Workplace fatal injuries in Great Britain 2018

Contents

Summary

Introduction

Fatal injuries to workers
   Headline figures
   Injuries by industry
   Injuries by accident kind
   Injuries by gender and age
   Injuries by employment status
   Injuries by country within GB
   Injury comparison with other countries
   Longer term trends

Fatal injuries to members of the public

Technical note

Annex 1 – Industry definitions
Summary

144 Workers killed in 2017/18 (RIDDOR)

Fatal injuries to workers by main industry

- Construction, 38
- Agriculture, 29
- Manufacturing, 15
- Transport and Storage, 15
- Waste, 12
- Other, 35

Fatal injuries to workers by age

- Aged 16-59, 86
- Aged 60 plus, 55
- Age not known, 3

Main kinds of fatal accident for workers

- Falls from a height, 35
- Struck by moving vehicle, 26
- Struck by moving object, 23
- Trapped by something collapsing/overturning, 16
- Contact with moving machinery, 13

Rate of fatal injury per 100,000 workers

Data source RIDDOR: Reporting of Injuries Diseases and Dangerous Occurrences Regulations.

Members of the public were killed due to work related activities in 2017/18.
Introduction

This report provides headline numbers on workplace fatal injuries that were reported to enforcing authorities in 2017/18. It includes both fatal injuries to workers and to members of the public. The 2017/18 figures are currently provisional, and marked as 'p' and will be finalised in July 2019 to take account of any necessary adjustments.

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 2017/18, this report also presents the annual average estimate for the five years 2013/14-2017/18, 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 Technical note for more details).

Fatal injuries to workers

Headline figures

A total of 144 workers were killed at work in Great Britain in 2017/18p. Although this represents an increase of 9 fatalities from 2016/17, 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 2013/14-2017/18p is 141.

Figure 1: Fatal injuries to workers: GB 2007/08 - 2017/18p

![Figure 1: Fatal injuries to workers: GB 2007/08 - 2017/18p](chart)
Injuries by industry\(^1\)

There are two ways of looking at fatality numbers. The first is to look at the absolute count. On this basis, construction and agriculture 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, 2017/18\(^p\) and annual average for 2013/14-2017/18

The number of fatal injuries in 2017/18 for each of the main industry sectors is broadly in line with the annual average over the last 5 years. However, numbers can be prone to year-on-year fluctuations.

Of the 11 deaths in the Communication, business services and finance sector in 2017/18, seven were in the sub-sector Administrative and support services which includes a variety of activities that support general business operations (such as renting and leasing activities and services to buildings and landscape activities).

The 24 fatal injury cases in Other sectors in 2017/18 include cases in

- Wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service activities (8);
- Arts, entertainment and recreation; all other service activities (5);
- Public administration; education; human health and social work activities (5);
- Mining and quarrying (4);
- Electricity, Gas, Steam and Air Conditioning (1);
- Water collection, treatment and supply (1).

---

\(^1\) Industry is defined using the [2007 Standard Industrial Classification](https://www.hse.gov.uk/statistics/). 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), 2017/18p and annual average for 2013/14-2017/18p

<table>
<thead>
<tr>
<th>Industry Group</th>
<th>Rate 2017/18</th>
<th>Rate Annual Average 2013/14-2017/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>1.64</td>
<td>8.44</td>
</tr>
<tr>
<td>Agriculture</td>
<td>1.77</td>
<td>8.20</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.52</td>
<td>0.85</td>
</tr>
<tr>
<td>Transportation and storage</td>
<td>0.96</td>
<td>0.91</td>
</tr>
<tr>
<td>Waste and recycling</td>
<td>7.22</td>
<td>10.25</td>
</tr>
<tr>
<td>Communication, business services and finance</td>
<td>0.16</td>
<td>0.14</td>
</tr>
<tr>
<td>All Industry</td>
<td>0.45</td>
<td>0.45</td>
</tr>
</tbody>
</table>

Based on the annual average rates for 2013/14-2017/18p (as this reduces the effect of year-on-year fluctuations and gives a more stable picture):

- Agriculture and Waste and recycling come out worst, with a rate of injury some 18 times and 16 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 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 five times as high as the average rate across all industries and broadly similar to that seen in Construction.

- While the combined Communication, business services and finance sector account for around 7% of fatal injuries, in terms of rate the overall sector is relatively low risk with an injury rate of around one third the all industry rate. However, within the sector there is some variation, with the sub-sector Administrative and support services having a fatal injury rate similar to the rate across all industries.

