Historical picture

Trends in work-related injuries and ill health in Great Britain since the introduction of the Health and Safety at Work act 1974

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Note: more recent data are now available

This document is the most recent detailed description of historical data, but does not include data for the latest year published on 2 November 2016.

The latest data tables are now available at: www.hse.gov.uk/statistics/tables/index.htm

A summary of the latest headline figures is available at: www.hse.gov.uk/statistics/history/index.htm
Summary


British industry has changed substantially since the introduction of the Health and Safety at Work Act (HSWA) in 1974 and data shows there have been large reductions in work-related injury and (since 1990) the overall scale of ill health.

Between 1974 and 2015:

- fatal injuries to employees have fallen by 86%
- reported non-fatal injuries have fallen by 77% (to 2011/12)
  - analysis of non-fatal injuries is complicated by changes in the reporting legislation over recent years
  - research commissioned by HSE suggests about half of the reduction in non-fatal injuries up to 2011/12 relates to changing employment patterns and occupations
- self-reported non-fatal injuries have fallen (since 2000/01)
- deaths from asbestos-related diseases have increased almost constantly year-on-year with about 10 times as many deaths in 2012 than in 1974, mainly due to exposure to asbestos prior to 1980
- the rate of total cases of self-reported work-related illness, and specifically musculoskeletal disorders, has fallen (since 1990)
- the rate of total cases of stress and related conditions increased during the 1990s, though likely due to awareness of work-related stress and changing attitudes affecting reporting levels

Earliest and latest data on injuries and ill health since 1974

<table>
<thead>
<tr>
<th>Summary description</th>
<th>Earliest data</th>
<th>Latest data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer-reported injuries (latest data adjusted to align with 1974 requirements)</td>
<td>1974</td>
<td>2014/15</td>
</tr>
<tr>
<td>Fatal injuries to employees</td>
<td>651</td>
<td>92</td>
</tr>
<tr>
<td>Rate of fatal injury per 100,000 employees</td>
<td>2.9</td>
<td>0.48</td>
</tr>
<tr>
<td>Reported non-fatal injuries to employees</td>
<td>336,722</td>
<td>77,310 (2011/12)</td>
</tr>
<tr>
<td>Rate of self-reported non-fatal injuries</td>
<td>2000/01</td>
<td>2014/15</td>
</tr>
<tr>
<td>All Injury rate per 100,000 workers</td>
<td>3,980</td>
<td>2,030</td>
</tr>
<tr>
<td>Occupational diseases</td>
<td>1974</td>
<td>2013</td>
</tr>
<tr>
<td>Deaths from pneumoconiosis as underlying cause (coal-related)</td>
<td>305</td>
<td>147</td>
</tr>
<tr>
<td>Deaths from pneumoconiosis as underlying cause (silica-related)</td>
<td>42</td>
<td>18</td>
</tr>
<tr>
<td>Deaths from asbestosis without mention of mesothelioma (asbestosis register)</td>
<td>74</td>
<td>516</td>
</tr>
<tr>
<td>Deaths from mesothelioma (mesothelioma register)</td>
<td>243</td>
<td>2,538</td>
</tr>
<tr>
<td>Rate of self-reported work-related illness (latest data adjusted to align with 1990 survey definitions where possible)</td>
<td>1990</td>
<td>2013/14</td>
</tr>
<tr>
<td>Overall rate per 100,000 employed</td>
<td>5,940</td>
<td>3,940</td>
</tr>
<tr>
<td>Rate of musculoskeletal disorders per 100,000 employed</td>
<td>2,750</td>
<td>1,750</td>
</tr>
<tr>
<td>Rate of stress and related conditions per 100,000 employed</td>
<td>820</td>
<td>1,450</td>
</tr>
</tbody>
</table>

Notes:

