

Construction statistics in Great Britain, 2019

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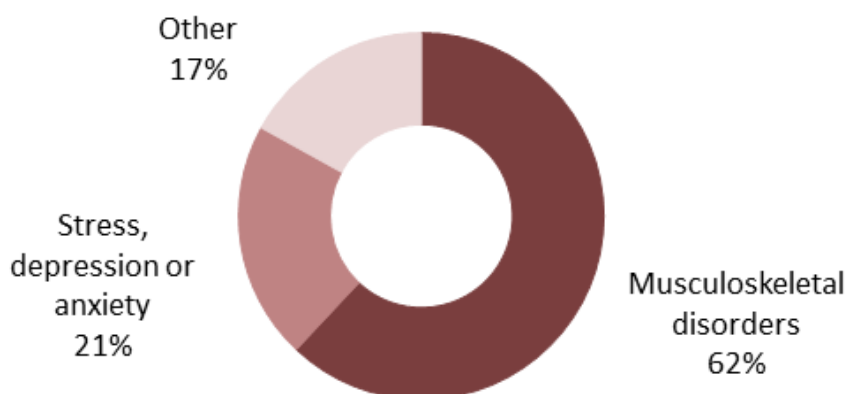
Key statistics

in the Construction sector in Great Britain, 2019



79,000

workers suffering
from work-related
ill health (new or
long-standing)



The rate of self-reported work-related ill health has been broadly flat in recent years.

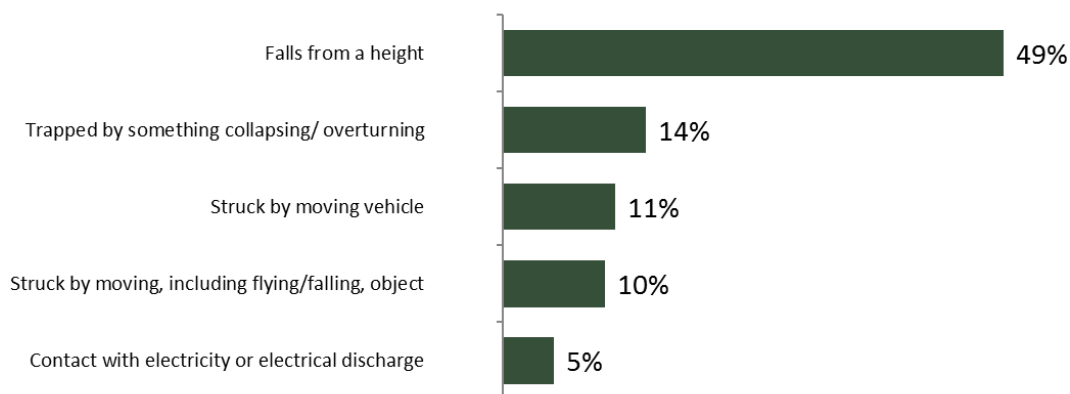
Sources: LFS, estimated 2018/19; LFS estimated annual average 2016/17-2018/19.



30 fatal injuries
to workers in
2018/19p

This is the similar
to the annual
average number of
36 fatalities for
2014/15-2018/19

Source:
RIDDOR, 2018/19



Source: RIDDOR, 2014/15-2018/19. Accident kinds are shown for the top five causes of fatal injuries.

Note: p is used in this document to indicate provisional figures due to be finalised in 2019/20

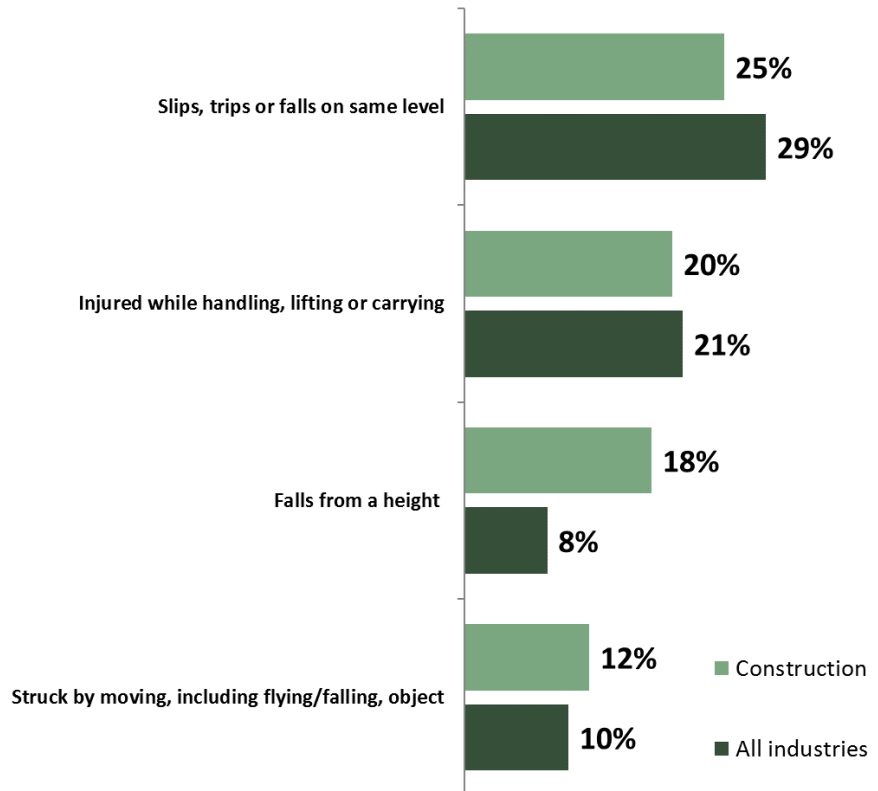


54,000

non-fatal injuries to
workers each year

The rate of self-
reported non-fatal
injury to workers
shows a downward
trend

Source: LFS, estimated
annual average
2016/17-2018/19.



