Workplace fatal injuries in Great Britain, 2019

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Summary

147
Workers killed in 2018/19 (RIDDOR)

Fatal injuries to workers by main industry

- Agriculture, forestry and fishing: 32
- Construction: 30
- Wholesale, retail, motor repair, Accommodation and food: 18
- Transport and storage: 16
- Admin & support services: 10
- Waste: 7
- Other: 8
- Manufacturing: 26

Fatal injuries to workers by age

- Aged 16-59: 107
- Aged 60 plus: 37
- Age not known: 3

Main kinds of fatal accident for workers

- Falls from a height: 40
- Struck by moving vehicle: 30
- Struck by moving object: 16
- Contact with moving machinery: 14
- Trapped by something collapsing/overturning: 11

Rate of fatal injury per 100,000 workers

Data source RIDDOR: Reporting of Injuries Diseases and Dangerous Occurrences Regulations. Figures for 2018/19 are published as provisional at this stage and will be finalised July 2020.

Members of the public were killed due to work related activities in 2018/19

Long term downward trend

Broadly flat

This document is available from www.hse.gov.uk/statistics/
Introduction

This report provides headline numbers on workplace fatal injuries that were reported to enforcing authorities in 2018/19. It includes both fatal injuries to workers and to members of the public. The 2018/19 figures are currently provisional and will be finalised in July 2020 to take account of any necessary adjustments. In tables and chart headings, 2018/19 is marked as ‘p’ for clarity.

Fatal injuries are thankfully rare events. There is a degree of chance and randomness to the annual count resulting in an element of natural variation from one year’s count to the next. To allow for this natural variation, alongside figures for 2018/19, this report also presents the annual average estimate for the five years 2014/15-2018/19, which reduces the effect of year-on-year fluctuations and gives a more stable current picture.

The figures make up part of a long running series enabling both short and long-term comparisons of change.

The information includes only those cases of fatal injury that the enforcing authorities have judged as meeting the reporting criteria as set out in the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR). Two notable exclusions from these statistics are fatal diseases and fatal accidents on non-rail transport systems. (See Annex 1 for more details).

Fatal injuries to workers

Headline figures

A total of 147 workers were killed at work in Great Britain in 2018/19. Although this represents an increase of 6 fatalities from 2017/18, it is possible that this change can be explained by natural variation in the figures. 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 2014/15-2018/19 is 142.

Figure 1: Fatal injuries to workers: GB 2008/09 - 2018/19p
Injuries by industry

There are two ways of looking at fatality numbers. The first is to look at the absolute count. On this basis, Construction and Agriculture, forestry and fishing tend to come out worst as they account for the greatest number of fatalities each year.

Figure 2: Number of fatal injuries by main industry group, 2018/19p and annual average for 2014/15-2018/19p

- The number of fatal injuries in 2018/19 for each of the main industry sectors is broadly in line with the annual average over the last five years. However, numbers can be prone to year-on-year fluctuations.

- The number of fatal injuries to workers in Construction in 2018/19 (30) is the lowest number on record, a similar number to the previous low in 2016/17 (31). However, the number has fluctuated over the last five years ranging between 30 and 47 (in 2015/16).

- The number of fatal injuries in Manufacturing has fluctuated over the last five years, and the number in 2018/19 is up on the low of 15 in 2017/18.

- Of the 18 deaths in Wholesale, retail trade, motor vehicle repair; Accommodation and food services
  - 7 were in Wholesale and retail trade of motor vehicles (including motor vehicle repair);
  - 8 were in other Wholesale trade activities;
  - 2 were in Retail trade
  - 1 was in Accommodation.

- Although not shown in Figure 2, there were 8 fatal injury cases in other sectors in 2018/19, including 4 in public services (comprising Public administration; Education; Human health and social work activities).

\(^1\) Industry is defined using the 2007 Standard Industrial Classification. See annex 1 for more details.
The second approach of looking at fatality numbers is to consider the **fatal injury rate** in terms of the number of fatalities per 100,000 workers employed.