1 Reporting of workplace injuries in 1974 covered production and some service sectors. Data for 2014/15 has been adjusted to make a comparison (it excludes reported injuries in the public administration, education, and health and social work sectors (SIC codes 84–88).
2 A comparison using the latest reported non-fatal injury data is complicated by legislative changes over recent years.
3 Estimates of self-reported workplace non-fatal injuries are based on results from the Labour Force Survey, available on a consistent basis since 2000/01.
4 Mesothelioma is an asbestos-related cancer. The rise was driven largely by asbestos usage prior to 1980 which peaked in the 1960s; the effect of subsequent reductions in asbestos usage are starting to be seen in the fall in the numbers of male deaths from this cancer in younger age groups.
5 Estimates of self-reported work-related illness are based on results from the Labour Force Survey collected since 1990. They have been adjusted such that the coverage is approximately consistent (e.g. limited to people who worked in the last 12 months in England and Wales only), and even then are still affected by factors such as differences in survey design and level of information collected.
Fatal injuries

Workers

At the time of the introduction of the HSWA in 1974, the reporting legislation covered accidents to employees only (i.e., not the self-employed), and those mainly employed in factories, construction, manufacturing, agriculture and docks (excluding 'office-based' services activities such as public administration, education, and health and social work).

There were 651 fatal injuries to employees in 1974. When an adjustment is made to the latest data (to mirror the same reporting as 1974), this shows 92 fatal injuries to employees in the provisional year 2014/15. This represents an overall decrease of 86% from comparative figures in 1974. With the same adjustment made to today’s employment levels, the rate of fatal injury has decreased by 83% over this period, from 2.9 per 100,000 employees in 1974 to 0.48 in 2014/15.

Across all industries (i.e. not adjusted) there were 99 fatal injuries to employees in 2014/15 — including the self-employed the total number of fatal injuries to ‘workers’ in 2014/15 is 142, with a corresponding rate of 0.46. Whilst not directly comparable to 1974, the above adjustment made to today’s worker employment figures shows a rate of 0.57 deaths per 100,000 workers in 2014/15.

Figure 1: Number and rate of fatal injury to workers in Great Britain 1974, 1981, 1986/87, 1996/97 – 2014/15

Source: Factories Act (1974); Notification of Accidents and Dangerous Occurrences Regulations (NADOR, 1980); Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR, 1986/87 – present).

Notes:
- The term ‘workers’ describes employees and the self-employed, combined.
- r = Revised
- p = Provisional

2004/05 - 2013/14 rates have been revised (October 2015) as Annual Population Survey (APS) data sets have been reweighted to reflect population estimates based on the 2011 Census.

See www.hse.gov.uk/statistics/history/histfatal.xlsx for the data featured in Figure 1.

Members of the public

The Notification of Accidents and Dangerous Occurrences Regulations 1980 (NADOR) introduced a requirement to report fatal injuries to members of the public in connection with work, and there were 71 fatal injuries reported in 1981.

From April 1996 until October 2013 there was also a requirement under RIDDOR to report suicides on railways. This change had the effect of dramatically increasing the number of fatal injuries to members of the public. In 2013/14 – the last reporting year for which suicides on railways was a requirement – there were 291 fatal injuries to members of the public; of these, 213 deaths (73%) related to incidents occurring on railways. For 2014/15 – the first full year that the reduction has taken effect – there is a noticeable impact on the figures, with 123 members of the public fatally injured in accidents. Of these, 21 (17%) were railway incidents (excluding suicides).
Non-fatal injuries

Even allowing for the expansion and diversification of Britain’s workforce since 1974, there have been substantial decreases in the number and rate of reported injuries. Research commissioned by HSE in 2005 suggests only a quarter to a half of the reduction in non-fatal injuries over the last 30 years is attributable to a shift in employment away from manufacturing and heavy industry to lower risk service industries – see www.hse.gov.uk/research/rrpdf/rr386. This previous analysis of the effect of the economic cycle on workplace injury rates has been recently updated to include the latest recession. For more information, see www.hse.gov.uk/statistics/adhoc-analysis/economic-cycle-paper.

In addition to actual reports made by employers under reporting legislation, data on workplace injuries sustained as a result of a non-road traffic accident have been collected by HSE through the Labour Force Survey (LFS), from 1990, and annually since 1993/94.