Source: Non-fatal injuries reported under RIDDOR 2016/17-2018/19. RIDDOR is used here as the LFS is not able to provide a breakdown to this level of detail. Accident kinds are shown that account for 10% or more of injuries.

Introduction

This report provides a profile of workplace health and safety in construction¹.

Construction includes three broad industry groups:

- Construction of buildings – general construction of buildings, including new work, repair, additions and alterations;
- Civil engineering – civil engineering work, including road and railway construction, and utility projects; and
- Specialised construction activities – covering trades that usually specialise in one aspect, common to different structures. For example: demolition, electrical, plumbing, joinery, plastering, painting and glazing.

There is an overlap between these groups, for example roofing work may be carried out by a specialist contractor and so included in Specialised construction activities or by a general contractor as part of Construction of buildings.

This sector accounts for around 7% of the workforce in Great Britain².

¹ The 'Construction' sector is defined by section F within the 2007 Standard Industrial Classification. See www.hse.gov.uk/statistics/industry/sic2007.htm for more detail.

² Annual Population Survey, 2018



Work-related ill health

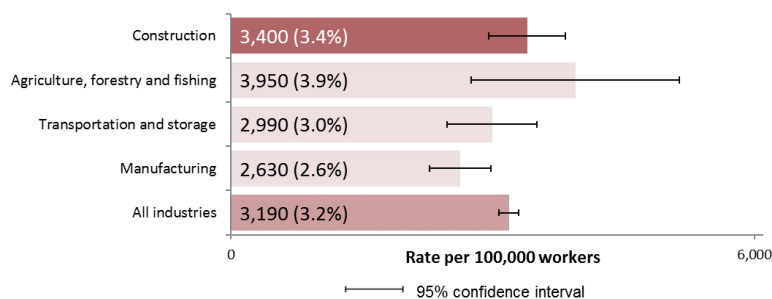
All illness

In Construction:

- There were an estimated **79,000** work-related ill health cases (new or long-standing)
- **62%** were musculoskeletal disorders

Source: LFS, estimated annual average 2016/17-2018/19

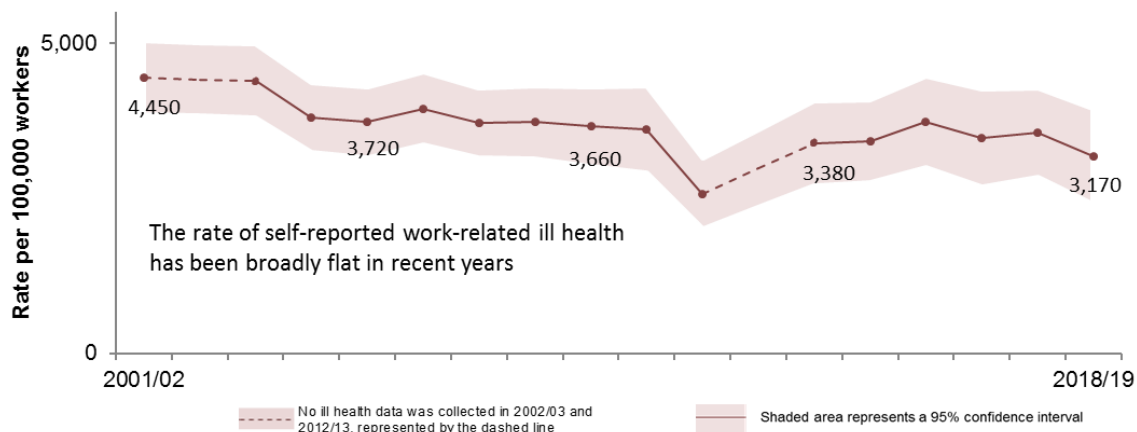
Construction compared to industries with similar work activities



- Around **3.4%** of workers suffered from work-related ill health (new or long-standing cases)
- This rate is not statistically significantly different to that for workers across all industries (**3.2%**)

Source: LFS, estimated annual average 2016/17-2018/19.
95% confidence intervals are shown on the chart.

Changes over time



Source: LFS annual estimate, from 2001/02 to 2018/19.



Work-related ill health

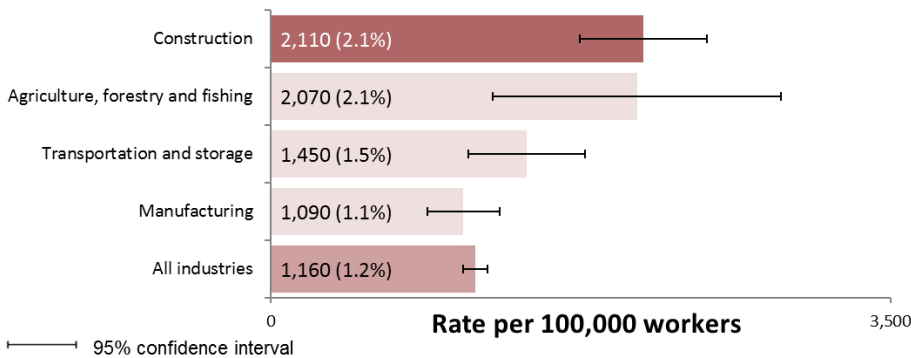
Musculoskeletal disorders

In Construction:

