Historical picture statistics in Great Britain, 2020

Trends in work-related ill health and workplace injury

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Summary

In recent decades there have been large reductions in both fatal and non-fatal workplace injuries (See Charts 5-7 below). However, the picture for ill health is mixed. There have been reductions in the rate of total self-reported work-related illness (total includes both new and long-standing cases), particularly musculoskeletal disorders (Chart 1 and 3). The rate of total self-reported work-related stress, depression or anxiety has increased in recent years having previously remained broadly flat (Chart 4). Annual mesothelioma deaths increased substantially over the last few decades due to past asbestos exposures, but have remained broadly level over recent years (Chart 2).

While disruptions to the economy from COVID-19 had the potential to have impacted on workplace injury and work-related ill health data for 2019/20, analysis of 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 year’s data. For more details see www.hse.gov.uk/statistics/adhoc-analysis/covid19-impact19-20.pdf.
Introduction

This report presents an assessment of the longer-term trends in work-related illness and workplace injury using a range of data sources. (Note - the time-period covered is different for different data sources, with each data source generally going back at least as far as 1990). The latest information and trends over more recent years is available at www.hse.gov.uk/statistics.

Work-related ill health

**All Illness**

In 2019/20, an estimated 1.6 million workers in Great Britain were suffering from an illness which they believed was caused or made worse by work (either new or long-standing), equivalent to a rate of 4,790 per 100,000 workers (5%).

To look at the long-term trend in work-related ill health we generally consider how the rate has changed, rather than the number of cases, as the rate accounts for variations in the number of people in work between years.

The rate of self-reported work-related ill health showed a generally downward trend, but has been broadly flat in recent years, although 2019/20 is above recent rates.

**Figure 1: Estimated rate of self-reported work-related ill health per 100,000 workers, Great Britain (new and long-standing cases)**

Source: Labour Force Survey
Musculoskeletal disorders

Musculoskeletal disorders account for a large proportion of self-reported work-related ill health – around 30% of all self-reported cases in Great Britain in 2019/20.

The rate of self-reported work-related musculoskeletal disorders showed a generally downward trend, and currently stands at 1,420 cases per 100,000 workers (1.4%).

Figure 2: Estimated rate of self-reported work-related musculoskeletal disorders per 100,000 workers, Great Britain (new and long-standing cases)

Stress, depression or anxiety

Stress, depression or anxiety was the most frequent type of work-related illness in Great Britain in 2019/20, accounting for around half of all cases of self-reported work-related ill health.

The rate of self-reported stress, depression or anxiety was broadly flat from 1998/99 but has increased in recent years and currently stands at 2,440 cases per 100,000 workers (2.4%). It is likely that awareness of work-related stress and attitudes towards it changed in the 1990s, which will have affected reporting levels.

Figure 3: Estimated rate of self-reported work-related stress, depression or anxiety per 100,000 workers, Great Britain (new and long-standing cases)
**Occupational lung disease**

Typically, 3-4% of cases of self-reported work-related illness are reported as “breathing or lung problems”. This general category is likely to include a wide range of illnesses: some caused by, and others aggravated by work; some that can occur rapidly following exposure to respiratory hazards, and others that take many years to develop.

In 2019/20, an estimated 57,000 workers in Great Britain were suffering from a work-related breathing or lung problem (either new or long-standing).

The rate of self-reported work-related breathing or lung problems reduced from around 200 cases per 100,000 workers in the early 2000s but remained broadly constant over recent years, with an estimated 140 cases per 100,000 workers based on the latest three Labour Force Surveys.

**Figure 4: Estimated rate of self-reported work-related breathing or lung problems per 100,000 workers, Great Britain (new and long-standing cases)**

[Graph showing estimated rate of self-reported work-related breathing or lung problems per 100,000 workers, Great Britain (new and long-standing cases).]

**Specific occupational lung diseases**

Long-term trends for certain specific occupational lung diseases can be assessed where data have been collected consistently over extended periods, for example based on death certificates or the Industrial Injuries Disablement Benefit (IIDB) scheme.

