 14 days lost for each case.

WRMSDs represent 24% of all days lost due to work-related ill health in Great Britain in 2017/18. Within the total number of 6.6 million days lost due to WRMSDs, Work Related Upper Limb Disorders (WRULDs) account for around 2.6m of days lost, with back disorders around 2.2m of days lost and Work Related Lower Limb disorders (WRLLDs) 1.7m 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 2017/18

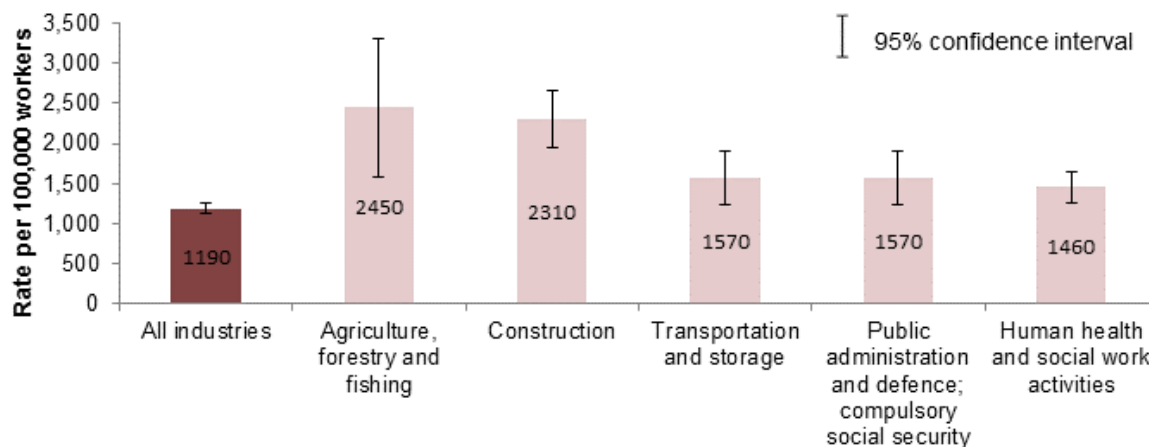


WRMSDs by industry and occupation

The industries with the highest rates of WRMSDs averaged over the 3 year period 2015/16-2017/18 are listed below. These industries had rates significantly higher than the all industry rate (see Figure 3).

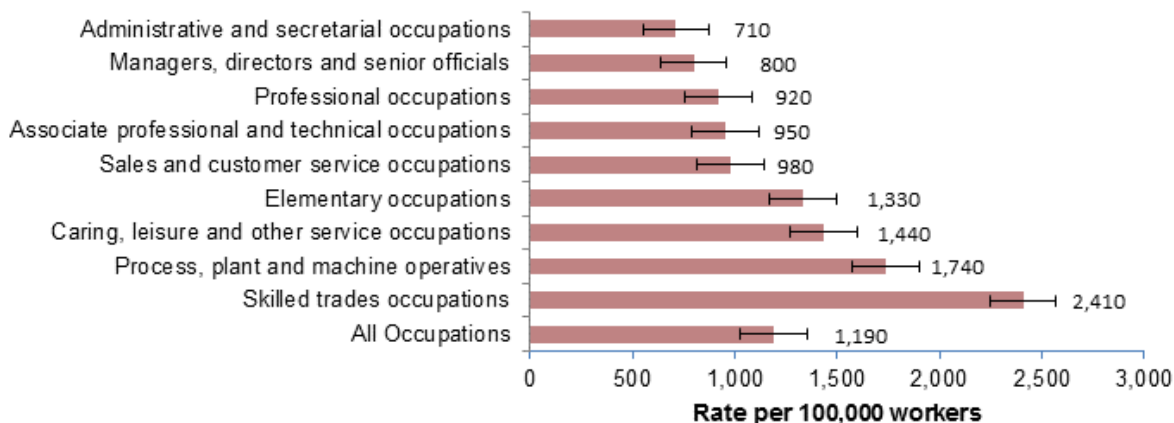
- Agriculture, Forestry and Fishing
- Construction
- Transportation and Storage
- Public administration and Defence
- Human Health and social work activities.