- There were an estimated **42,000** work-related cases of musculoskeletal disorder (new or long-standing), about three fifths of all ill health in this Sector

Source: LFS, estimated 2018/19

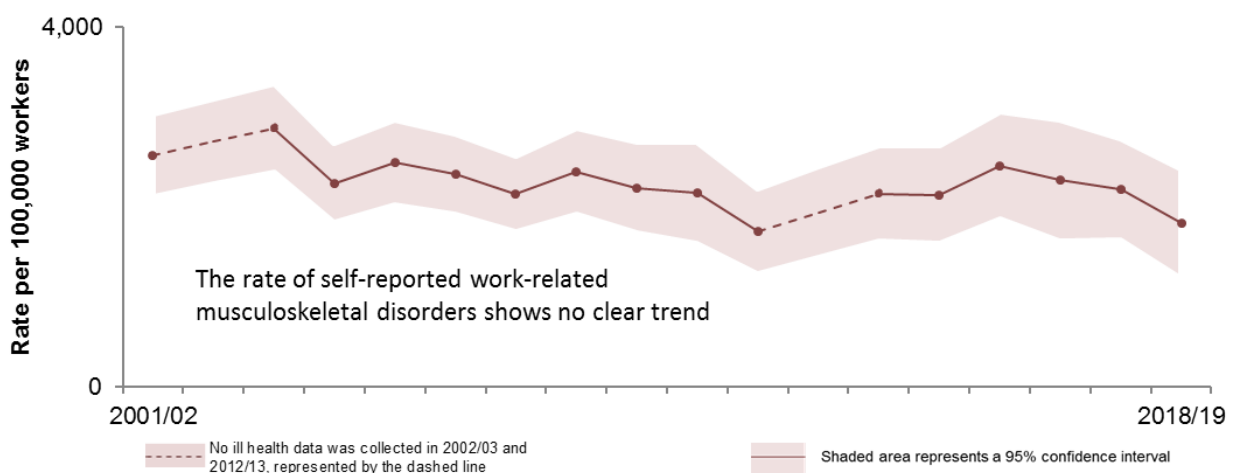
Construction compared to industries with similar work activities



- Around **2.1%** of workers in the sector reported suffering from a musculoskeletal disorder they believed was work-related (new or long-standing cases)
- This rate is **statistically significantly higher** than the rate for workers across all industries (**1.2%**)

Source: LFS, estimated annual average 2016/17-2018/19. 95% confidence intervals are shown on the chart.

Changes over time



Source: LFS annual estimate, from 2001/02 to 2018/19.



Work-related ill health

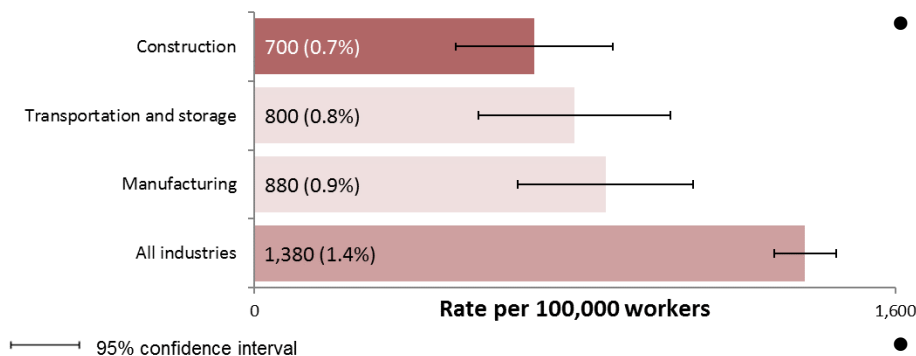
Stress, depression or anxiety

In Construction:

- There were an estimated **16,000** work-related cases of stress, depression or anxiety (new or long-standing), a quarter of all ill health in this Sector.

Source: LFS, estimated annual average 2016/17-2018/19

Construction compared to industries with similar work activities



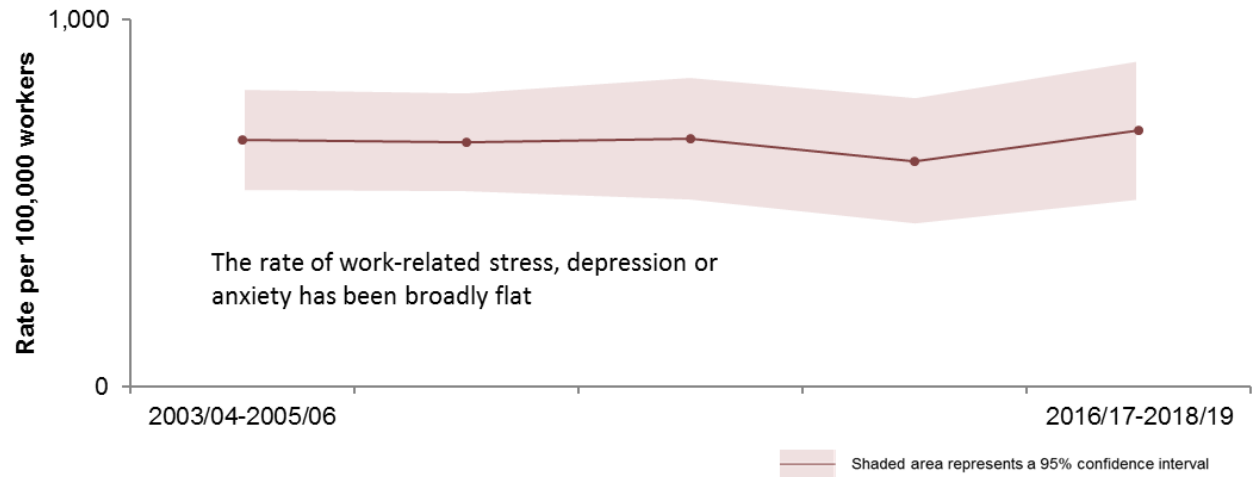
Source: LFS, estimated annual average 2016/17-2018/19.