Further information on workplace injuries is available at www.hse.gov.uk/statistics/causinj/.

Employer-reported non-fatal injuries

In 1974 there were 336,722 reported non-fatal injuries (typically, those resulting in ‘more than three days absence from work’ and covering the same production and service industries as fatal injuries). Survey data to estimate the level of under-reporting of non-fatal injuries was not available then, as it is today. In 2014/15 there were 76,054 reported non-fatal injuries to employees (and 78,671 in 2013/14). However, a comparison using these latest data is complicated by changes in the reporting regulations over recent years, though it is possible to make a representative comparison using adjusted non-fatal injury data for 2011/12 (major plus over-3-day injury); here the figure of 77,310 reported non-fatal injuries to employees in 2011/12 represents a fall of 77% from comparative figures recorded in 1974.

It is also useful to compare the reduction in reported non-fatal injuries since 1986/87 (when the requirement to report over-3-day injuries was introduced): at this time, there were 179,706 reported non-fatal injuries to employees (major plus over-3-day). In 2011/12 this figure was 111,299, and represents a reduction of 38%. There was a decrease of 49% in the corresponding rate of non-fatal injury, from 860.2 per 100,000 employees in 1986/87 to 442.6 in 2011/12.

Figure 2: Number and rate of reported non-fatal injury to employees in Great Britain 1996/97 – 2014/15

Source: RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations), as amended.

Notes:

r = Revised
p = Provisional
2004/05 - 2013/14 rates have been revised (October 2015) as Annual Population Survey (APS) data sets have been reweighted to reflect population estimates based on the 2011 Census.
See www.hse.gov.uk/statistics/history/histnonfats.xlsx for the data featured in Figure 2.
A historical series of statistics of reported injuries in Great Britain broken down by main industrial sectors is available at www.hse.gov.uk/statistics/history/histinj.xlsx (for workplace injury numbers) and www.hse.gov.uk/statistics/history/histrate.xlsx (for workplace injury rates, per 100,000 employed).
Self-reported injuries

The Labour Force Survey (LFS) shows that rates of self-reported non-fatal injuries at work have generally followed a downward trend over the last ten years or so, but show signs of levelling off in recent years.

Around a quarter of non-fatal injuries resulted in over-7-days absence from work and around a third in over-3-days.

Figure 3: Estimated rates of self-reported non-fatal injury, for people working in the last 12 months in Great Britain, 2000/01 to 2014/15

Source: Labour Force Survey

2001/02 - 2013/14 rates have been revised (October 2015) as Labour Force Survey (LFS) data sets have been reweighted to reflect population estimates based on the 2011 Census.

See www.hse.gov.uk/statistics/lfs/lfsinj1.xlsx for the data in Figure 3 and additionally, a series of estimated cases of self-reported workplace non-fatal injury.
Ill health

Comparisons of the scale of work-related ill health over the 40-year period since 1974 are possible only for certain specific conditions where data have been collected consistently on a long-term basis, either from death certificates or the Industrial Injuries Disablement Benefit (IIIB) scheme. Examples include certain lung diseases like pneumoconiosis due to coal dust, silica and asbestos, and the asbestos-related cancer mesothelioma. Such conditions take many years to develop and are continuing to increase – a continuing legacy of past workplace conditions.

More recently, HSE has also made use of other data sources such as the Self-reported Work-related Illness (SWI) survey module – which has been included in the Labour Force Survey (LFS) since 1990 – and physician-based reporting schemes in order to assess the scale of the full range of occupational ill health conditions including work-related stress and musculoskeletal disorders.

The latest information and trends over more recent years is available at www.hse.gov.uk/statistics/causdis/.

Trends for certain specific occupational diseases

**Mesothelioma**

Mesothelioma is an asbestos-related cancer. Annual deaths are now about 10-fold higher than in 1974 and are expected to continue to increase this decade. Annual IIIB cases have followed a similar trend. This continuing increase is largely a consequence of heavy past occupational asbestos exposures and the fact that mesothelioma typically takes decades to develop.