Figure 3. Estimated prevalence rates of self-reported WRMSDs in Great Britain, for people working in the last 12 months, by selected industries, averaged 2015/16-2017/18



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 2015/16-2017/18



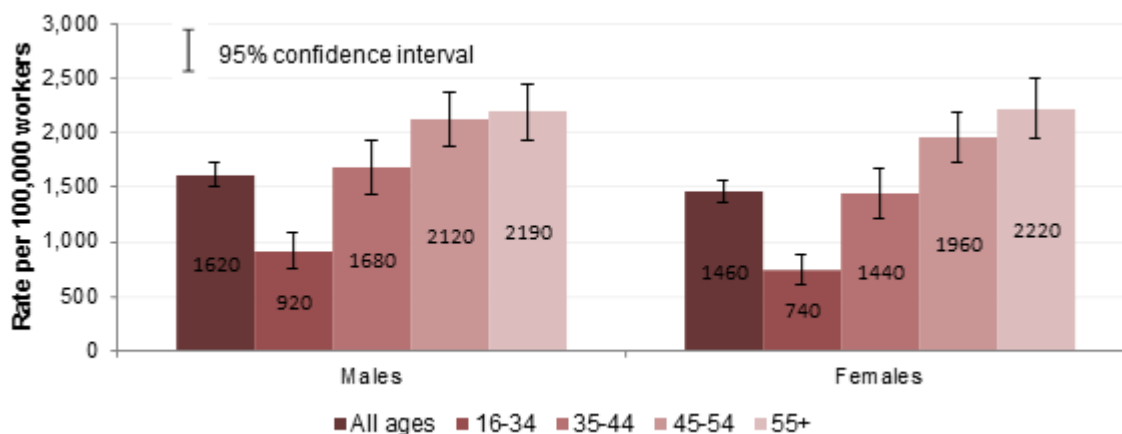
WRMSDs by age and gender

The rate of WRMSDs per 100,000 workers for all males was 1,620 cases in 2015/16-2017/18. Males aged 16-34 years had a statistically significantly lower rate of 920 cases per 100,000 workers. Males aged 35-44 did not have a statistically significantly different rate at 1,680 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 2,120 cases and 2,190 cases per 100,000 workers respectively.

The rate of WRMSDs per 100,000 workers for all females was 1,460 cases in 2015/16-2017/18. The overall rates for men and women were not significantly different.

Females aged 16-34 years had a statistically significantly lower rate of 740 cases per 100,000 workers. Females aged 35-44 years did not have a statistically significantly different rate at 1,440 cases per 100,000 workers. Females aged 45-54 and 55+ had statistically significantly higher rates than the all females rate at 1,960 and 2,220 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 2015/16-2017/18



In Great Britain, as in many developed nations, the populations, including worker populations, are ageing. This has generated increased research into the control of age related workplace risks, particularly those associated with occupational ill health.

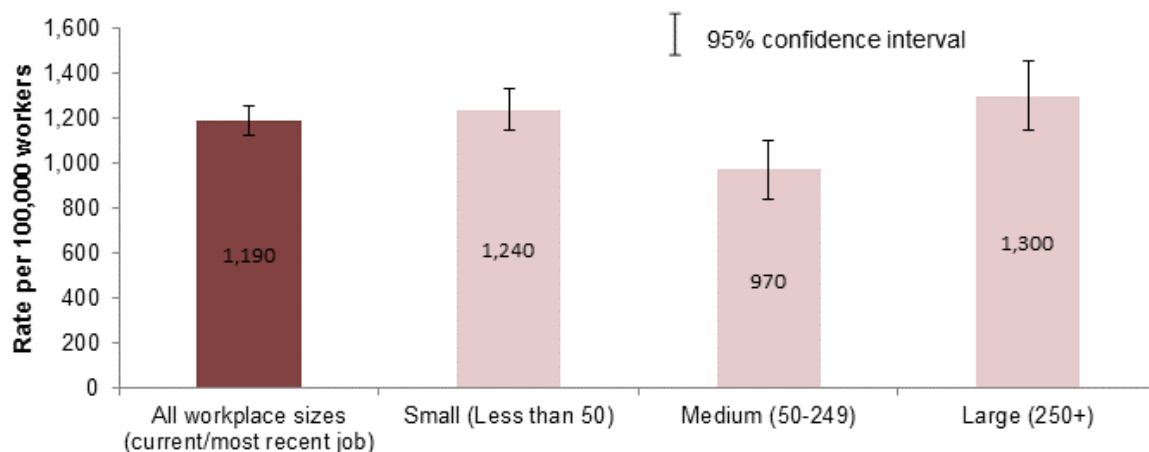
Age is not the most important determinant of health, nor does ageing inevitably bring illness and disease. Negative beliefs about ageing, including that older age is a risk factor for injury at work, have however, tended to preclude older workers from workplaces (HSE, 2010)