- Around **0.7%** of workers in the sector reported suffering from stress, depression or anxiety they believed was work-related new or long-standing cases)
- This rate is **statistically significantly lower** than the rate for workers across all industries (**1.4%**).³

³ A research report published by the Office for National Statistics indicates that the risk of suicide among low-skilled male labourers, particularly those working in construction roles, was three times higher than the male national average. It is not clear whether this increased risk is due to working within the construction industry or other socio-economic factors. See

www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/suicidebyoccupation/england2011to2015

Changes over time



Source: LFS estimated annual average, from 2003/04 to 2018/19



Work-related ill health

Other conditions

Occupational asthma

- According to reports from the chest physician reporting scheme for occupational respiratory disease, the rate of occupational asthma is lower than the rate for all industries (0.49 compared to 0.3 per 100 000 workers, average annual rates 2016-2018p).
- Airborne materials from spray painting, welding, or cutting/grinding metals are among the contributory factors to their ill health identified by those suffering from asthma.

Source: The Health and Occupation Reporting network (THOR)

Chronic Obstructive Pulmonary Disease (COPD)

- There are various causative factors linked to COPD including occupational exposure to fumes, chemicals and dusts and environmental pollution. Smoking is the single most important causative factor.
- A recent analysis of COPD, based on the UK Biobank study, identified a number of occupations for which the prevalence of COPD was significantly higher compared with all other occupations. Within the construction sector, roofers were identified as being one of the occupational groups with a higher than the all occupation average prevalence of COPD.

*Source: Work-related Chronic Obstructive Pulmonary Disease (COPD) in Great Britain, 2019-
www.hse.gov.uk/statistics/causdis/copd.pdf*

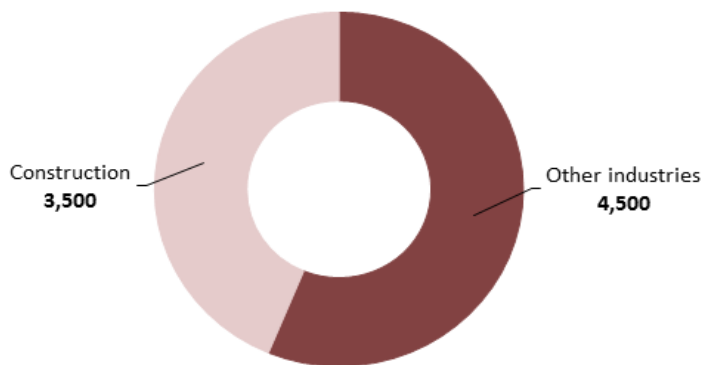
Contact dermatitis

- Painters and decorators, Carpenters and joiners, and Construction and building trades not elsewhere classified all suffer from more than twice the all industry rate of contact dermatitis.
- The rate for Floorers and wall tilers is also high when averaged over the last 10 years. The rate for Bricklayers and masons has fallen substantially since 2004-06, probably because of reduced exposure to chromates in cement following the introduction of EU legislation in 2005.
- The rate for construction is similar to that for all industries (2.4 compared to 2.8 per 100 000 workers).

Source: THOR, annual average 2016-2018p.

Occupational Cancer

HSE commissioned research to look at the burden of occupational cancer in Great Britain. The occupational cancer burden research indicates:



- Past occupational exposure to known and probable carcinogens is estimated to account for about **5%** of cancer deaths and **4%** of cancer registrations currently occurring each year in Great Britain.
- This equates to about **8,000** cancer deaths and **13,500** new cancer registrations each year

Source: Burden of occupational cancer in Great Britain
www.hse.gov.uk/statistics/causdis/cancer.pdf

- An epidemiological study of mesothelioma, a form of cancer that follows the inhalation of asbestos fibres, in Great Britain suggests that about 46% of currently occurring mesotheliomas among men born in the 1940s is associated with the construction industry including carpenters, plumbers and electricians. 17% can be attributed to asbestos exposures through carpentry work alone.
- A key factor in causing the higher risks now seen in these former workers appears to be the extensive use of insulation board containing brown asbestos (amosite) within buildings for fire protection purposes.

Source: See Mesothelioma –
www.hse.gov.uk/statistics/causdis/mesothelioma/mesothelioma.pdf

Other conditions

Other conditions that can affect construction workers include:

- Occupational Deafness; and
- Hand Arm Vibration (largely made up of two conditions, Vibration White Finger and Carpal Tunnel Syndrome).

Source: Our main source of information on both these conditions is from new claims from the IIDB. Further detail is available at www.hse.gov.uk/statistics/causdis/deafness/index.htm and www.hse.gov.uk/statistics/causdis/vibration/index.htm, respectively.