**Figure 3**: Rate of fatal injuries by selected main industry group (per 100,000 workers), 2018/19p and annual average for 2014/15-2018/19p

Based on the annual average rates for 2014/15-2018/19 (as this reduces the effect of year-on-year fluctuations and gives a more stable picture):

- Agriculture, forestry and fishing and Waste and recycling come out worst, with a rate of injury some 18 times and 17 times as high as the average across all industries respectively.

- The rate of fatal injury in Construction, while around 4 times as high as the average rate across all industries, is considerably less than the rate in either Agriculture, forestry and fishing or Waste and recycling, despite accounting for a greater number of cases than these sectors.

- The Manufacturing and the Transportation and storage sector have a rate of fatal injury around 1.5 to 2 times the average rate across all industries.

- Although not shown in figure 3 above, the rate of fatal injury in Mining and quarrying is around four times as high as the average rate across all industries and broadly similar to that seen in Construction.

- While the combined ‘Wholesale, retail, motor repair; Accommodation and food services’ sector account for around 7% of fatal injuries between 2014/15 and 2018/19, in terms of rate the overall sector is relatively low risk with an injury rate of around one third the all industry rate. However, there will be variation in risk across activities within the sector.

For more details of fatal injuries by main industry sector, see Table 1, [www.hse.gov.uk/statistics/tables/ridfatal.xlsx](http://www.hse.gov.uk/statistics/tables/ridfatal.xlsx)
Injuries by accident kind

Around three-quarters of fatal injuries in both 2018/19 and the combined five-year period 2014/15-2018/19 were accounted for by just five different accident kinds (see figure 4 below). Falls from a height, being struck by a moving vehicle and being struck by a moving, including flying or falling, object continue as the three main causes of fatal injury, between them accounting for over half of all fatal injuries each year since at least 2001/02.

Figure 4: Number of fatal injuries to workers by accident kind, 2018/19p and annual average for 2014/15-2018/19p

- In 2018/19, 40 fatal injuries to workers were due to falls from a height. This compares to 35 in 2017/18 and an annual average over the period 2014/15-2018/19 of 36.

- Being struck by a moving vehicle accounted for 30 fatal injuries to workers in 2018/19 compared with 24 in 2017/18 and an annual average of 27 over the period 2014/15-2018/19.

- The number of fatal injuries caused by being struck by a moving, including flying or falling, object has fluctuated between 15 and 23 over the last five years, with an annual average of 18 over the period 2013/14-2018/19.

- The 36 fatal injury cases in the Other kind of accident category in 2018/19 are made up of a range of different accident kinds including (but not limited to):
  - Injured by an animal (8)
  - Drowning or asphyxiation; Exposed to explosion; Contact with electricity or electrical discharge; (5,5,4 fatalities respectively).

For more details of fatal injuries by accident kind, see Table 3, [www.hse.gov.uk/statistics/tables/ridfatal.xlsx](http://www.hse.gov.uk/statistics/tables/ridfatal.xlsx)
Injuries by gender and age

Fatal injuries to workers are predominately to male workers. In 2018/19, 139 (95%) of all worker fatalities were to male workers, a similar proportion to earlier years.

In terms of age, 25% of fatal injuries in 2018/19 were to workers aged 60 and over, even though such workers made up only around 10% of the workforce.

Figure 5: Number of fatal injuries by age group, 2018/19p

Figure 6 below shows the fatal injury rate by age group for the period 2014/15-2018/19. This clearly shows how the rate of fatal injury increases with age, with workers aged 60-64 having a rate around twice as high as the all ages rate, and workers aged 65 and over a rate more than four times as high as the all ages rate. Almost all the main industry sectors show an age gradient in fatal injury rate.

Figure 6: Rate of fatal injuries by age group (per 100,000 workers), annual average for 2014/15-2018/19p

Injuries by employment status

Over a quarter of fatal injuries in both 2018/19 and the five year-period 2014/15-2018/19, were to self-employed workers working mostly in Agriculture, forestry and fishing and Construction but also in other sectors including (but not restricted to) Manufacturing, and Administrative and support service activities (such as renting and leasing activities and services to buildings and landscape activities).