The studies on functional capability indicate age-related changes in functional capabilities of adults and it is generally agreed that as we age we are not able to perform to the same level as when we were young (Savinainen et al., 2004; Atwood, 2005; Kowalsi-Trakofler et al., 2005; Kenny et al., 2008; Welch et al., 2008). In terms of WRMSDs, there are three main musculoskeletal changes reported in the literature; a reduction in joint mobility, decrease in muscular strength and the slowing of reaction and movement times.

WRMSDs by workplace size

Medium-sized workplaces had a statistically significantly lower average prevalence rate of WRMSDs in the latest three-year period (2015/16-2017/18) compared to all workplace size.

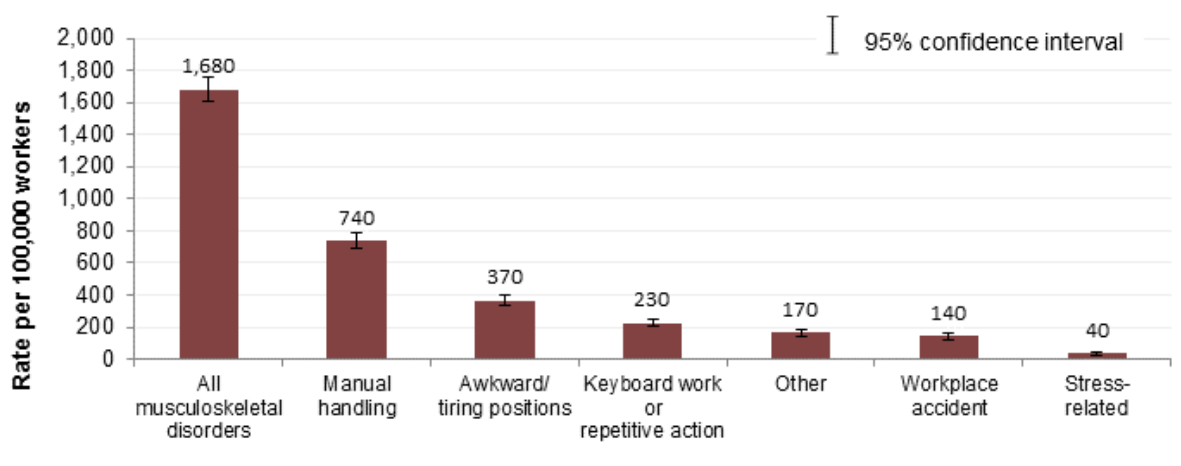
Figure 6. Work related musculoskeletal disorders by work place size 2015/16-2017/18