Work-related injuries

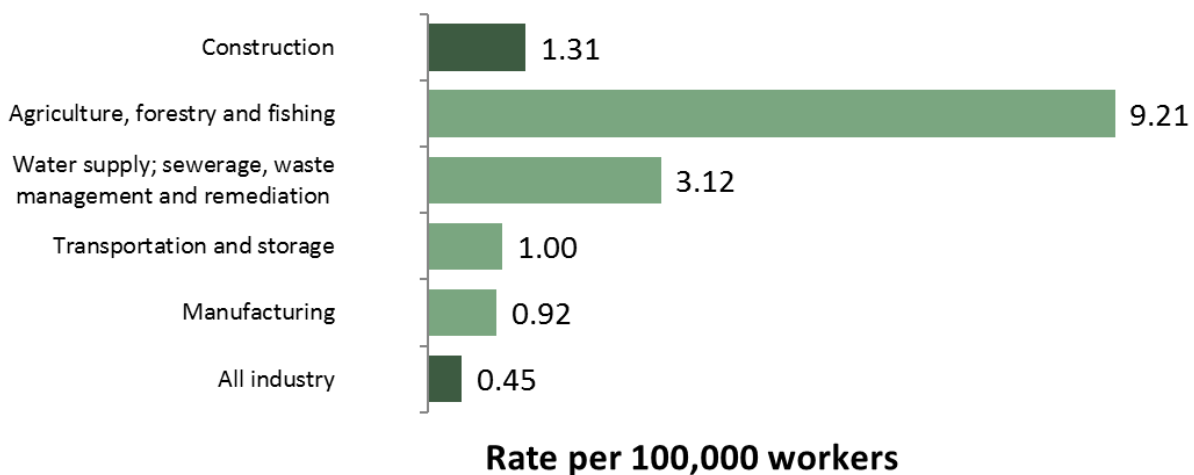
Fatalities

In Construction there were:

- **30** fatal injuries to workers and **seven** to members of the public in 2018/19;
- Average of **36** fatalities to workers and **five** to members of the public each year over the last five years;
- **49%** of deaths over the same five year period were due to falls from height

Source: RIDDOR, 2018/19; RIDDOR, 2014/15-2018/19

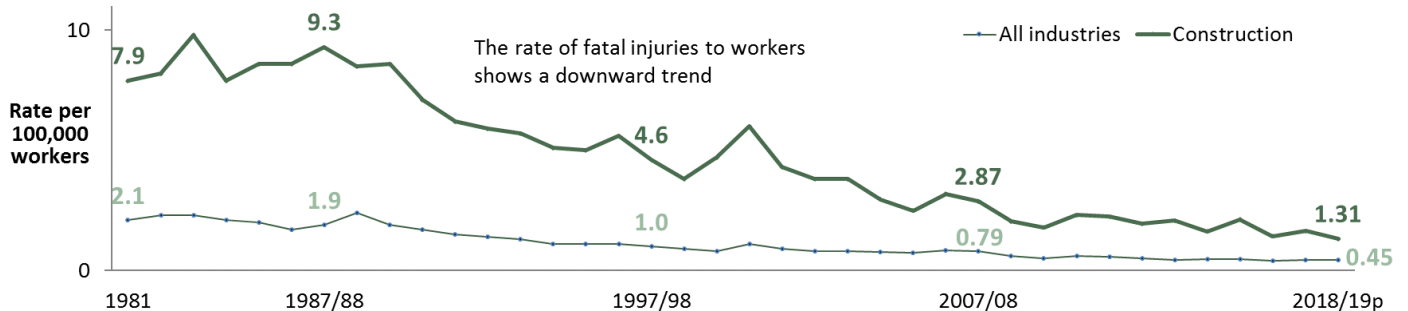
Construction compared to industries with similar work activities



The fatal injury rate (**1.31** per 100,000 workers) is **three** times the All industry rate.

Source: RIDDOR, 2018/19

Changes over time



Source: NADOR and RIDDOR, 1981 to 2018/19



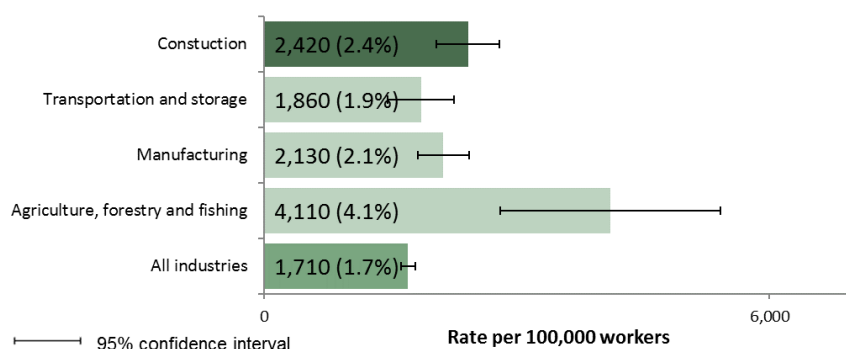
Work-related injuries

The Labour Force Survey is HSE's preferred data source for non-fatal injuries. The latest estimates show that in Construction there were:

- **54,000** cases of non-fatal work-related injury
- **37%** involved over three days and **28%** over seven days absence