Further information about mesothelioma and other asbestos-related disease is available at www.hse.gov.uk/statistics/causdis/asbestos.

**Silicosis**

Silicosis is a form of pneumoconiosis due to exposure to Respirable Crystalline Silica (RCS). There has been a steady decline in annual deaths since 1974, with numbers in recent years about half or lower than those in the 1970s. Annual IIIB cases have tended to fluctuate considerably, though there is also evidence of a reduction over the period.

Further information about silicosis and other occupational lung diseases is available at www.hse.gov.uk/statistics/causdis/respiratory-diseases.

Figure 4: Mesothelioma and silicosis – annual deaths and cases assessed for Industrial Injuries Disablement Benefit (IIIB) in Great Britain, 1974 to 2014*

Source: Mortality statistics from the Office for National Statistics (ONS) and National Records of Scotland (NRS); Industrial Injuries Disablement Benefit (IIIB) from the Department of Work and Pensions (DWP)

Notes:

*Latest data for mesothelioma and silicosis deaths is for 2013.

* Mesothelioma IIIB figures for 1978-1980 only include cases where an award for death benefit was made.

See www.hse.gov.uk/statistics/history/histill1.xlsx for a table of the data featured in Figure 4.
Trends in Self-reported Work-related Illness

The Self-reported Work-related Illness (SWI) survey module has been included in the Labour Force Survey (LFS) since 1990. It was initially included periodically, but annually from 2003/04 to 2011/12. The module was suspended for one year in 2012/13, but from 2013/14 reverted to an annual data collection. Results prior to 2001/02 are not directly comparable with later years. Estimates have been adjusted such that the coverage is approximately consistent (e.g. limited to people who worked in the last 12 months in England and Wales only), and even then are still affected by factors such as differences in survey design and level of information collected.

Since 1990, the LFS results suggest that the overall prevalence rate of self-reported work-related illness has fallen. In 1990 and 1995 the estimated rates were similar (not statistically significantly different), and from 2001/02 to 2011/12 generally fell, with the exception of an unusually high rate in 2006/07. No ill health data was collected in 2012/13, but the rate in 2013/14 was higher than in 2011/12, and remained at a similar level in 2014/15.

The estimated prevalence rate of stress and related conditions increased during the 1990s, but has remained broadly flat since 1998/99. It is likely that greater awareness and attitudes to work-related stress changed in the 1990s, which will have affected reporting levels.

For musculoskeletal disorders, following an increase between 1990 and 1995, the estimated prevalence rate has generally followed a downward trend over time, reaching its lowest level in 2011/12. Although the rate increased in 2013/14, it continued at a similar level in 2014/15, and both rates were lower than that in 1990.

Figure 5: Comparison of estimated prevalence rates (new and existing cases) of self-reported work-related illness, for people working in the last 12 months in England and Wales, 1990 to 2014/15

Source: Labour Force Survey

Notes:

* Self-reported work-related ill health data was only collected for years shown in the chart.
* Includes stress, depression or anxiety and heart conditions.

2001/02-2013/14 rates have been revised (October 2015), as Labour Force Survey (LFS) data sets have been reweighted to reflect population estimates based on the 2011 Census.

See [www.hse.gov.uk/statistics/history/histill2.xlsx](http://www.hse.gov.uk/statistics/history/histill2.xlsx) for a table of historic self-reported work-related illness data.
Technical Notes

Reporting legislation for workplace injuries since 1974

**Factories Act**

In 1974, injuries were reported on a calendar year basis (January to December) and defined in various legislation, but chiefly the 1961 Factories Act. Reporting was limited mainly to those employed in factories, construction, manufacturing, agriculture and docks, and excluded ‘office-based’ services activities (such as public administration, education, and health and social work). For more information on the Factories Act, see [www.legislation.gov.uk/ukpga/1961/34/pdfs/ukpga_19610034_en](http://www.legislation.gov.uk/ukpga/1961/34/pdfs/ukpga_19610034_en).