By industry, the proportion of fatal injuries to employees and the self-employed varies considerably, to some extent reflecting the relative make-up of the working population between employees and self-employed.

Figure 7: Fatal injury by employment status for selected industries, 2014/15-2018/19

However, some of the difference in the proportion of fatal injuries to the self-employed by industry is due to variations in the rate of fatal injury to these workers. Overall, the fatal injury rate for the self-employed is more than double that for employees. This increased rate for self-employed workers is seen particularly in the Agriculture, forestry and fishing sector and Administration and Support service activities. However, in construction and manufacturing, there is more parity in the rate of fatal injury between employees and self-employed workers.

Figure 8: Rate of fatal injuries to employees and self-employed workers (per 100,000 workers) for selected industries, 2014/15 - 2018/19

For more details of fatal injuries by employment status, see www.hse.gov.uk/statistics/tables/ridfatal.xlsx
Injuries by country within GB

Figure 9 below shows the country or region where the death occurred for fatalities in 2018/19. The number of fatalities in some regions is relatively small, hence susceptible to considerable variation. Accidents involving multiple fatalities can also affect annual totals. Therefore Figure 9 also shows the annual average number of deaths for the five-year period 2014/15-2018/19 as this reduces the effect of year-on-year fluctuations.

It is worth noting that in 2018/19, there was a sharp increase in the number of worker deaths in Scotland. However, this increase can possibly be explained by natural variation in the figures and at this stage does not indicate any statistically significant change.

Figure 9: Number of fatal injuries by country and region within GB, 2018/19p and annual average for 2014/15 - 2018/19p (annual average number in brackets)

In terms of fatal injury rate, England consistently has a lower injury rate than either Scotland or Wales. However, injury rates are strongly influenced by variations in the mix of industries and occupations. The country injury rate does not make allowance for the varying composition of the workforce between the three home nations. A previous analysis of rates adjusted for industry composition by both country and region within England can be found at www.hse.gov.uk/statistics/adhoc-analysis/standardised-fats.pdf . This analysis shows that after standardising fatal injury rates by industry, Wales and Scotland have a fatal injury rate that is not statistically significantly different from the GB rate.

For more details of fatal injuries by country and region within GB, see Table 5, www.hse.gov.uk/statistics/tables/ridfatal.xlsx
Injury comparison with other countries

Since 1990, the statistical authority for the European Union (Eurostat) has worked with member states on a harmonisation programme to give consistency to workplace injury statistics across the EU. To take account of differing industrial backgrounds across member states, Eurostat publishes industry standardised incidence rates. The standardised rate accounts for variation in industry composition across EU countries. (See the appendix in www.hse.gov.uk/statistics/european/european-comparisons.pdf for further details on the standardisation process).

The UK consistently has one of the lowest rates of fatal injury across the EU.

- In 2016 the standardised rate, at 0.53 per 100,000 employees, was one of the lowest of all European countries and compares favourably with other large economies such as France, Germany, Italy, Spain and Poland.
- Similarly, the UK three-year average rate for 2013-2015 (0.52 per 100,000 employees) was the lowest of all EU member states.
- Standardised rates published by Eurostat are based on fatalities occurring across all main industry sectors (excluding the transport sector). Whilst road traffic accidents should not be included in these rates, their removal may not always be complete. This should be considered when reviewing rates for individual countries.

Figure 10: Standardised incidence rates (per 100,000 employees) of fatal injuries at work for 2016

Global comparisons, for example, with the USA, Asia etc, are not available due to differences in definitions of workplace accidents and reporting systems.

For more details see www.hse.gov.uk/statistics/european/table1.xlsx
Longer term trends

Despite long term reductions in the number of workers killed by work activities, each year such cases continue, with 147 such deaths in 2018/19. This number compares with 253 twenty years ago (1998/99) and 495 in 1981 (prior to 1981 only fatal injury numbers to employees were reported to enforcing authorities).