Source: LFS, estimated annual average 2016/17-2018/19

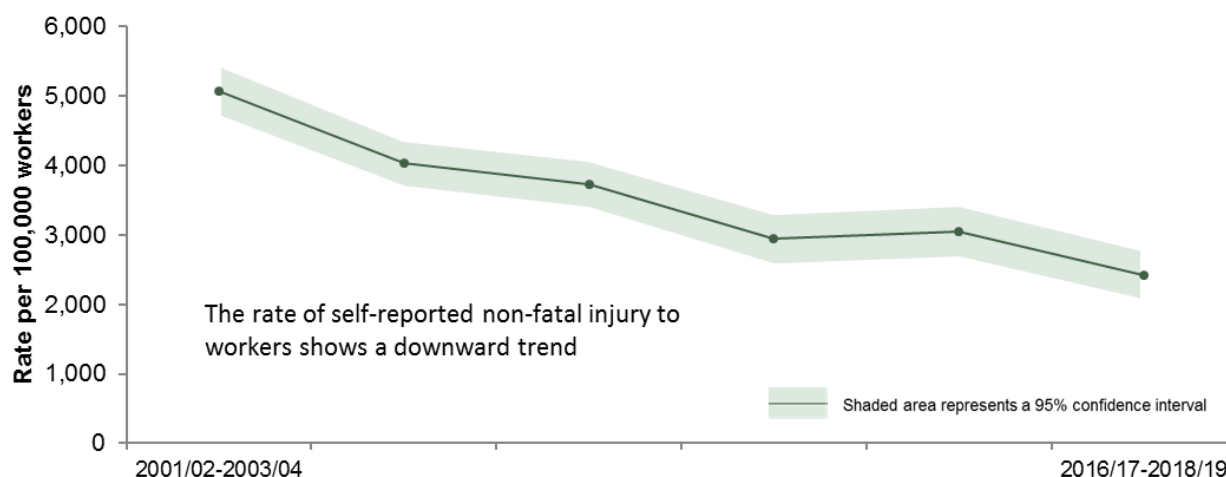
Construction compared to industries with similar work activities



- Around **2.4%** of workers in this sector suffered from an injury.
- This is **statistically significantly higher** than the all industry rate.

Source: LFS, estimated annual average 2016/17-2018/19

Changes over time



Source: LFS, grouped by 3 years, estimate annual average 2000/01 – 2018/19



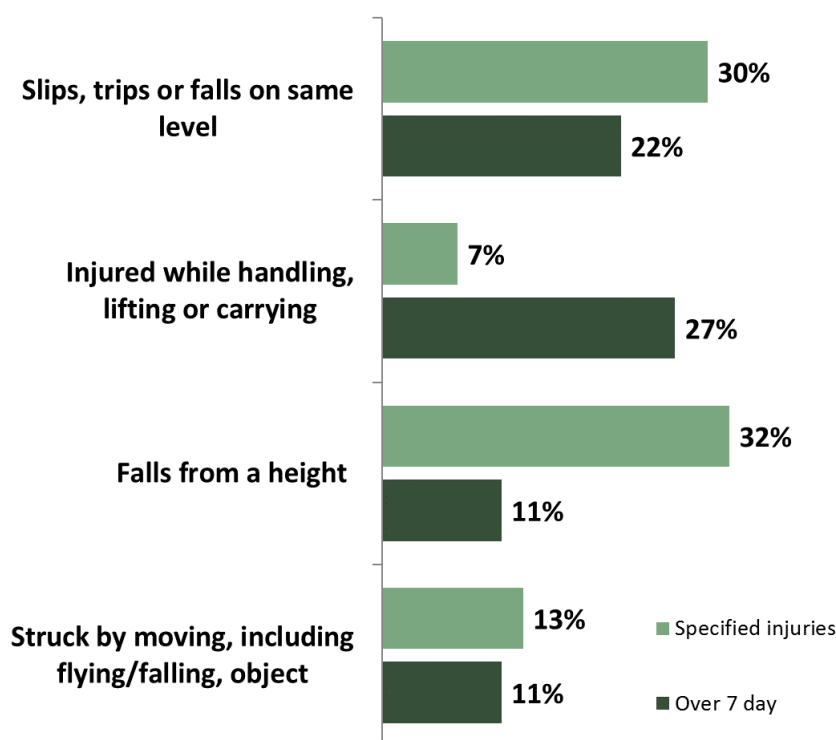
Work-related injuries

Supporting information around work-related injuries is available from RIDDOR reporting[#]. In Construction there were:

- **4,872** non-fatal injuries to employees reported by employers under RIDDOR in 2018/19p.
- **1,697** (35%) were specified injuries^{##} and **3,175** (65%) were over seven-day injuries.

Source: RIDDOR, 2018/19

Main accident kinds for the latest three years (2016/17 – 2018/19)



Source: RIDDOR, 2016/17 - 2018/19.

[#]The LFS gives the best indication of the scale of workplace injury within the sector. RIDDOR provides additional information for non-fatal injuries but needs to be interpreted with care since it is known that non-fatal injuries are substantially under-reported, especially for the self-employed. Possible variations in reporting rates both between industries and over time make comparisons difficult. However, RIDDOR can be used for analysis at a detailed level not available through the LFS, for example, around the kind of incident.