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

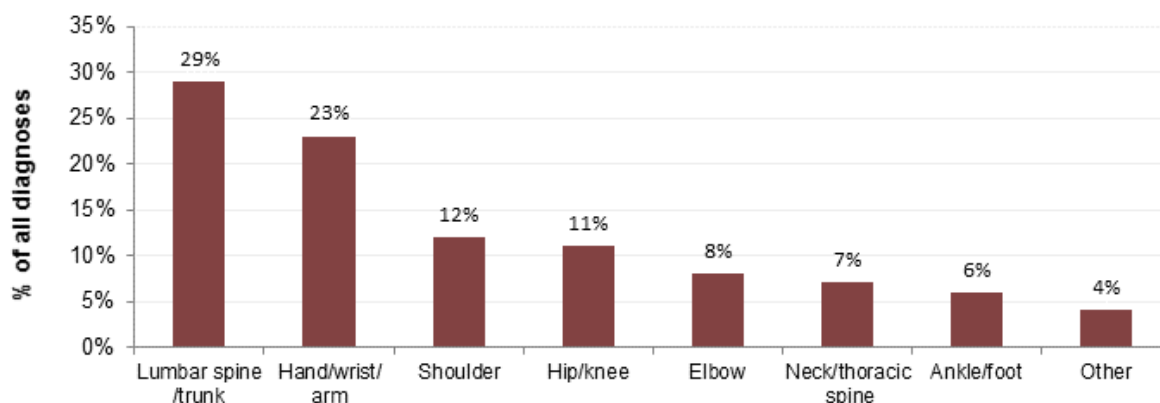
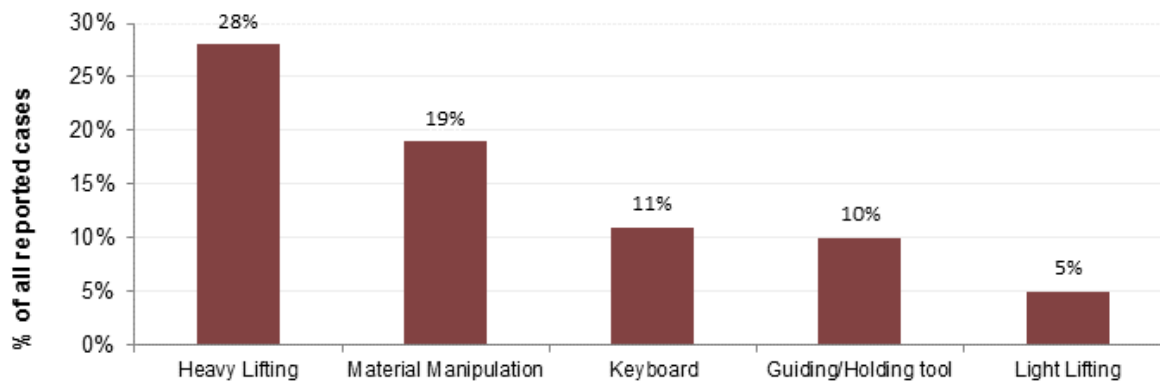


Figure 9. Percentage of WRMSDs reported to THOR-GP according to main attributed task, three-year aggregate total 2013 to 2015 in Great Britain



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 2017/18, WRMSDs accounted for 35% of the prevalence of all work-related ill-health in Great Britain. WRMSDs working days lost (which place burdens on employers) account for 24% of all working days lost due to work-related illness in 2017/18 in Great Britain. The industries and occupations that have demonstrated the highest rates of musculoskeletal disorders have also remained similar.

<http://www.hse.gov.uk/statistics/>

Glossary of Acronyms

WRMSDs Work related musculoskeletal disorders

LFS – Labour Force Survey

THOR – The health and occupational reporting network

THOR –GP The health and occupational reporting network – General Practitioners

National Statistics

National Statistics status means that statistics meet the highest standards of trustworthiness, quality and public value. They are produced in compliance with the Code of Practice for Statistics, and awarded National Statistics status following an assessment by the Office for Statistics Regulation (OSR). The OSR considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is Health and Safety Executive's responsibility to maintain compliance with the standards expected by National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the OSR promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

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/.

General enquiries: Statistician paul.buckley@hse.gov.uk

Journalists/media enquiries only: www.hse.gov.uk/contact/contact.htm

© *Crown copyright* If you wish to reuse this information visit www.hse.gov.uk/copyright.htm for details.
First published 10/18.