Figure 11: Number of fatal injuries to workers in Great Britain, 1981-2018/19

As described in the earlier section ‘Headline figures’, the 147 fatal injuries in 2018/19 represents an increase of 6 fatalities from 2017/18. However, it is possible that this change can be explained by natural variation in the figures. 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 2014/15-2018/19 is 142.

By natural variation we mean that if we had identical conditions between two years; identical people doing identical jobs in identical industries working in identical conditions, the number of fatalities would not necessarily be the same. This is because the final total is at least partly related to chance and randomness. Examining the causal factors behind individual fatal accidents, it is often found that an unfortunate set of chance events have occurred together with shortcomings in safety precautions. Annual counts of fatalities can also be influenced by multiple fatalities; that is one incident resulting in more than one death.

Taking employment levels into account, the 147 fatalities in 2018/19 gives rise to a fatal injury rate of 0.45 deaths per 100,000 workers. When considering trends over time it is preferable to consider the rate of injury rather than just the number of injuries as the rate accounts for changes in the numbers in employment between years. The long-term picture for the fatal injury rate is similar to that for fatal injury numbers: a long-term downward trend to around 2013/14. Since then the rate has been broadly flat.

Figure 12: Rate of fatal injuries to workers in Great Britain, 1981-2018/19

For more details see www.hse.gov.uk/statistics/tables/ridhist.xlsx and www.hse.gov.uk/statistics/tables/ridfatal.xlsx
Fatal injuries to members of the public

A total of 92 members of the public were killed in 2018/19 as a result of a work-connected accident. Of these deaths, about a third (32) occurred on railways and a further 23 occurred in the Health and social work sector.

Comparison of numbers between years is complicated by recent changes in reporting requirements. Since October 2013, the requirement to report suicides to members of the public on railways (which accounted for a high proportion of railway deaths) was removed. Further, since 2015/16, the fatality figure no longer includes ‘patient and service users’ deaths in England for premises registered with the Care Quality Commission. Previously these statistics were recorded as member of the public deaths in Health and social care.

To get an indication of changes in work-related deaths to members of the public, the chart below considers work-related deaths to members of the public excluding those that occurred on railways and in health and social care. This shows that over the last decade the number of such deaths has fluctuated each year, with no clear trend.

**Figure 13**: Number of work-related deaths to member of the public, excluding deaths on railways and in health and social care: GB 2008/09 - 2018/19p

For more details see Table 2, [www.hse.gov.uk/statistics/tables/ridfatal.xlsx](http://www.hse.gov.uk/statistics/tables/ridfatal.xlsx)
ANNEX 1: Sources and definitions

Coverage of fatal injury numbers

Fatal injuries included in this report are those that the relevant enforcing authority (namely HSE, Local authorities or the Office of Rail and Road) have judged as reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR).

Certain types of work-related injury are not reportable under RIDDOR, hence excluded from these figures. Particular exclusions include:

- Fatal accidents involving workers travelling on a public highway (a 'road traffic accident'). Such incidents are enforced by the police and reported to the Department for Transport. Those killed whilst commuting (travelling from home to work, and vice versa) are also excluded. For road accident statistics, see www.gov.uk/government/organisations/department-for-transport/series/road-accidents-and-safety-statistics
- Fatal accidents involving workers travelling by air or sea. These incidents are the responsibility of the Air Accident Investigation Branch and Marine Accident Investigation Branch of the Department for Transport and reported accordingly;
- Fatalities to members of the armed forces on duty at the time of incident;
- Fatal injuries at work due to 'natural causes', often heart attacks or strokes, unless brought on by trauma due to the accident.

Fatal injury statistics presented in this report also exclude deaths from occupational diseases, which typically occur many years after first exposure to the causative agent. The asbestos-related cancer mesothelioma is one of the few examples where deaths due to an occupational disease can be counted directly. There were 2,523 such deaths in GB in 2017 - see www.hse.gov.uk/statistics/causdis/asbestos.htm. Other occupational deaths usually have to be estimated rather than counted. Each year around 13,000 deaths from occupational lung disease and cancer are estimated to have been caused by past exposure, primarily to chemicals and dust, at work. (this estimate includes the count of mesothelioma deaths).