^{##}For the full list of specified injuries, see www.hse.gov.uk/riddor/reportable-incidents.htm

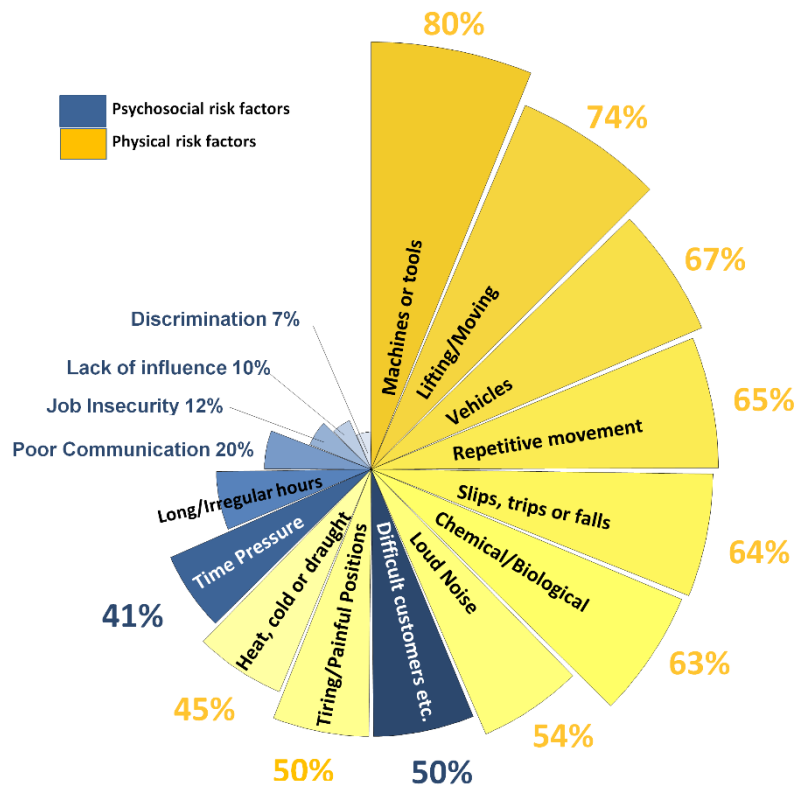


Workplace risks

European Union Occupational Health Agency survey 2014[#]

Percentage of workplaces in the Construction sector reporting the presence of workplace risks^{##}

% of establishments with risk present (Construction)



- Physical risks were more commonly reported than psychosocial risks
- Although 'machines or tools' was the top risk, accidents with machinery account for between 3-4% of reported fatal and non-fatal injuries
- The main psychosocial risks related to difficult customers and time pressure

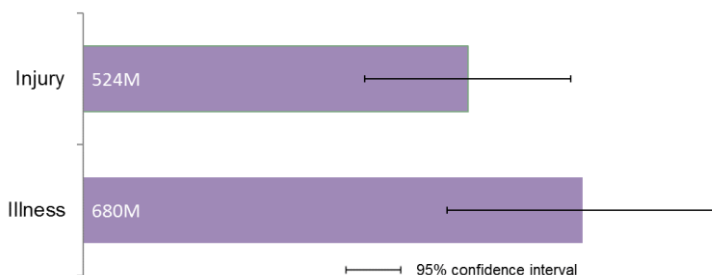
[#] A 2014 survey, commissioned by the European Union Occupational Safety and Health Agency (in collaboration with the Health and Safety Executive), explored the extent that various risks are present in the workplace (regardless of whether the risk is under control), as reported by the person who knows most about safety and health in the workplace. The chart shows the extent of these various risk factors in workplaces in the Agriculture, forestry and fishing sector in the UK. Full details of the UK results, including measures of how risks are managed within the sector can be found at www.hse.gov.uk/statistics/oshman.htm. The source is known as ESENER 2014

^{##} For workplaces with five or more employees reporting the presence of various workplace risks, regardless of whether risk is under control.



Economic Cost

Economic cost of workplace injury and new cases of work-related ill health in Construction

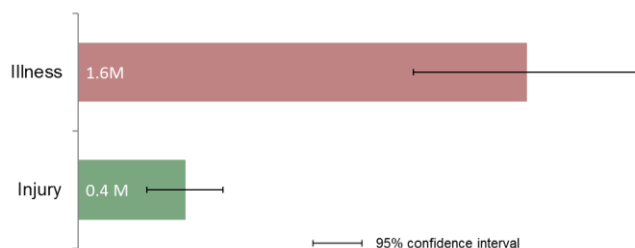


- The total cost in 2017/18 is estimated at **£1.2 billion**, (95% confidence interval £972 M – £1,437 M)
- This accounts for **8%** of the total cost across all industries (£14,885 M).

Source: HSE Costs to Britain, 2017/18.

Workplace injury and ill health impose costs: both financial (for example in terms of lost output and healthcare costs) and non-financial (the monetary valuation of the human cost of injury and illness in terms of loss of quality of life, and for fatalities, loss of life). Taken together, this gives the total economic cost to society. This cost is shared between individuals, employers and government/taxpayers.

Working days lost



Source: LFS, estimated annual average 2016/17-2018/19

In Construction around **2.0 million working days** (full-day equivalent) were lost each year between 2016/17 and 2018/19 due to:

- workplace injury (19%) and
 - work-related illness (81%).
- That is equivalent to around 0.9 working days lost per worker and is not significantly different to the average days lost per worker across all industries (0.9 days).



Enforcement

Enforcement notices issued by HSE to businesses in this Sector, 2018/19p

| | |
|---------------------------------|---------------------------------|
| 1,609 Prohibition Notices | 1,316 Improvement Notices |
|---------------------------------|---------------------------------|

In 2018/19p there was 1 additional deferred prohibition notice which is not included in the above

Provisional figures for 2018/19p show a total of **2,926 notices** issued by HSE inspectors in Construction.

- 55% were improvement notices and
- 45% were prohibition notices.
- Prohibition notices issued in the Construction Sector account for around 60% of the total prohibition notices issued by HSE in 2018/19
- There has been a slight decrease in the number of notices issued compared to the previous year (3,045 in 2017/18).