Trends for mesothelioma (an asbestos-related cancer), asbestosis (a form of pneumoconiosis caused by inhalation of asbestos fibres), and silicosis (a form of pneumoconiosis caused by respirable crystalline silica) are shown in Figure 5 and Figure 6 below.
Annual mesothelioma deaths have increased around 10-fold since 1974 and numbers of deaths for years up to around 2020 are expected to remain at about 2,500 per year. Annual mesothelioma IIDB cases have followed a similar trend. Deaths mentioning asbestosis (excluding those that also mention “mesothelioma”) have also increased substantially, mirrored by increases in the number of asbestosis IIDB cases.

These cases are largely a consequence of heavy past occupational asbestos exposures and the fact that the disease typically takes decades to develop.

There has been a steady decline in annual silicosis deaths since 1974, with numbers in recent years less than half those in the 1970s. Annual IIDB cases have tended to fluctuate considerably, though there is also evidence of a reduction over the period.

Workplace injury

Fatal injury

In 2019/20, 111 workers were killed at work in Great Britain including 77 employees and 34 self-employed workers, a decrease of 38 fatalities from 2018/19. However, in statistical terms the number of fatalities has remained broadly level in recent years – the average annual number of workers killed at work over the five years 2015/16-2019/20p is 137.

While data on fatal injuries to the self-employed have only been collected since 1981 (when the Notification of Accidents and Dangerous Occurrences Regulations were introduced), data on fatal injuries to employees have been collected under various regulations since at least 1900, though prior to 1981 reporting did not cover all industry sectors; notably, injuries to employees in ‘office based’ service activities (such as public administration, education and health and social work) were excluded.

Figure 7 below shows the number of fatal injuries to employees in Great Britain notified to enforcing authorities in each year since 1900. While data prior to 1981 is not entirely comparable with later years, the chart demonstrates how deaths at work have reduced substantially over the period, from around 4,400 deaths a year to around 200 deaths a year over the course of the 20th Century. There have been further reductions since the year 2000, with a total of 77 employee fatalities in the latest year. This reduction is in part due to changes in the industry composition over the period (for example a shift away from mining, manufacturing and other heavy industry to lower risk service industries).

A comparison of fatal injury numbers between 1974 (when the Health and Safety at Work Act was introduced) and 2018/19, adjusting to allow for the difference in industry coverage of the reporting requirements between these years, suggests that fatal injury numbers to employees have fallen by around 90% over this period.

Figure 7: Number of fatal injuries to employees in Great Britain 1900-2019/20p
(Note: estimate for 2019/20 is a provisional estimate, labelled as p)

Sources: RIDDOR and earlier reporting legislation
Non-fatal injury

In 2019/20, an estimated 693,000 workers sustained a non-fatal injury at work in Great Britain according to self-reports, equivalent to a rate of 2,160 injuries per 100,000 workers (2%). Around a quarter of these injuries resulted in over-7-days absence from work.

The rate of self-reported non-fatal injury to workers shows a generally downward trend, but has been broadly flat in recent years.

Figure 8: Estimated rate of self-reported non-fatal injury per 100,000 workers, Great Britain

![Graph showing generally downward trend and broadly flat in recent years.]

Source: Labour Force Survey

Certain workplace injuries also require reporting by employers to the Enforcing Authorities. Since October 2013 this reporting is required under the 2013 Reporting of Injuries Diseases and Dangerous Occurrences Regulations (RIDDOR 2013), and previously under various revisions of RIDDOR regulations or earlier legislation - see Sources and Definitions for more details. Current reporting requirements under RIDDOR 2013 require all non-fatal injuries resulting in over-7-days absence from work or a certain defined set of 'specified' injuries to be reported. (This is a change from the previous requirement to report over-3-day absence injuries and the previous 'major' injury category).