**Notification of Accidents and Dangerous Occurrences Regulations (NADOR)**

NADOR was the legal requirement for reporting from 1981 to 1985. This introduced the requirement to report fatal or defined major injuries to the self-employed, as well as injuries to members of the public killed or injured as the result of someone else’s work activity. For more information on NADOR, see [www.legislation.gov.uk/uksi/1980/804/pdfs/uksi_19800804_en](http://www.legislation.gov.uk/uksi/1980/804/pdfs/uksi_19800804_en).

**Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR)**

Since April 1986 the requirement to report under RIDDOR has been on a planning year basis (April to March). RIDDOR has been subject to several amendments since that date, the most notable as follows:

- 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 railways systems. The list of reportable major injuries to workers included a wider range of fractures and amputations, as well as certain dislocations. For more information on RIDDOR 1995, see [www.legislation.gov.uk/uksi/1995/3163/contents/made](http://www.legislation.gov.uk/uksi/1995/3163/contents/made).
- 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' incapacity 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](http://www.legislation.gov.uk/uksi/2013/1471/contents/made).


**Labour Force Survey**

The Labour Force Survey (LFS) is a household survey consisting of around 41,000 households across Great Britain 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](http://www.hse.gov.uk/statistics/lfs/technicalnote).

**Confidence intervals and statistical significance**

Confidence intervals represent the range of values 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. 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. However, differences highlighted in the commentary, e.g. higher/lower, increase/fall, are statistically significant, unless otherwise stated.

**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 longstanding as well as new cases. New cases
consist of those who first became aware of their illness in the last 12 months. HSE has collected data on ill health through the LFS, periodically since 1990 and annually from 2003/04 to 2011/12. In 2012/13, the ill health data collection was suspended but from 2013/14 returned to annual data collection.

**Self-reported injuries**

Workplace injuries sustained as a result of a non-road traffic accident, as estimated by the LFS. Over-3-day and over-7-day absence injuries include all those with more than three and more than seven consecutive (working and non-working) days away from work (not counting the day on which the accident happened). HSE has collected data on injuries through the LFS in 1990 and annually since 1993/94. Data is available on a consistent basis since 2000/01, but over-7-day absence injury data is only available from 2003/04.

**Asbestos-related and other occupational lung diseases**

A number of different forms of pneumoconiosis (including coal worker’s pneumoconiosis and silicosis) have been recognised as occupational diseases, and included within the International Classification of Diseases, 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). HSE published annual mortality statistics for non-asbestos related pneumoconiosis in Great Britain (predominantly caused by coal dust and silica) are derived from these sources.

Although the asbestos-related cancer, mesothelioma, has been recognised for many years, the full scale of mortality within Great Britain could not be readily identified from national death data because mesothelioma was not specifically categorised within the International Classification of Diseases prior to Revision 10 (ICD-10). HSE published mortality statistics have been compiled on a consistent basis since 1968 based on the mesothelioma register which includes all deaths where the term ‘mesothelioma’ was mentioned anywhere on the death certificate. Since the introduction of ICD-10, the majority of deaths on the register have mesothelioma recorded as the underlying cause.

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

Pneumoconiosis and asbestos-related diseases have also, for many years, been prescribed occupational diseases for which compensation may be payable under the Industrial Injuries Disablement Benefit (IIDB) scheme currently administered by the Department for Work and Pensions. HSE routinely publishes statistics on new cases of diseases assessed for IIDB.

Further details on asbestos-related and other occupational lung diseases are available from www.hse.gov.uk/statistics/sources.

**Looking back, thinking forward: HSWA 40 and beyond**

It is 40 years since the Health and Safety at Work Act received Royal Assent, providing a new regulatory framework for workplace health and safety in Great Britain. For more information, see www.hse.gov.uk/aboutus/40.
National Statistics

National Statistics are produced to high professional standards set out in the National Statistics Code of Practice. They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference.

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

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

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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