There were **158 prosecution cases**[#] led by HSE or, in Scotland, the Crown Office and Procurator Fiscal where a verdict was reached in 2018/19, resulting in:

- 146 (92%) with a conviction for at least one offence;
- £15.7 million in total fines^{##} averaging over £107,000 per conviction.
 - In 2017/18 there were 202 cases resulting in 190 convictions (94%); this led to £18 million total fines and average fines of around £95,000.

Source: HSE Enforcement Data

HSE and local authorities are responsible for enforcing health and safety legislation. For the most serious offences, inspectors may serve improvement notices and prohibition notices and they may prosecute (or in Scotland, report to the Crown Office and Procurator Fiscal Service (COPFS) with a view to prosecution).

[#]Cases refer to a prosecution against a single defendant. The defendant may be an individual person or a company. There may be one or more breach of health and safety legislation (offences) in each case.

^{##} New sentencing guidelines for health and safety offences came into force February 2016. A feature of these guidelines is that the fine is related to the turnover of organisations and, as a result, large organisations convicted of offences are receiving larger fines than seen prior to these guidelines.

Annex 1: Sources and definitions

The Labour Force Survey (LFS): The LFS is a national survey run by the Office for National Statistics of currently around 37,000 households each quarter. HSE commissions annual questions in the LFS to gain a view of self-reported work-related illness and workplace injury based on individuals' perceptions. The analysis and interpretation of these data are the sole responsibility of HSE.

- 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 long-standing as well as new cases. New cases consist of those who first became aware of their illness in the last 12 months.
- Self-reported injuries: Workplace injuries sustained as a result of a non-road traffic accident, as estimated by the LFS.

Specialist physician surveillance schemes (THOR): Cases of work-related respiratory and skin disease are reported by specialist physicians within The Health and Occupation Reporting network (THOR) surveillance schemes.

Ill health assessed for disablement benefit (IIDB): New cases of specified 'prescribed diseases' (with an established occupational cause) assessed for compensation under the Industrial Injuries Disablement Benefit scheme.

RIDDOR: The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations, under which fatal and defined non-fatal injuries to workers and members of the public are reported by employers.

Certain types of work-related injury are not reportable under RIDDOR, hence excluded from these figures. Particular exclusions include fatalities and injuries to the armed forces and injuries from work-related road collisions.

NADOR: The Notification of Accidents and Dangerous Occurrences Regulations (NADOR) 1980. These reporting requirements preceded RIDDOR.

HSE Costs to Britain Model: Developed to estimate the economic costs of injury and new cases of ill health arising from current working conditions. The economic cost estimate includes estimates of financial (or direct) costs incurred (either in terms of payments that have to be made or income/output that is lost) and the monetary valuation of the impact on quality and loss of life of affected workers.

HSE Enforcement data: The main enforcing authorities are HSE and local authorities. In Scotland, HSE and local authorities investigate potential offences but cannot institute legal proceedings and the Crown Office and Procurator Fiscal Service (COPFS) makes the final decision whether to institute legal proceedings and which offences are taken.

Enforcement notices cover improvement, prohibition and deferred prohibition. Offences prosecuted refer to individual breaches of health and safety legislation; a prosecution case may include more than one offence. Where prosecution statistics are allocated against a particular year, unless otherwise stated, the year relates to the date of final hearing with a known outcome. They exclude those cases not completed, for example adjourned.

Rate per 100,000: The number of annual workplace injuries or cases of work-related ill health per 100,000 employees or workers.

95% confidence interval: 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.

Statistical significance: 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.

For more information, see www.hse.gov.uk/statistics/sources.pdf

Annex 2: Links to detailed tables

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

Tables

Web Address (URL)

Work-related illness

| | |
|-----------|--|
| lfsillind | www.hse.gov.uk/Statistics/lfs/lfsillind.xlsx |
| THORR04 | www.hse.gov.uk/Statistics/tables/thorr04.xlsx |
| THORR05 | www.hse.gov.uk/Statistics/tables/thorr05.xlsx |
| THORS04 | www.hse.gov.uk/Statistics/tables/thors04.xlsx |
| THORS05 | www.hse.gov.uk/Statistics/tables/thors05.xlsx |
| CAN05 | www.hse.gov.uk/Statistics/tables/can05.xlsx |
| IIDB01 | www.hse.gov.uk/Statistics/tables/iidb01.xlsx |
| DC01 | www.hse.gov.uk/Statistics/tables/dc01.xlsx |
| lfsillocc | www.hse.gov.uk/statistics/lfs/lfsillocc.xlsx |

Workplace injuries

| | |
|-----------|--|
| lfsinjind | www.hse.gov.uk/Statistics/lfs/lfsinjind.xlsx |
| lfsinjocc | www.hse.gov.uk/statistics/lfs/lfsinjocc.xlsx |
| RIDIND | www.hse.gov.uk/Statistics/tables/ridind.xlsx |
| RIDKIND | www.hse.gov.uk/Statistics/tables/ridkind.xlsx |
| RIDHIST | www.hse.gov.uk/Statistics/tables/ridhist.xlsx |
| RIDFATAL | www.hse.gov.uk/Statistics/tables/ridfatal.xlsx |

Costs to Britain of workplace injury and illness

| | |
|-----------------|--|
| COST_Tables1718 | www.hse.gov.uk/Statistics/tables/costs_tables1718.xlsx |
|-----------------|--|

Enforcement

| | |
|--------------|--|
| Notices | www.hse.gov.uk/Statistics/tables/notices.xlsx |
| Prosecutions | www.hse.gov.uk/Statistics/tables/prosecutions.xlsx |

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