Changes in the reporting requirements, makes comparison of employer reported injuries difficult. However, using what we know about the proportion of over-3-day injuries that result in more than seven days off work (taken from estimates of self-reported injuries from the Labour Force Survey), we can adjust employer reported non-fatal injury data for 2011/12 and earlier years to broadly align with current reporting requirements under RIDDOR 2013.

The rate of non-fatal injury to employees reported by employers shows a downward trend (see Figure 9 below). However, reporting by employers is known to be incomplete and may be distorting the trend. The current level of reporting of workplace non-fatal injuries is estimated at around a half.
Research commissioned by HSE in 2005 showed that around half of the fall in the rate of non-fatal injury between 1986 and 2003 was due to the changing occupational structure of the GB workforce. The other half was due to residual factors including real improvements in health and safety over the period - see www.hse.gov.uk/research/rrhtm/rr386.htm.

**Working days lost**

In 2019/20, an estimated 38.8 million working days were lost due to work-related illness and non-fatal workplace injuries in Great Britain; 32.5 million days due to work-related illness and 6.3 million days due to workplace injury. This is equivalent to 1.45 working days lost per worker over the year.

To look at the long-term trend in working days lost we generally consider how the average number of working days lost per worker has changed, rather the total number of days, as the average accounts for variations in the number of people in work between years.

Working days lost per worker due to self-reported work-related illness or injury has been broadly flat in recent years, although 2019/20 is above recent rates. This largely reflects trends in the rate of work-related illness and non-fatal workplace injury. (2000-02 refers to 2000/01 injury data and 2001/02 illness data combined.)
Annex 1: Sources and definitions

Sources

Labour Force Survey

Estimates of self-reported work-related ill health and self-reported workplace injury are sourced from the Labour Force Survey (LFS).

The LFS is a national survey run by the Office for National Statistics of currently around 33,000 households each quarter, which provides information about the labour market. HSE commissions a module of questions in the LFS to gain a view of work-related illness based on individuals’ perceptions. The analysis and interpretation of these data are the sole responsibility of HSE. Further details about the LFS, and more specifically, the HSE commissioned questions, are available from www.hse.gov.uk/statistics/lfs/technicalnote.htm.

Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (and earlier injury reporting legislation)

Employer reported injuries are sourced from reports made to enforcing authorities under statutory reporting requirements.

Since April 1986 the relevant reporting legislation is the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR). RIDDOR has been subject to several amendments since that date, the most notable as follows:

- From April 1986, RIDDOR 1985 introduced the requirement to report injuries to workers resulting in over three days absence from work.
- Under RIDDOR 1995 (from April 1996), the legislation was extended to include acts of violence to workers, and deaths to members of the public due to acts of suicide or trespass on railway systems. The list of reportable major injuries to workers included a wider range of fractures and amputations, as well as certain dislocations.
- HSE introduced a new online system for the notification of RIDDOR incidents in September 2011 (although legislation did not change at that time).
- In April 2012 the legal reporting requirement changed from over-3-days' incapacitation to over-7-days. The requirement remains for duty-holders to record over-3-day injuries, but not to report them.
- RIDDOR underwent a more extensive legislative change in October 2013. This included the introduction of the 'specified injury' category to replace the 'major injury' category, and the removal of the requirement to report suicides on railway systems. For more information on RIDDOR 2013, see www.legislation.gov.uk/uksi/2013/1471/contents/made.


Prior to RIDDOR, employers were required to report injuries to the enforcing authority under the Notification of Accidents and Dangerous Occurrences Regulations (NADOR, 1981-1985). This introduced the requirement to report fatal or defined major injuries to employees and the self-employed, as well as injuries to members of the public killed or injured as the result of someone else’s work activity. Prior to NADOR, reporting was required under various legislation, but chiefly the 1961 Factories Act. Reporting was limited mainly to those employees employed in factories, construction, manufacturing, agriculture and docks, and excluded ‘office-based’ services activities (such as public administration, education, and health and social work).