Provisional nature of the latest statistics

On first publication, RIDDOR data is classified as provisional and marked with a 'p' suffix. The following year data are finalised and marked as 'r' (revised). The revised (finalised) figures for fatal injuries can go down as well as up, by up to +/-3% on finalisation for fatal injuries to workers. The change from provisional to final usually reflects more up-to-date information following the detailed investigations of these incidents, but also Regulation 6 of RIDDOR covers situations where someone dies of their injuries within a year of their accident. The finalised figure for 2017/18 is 141 revised from 144.

Table 1: Differences in provisional and finalised counts of fatal injuries to workers, 2014/15-2018/19p

<table>
<thead>
<tr>
<th>Year</th>
<th>Provisional figure</th>
<th>Revised finalised figure</th>
<th>Difference</th>
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<tbody>
<tr>
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<td>147</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2017/18r</td>
<td>144</td>
<td>141</td>
<td>-3</td>
</tr>
<tr>
<td>2016/17</td>
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<td>135</td>
<td>-2</td>
</tr>
<tr>
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<td>147</td>
<td>+3</td>
</tr>
<tr>
<td>2014/15</td>
<td>142</td>
<td>142</td>
<td>0</td>
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</table>
Fatal injury rates

Differences in the size of the workforce will impact on comparisons of the number of fatalities, both over time and between one group and another within a year (e.g. between different industry groups). In order to make robust comparisons, it is important to consider the rate of fatal injury. The rate is constructed by dividing the count of fatal injuries by the employment estimate. This is then multiplied by a factor of 100,000 to give a rate per 100,000 workers, in line with international standards. The source of employment data used to construct the injury rates from 2004/05 onwards is the Annual Population Survey (APS).

Statistical significance

The total fatal injury count is subject to a degree of chance and randomness; if exactly the same conditions prevail in two different years then it is likely that the annual count will differ due to natural variation. We use tests of statistical significance at the 95% confidence level to judge whether a difference between years is likely to be explained by natural variation alone or whether it represents a statistically significant difference. (Note statistical significance should not be confused with the significance of each injury. Every casualty is a tragedy and has both a social cost and a personal cost to those directly affected).

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

The table below presents the 2007 Standard Industrial Classification (SIC) codes used to define the top-level industry groupings presented in this report.

<table>
<thead>
<tr>
<th>SIC Code</th>
<th>Industry Description</th>
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<tbody>
<tr>
<td>Section A</td>
<td>Agriculture</td>
</tr>
<tr>
<td>Section B</td>
<td>Mining and quarrying</td>
</tr>
<tr>
<td>Section C</td>
<td>Manufacture</td>
</tr>
<tr>
<td>Section D</td>
<td>Electricity, Gas, Steam and Air Conditioning</td>
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<tr>
<td>Section E</td>
<td>Water Supply, Sewerage, Waste Management and Remediation</td>
</tr>
<tr>
<td>Division 38</td>
<td>- of which waste and recycling</td>
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<tr>
<td>Section F</td>
<td>Construction</td>
</tr>
<tr>
<td>Section G, I</td>
<td>Wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service activities</td>
</tr>
<tr>
<td>Section H</td>
<td>Transport and storage</td>
</tr>
<tr>
<td>Section J-N</td>
<td>Communication, business services and finance</td>
</tr>
<tr>
<td>Section N</td>
<td>- of which Administrative and support services</td>
</tr>
<tr>
<td>Section O-Q</td>
<td>Public administration; education; human health and social work activities</td>
</tr>
<tr>
<td>Section R-U</td>
<td>Arts, entertainment and recreation; all other service activities</td>
</tr>
</tbody>
</table>

For more details of what is included in these SIC codes, please see the [2007 Standard Industrial Classification](http://www.hse.gov.uk/statistics/).
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/.

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