Numerical comparison of employer-reported injuries between different time periods requires data to be adjusted on a consistent basis:

- For fatal injuries, the latest years injury total is restricted to exclude employee deaths to workers in public service industries (industries defined by sections O-Q in the 2007 Standard Industrial Classification) to make it comparable with the fatal injury count in 1974.
- For non-fatal injuries, the rate of reported injury for years 2011/12 and earlier has been adjusted to allow for the change in the reporting definitions introduced by RIDDOR 2012 and RIDDOR 2013. Data from the Labour Force Survey suggested that around 72% of injuries reported prior to these changes were also in scope of the new regulations; therefore injury rates for this earlier period have been adjusted to reflect this.
Death certificates

Information on mortality from certain occupational lung diseases is available from the cause of death included on death certificates currently recorded in Great Britain using the International Classification of Diseases, revision 10 (ICD-10).

A number of different forms of pneumoconiosis (including asbestosis, coal worker’s pneumoconiosis and silicosis) have been recognised as occupational diseases, and included within the ICD classification, for many decades. Mortality statistics for pneumoconiosis recorded as the underlying cause of death can therefore be readily obtained from national data compiled by the Office for National Statistics (ONS) and National Records of Scotland (NRS).

Although mesothelioma was included in the ICD classification only from revision 10, mesothelioma mortality statistics have been compiled on a consistent basis since 1968 based on the HSE mesothelioma register, which includes all deaths where the term ‘mesothelioma’ was mentioned anywhere on the death certificate.

HSE published mortality statistics for asbestosis – i.e. pneumoconiosis caused by asbestos – are based on the HSE asbestosis register, which includes all deaths that mention the term ‘asbestosis’ anywhere on the death certificate. This includes a substantial number of deaths in addition to those with asbestosis recorded as the underlying cause of death.

Industrial Injuries Disablement Benefit (IIDB) cases

The Industrial Injuries Disablement Benefit (IIDB) scheme, administered by the Department for Work and Pensions (DWP), compensates employed earners who have been disabled by a prescribed occupational disease (PD). Diseases are prescribed where an occupational cause is well established, and where the terms of prescription can be framed to identify cases of genuine occupational origin.

Pneumoconiosis and asbestosis-related diseases have, for many years, been prescribed occupational diseases within the scheme. Although the scheme does not include all cases of these diseases (for example, the onus is on individuals to make a claim and the self-employed are not covered) it does provide a consistent basis for assessing trends over time.

Potential impact of COVID-19 on HSE’s main statistical data sources in 2019/20

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 year’s data.


Definitions

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 (prevalence) include long-standing as well as new cases (incidence). New cases consist of those who first became aware of their illness in the last 12 months. Estimates are based on the most serious work-related illness, as defined by the individual, if they have more than one. HSE has collected data on ill health through the LFS periodically since 1990 and annually from 2003/04 (except 2012/13). However, differences in the survey design, coverage and level of information collected in the surveys in the 1990s means that data presented from the LFS in this report for these years are only broadly comparable with later years.

Self-reported injuries: Workplace injuries sustained as a result of a non-road traffic accident, as estimated by the LFS. HSE has collected data on injuries through the LFS in 1990 and annually since 1993/94. Data are available on a consistent basis since 2000/01, but over-7-day absence injury data are only available from 2003/04.

Confidence intervals: Confidence intervals represent 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.

Rate per 100,000: The number of annual workplace injuries or cases of work-related ill health per 100,000 employees or workers. The rate is constructed by dividing the count of injuries or ill health by the employment estimate. This is then multiplied by a factor of 100,000 to give a rate per 100,000 employees or workers, in line with international standards.
Annex 2: Links to detailed data tables

The data in this report can be found in the following tables:

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Other tables can be found at: www.hse.gov.uk/statistics/tables/index.htm
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 assessment and compliance checks by the Office for Statistics Regulation (OSR). The last compliance check of these statistics was in 2013.

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. Details of OSR reviews undertaken on these statistics, quality improvements, and other information noting revisions, interpretation, user consultation and use of these statistics is available from www.hse.gov.uk/statistics/about.htm

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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