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 2017/18 and the combined five-year period 2013/14-2017/18 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, 2017/18 and annual average for 2013/14-2017/18

- In 2017/18, 35 fatal injuries to workers were due to falls from a height. This compares to 27 in 2016/17 and an annual average over the period 2013/14-2017/18 of 37.

- Being struck by a moving vehicle accounted for 26 fatal injuries to workers in 2017/18 compared with 30 in 2016/17 and an annual average of 26 over the period 2013/14-2017/18.

- The number of fatal injuries caused by being struck by a moving, including flying or falling, object has fluctuated between 15 and 23 in each of the last five years, with an annual average of 19 over the period 2013/14-2017/18.

- The 31 fatal injury cases in the Other kind of accident category in 2017/18 are made up of a range of different accident kinds including (but not limited to):
  - Injured by an animal (9)
  - Slips, trips or falls on the same level (4)
  - Drowning or asphyxiation; Contact with electricity or electrical discharge; Exposure to fire. (3 fatalities each).

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

Fatal injuries to workers are predominately to male workers. In 2017/18, 138 (96%) of all worker fatalities were to male workers, a similar proportion to earlier years.

Figure 5a: Number of fatal injuries by age group, 2017/18

In terms of age, nearly 40% of fatal injuries in 2017/18 were to workers aged 60 and over, even though such workers made up only around 10% of the workforce.

Figure 5b: Proportion of fatal injuries to workers aged 60 and over, 2004/05-2017/18

The proportion of fatal injuries to older workers has been steadily increasing in recent years, although the increase seen in the most recent year is particularly large.

Figure 6 below shows the fatal injury rate by age group for the period 2013/14-2017/18. This clearly shows how the rate of fatal injury increases with age, with workers aged 60-64 having a rate more than double the all ages rate, and workers aged 65 and over a rate around five times greater than the all ages rate.

Figure 6: Rate of fatal injuries by age group (per 100,000 workers), annual average for 2013/14-2017/18

Injuries by employment status

Around one third of fatal injuries in both 2017/18p and the five year-period 2013/14-2017/18p, were to self-employed workers, working mostly in agriculture 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).

Figure 7: Fatal injuries to self-employed by industry sector, 2013/14 -2017/18p

The fatal injury rate for the self-employed is more than double that for employees.

Figure 8: Rate of fatal injuries to employees and self-employed workers (per 100,000 workers), 2013/14 -2017/18p

For more details of fatal injuries by employment status, see www.hse.gov.uk/statistics/tables/ridfatal.xlsx
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-fatal.pdf](http://www.hse.gov.uk/statistics/adhoc-analysis/standardised-fatal.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](http://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 UK consistently has one of the lowest rates of fatal injury across the EU.

- In 2015 the standardised rate, at 0.51 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 2012-2014 (0.50 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 2015

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](http://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 144 such deaths in 2017/18. This number compares with 274 twenty years ago (1997/98) 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, 1981-2017/18

As described in the earlier section ‘Headline figures’, the 144 fatal injuries in 2017/18 represents an increase of 9 fatalities from 2016/17. 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 2013/14-2017/18 is 141.

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 144 fatalities in 2017/18 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 2012/13, more recently the rate has been broadly flat.

**Figure 12:** Rate of fatal injuries to workers in Great Britain, 1981-2017/18
Fatal injuries to members of the public

A total of 100 members of the public were killed in 2017/18 as a result of a work-connected accident. Of these deaths, just over half (51) occurred on railways and a further 16 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 2007/08 - 2017/18

For more details see Table 2, [www.hse.gov.uk/statistics/tables/ridfatal.xlsx](http://www.hse.gov.uk/statistics/tables/ridfatal.xlsx)
**Technical note**

**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](http://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 2,595 such deaths in GB in 2016- see [www.hse.gov.uk/statistics/causdis/asbestos.htm](http://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.

**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 2016/17 is 135, revised from 137.

**Table 1:** Differences in provisional and finalised counts of fatal injuries to workers, 2013/14 - 2017/18

<table>
<thead>
<tr>
<th>Year</th>
<th>Provisional figure</th>
<th>Revised finalised figure</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18p</td>
<td>144</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2016/17r</td>
<td>137</td>
<td>135</td>
<td>-2</td>
</tr>
<tr>
<td>2015/16</td>
<td>144</td>
<td>147</td>
<td>+3</td>
</tr>
<tr>
<td>2014/15</td>
<td>142</td>
<td>142</td>
<td>0</td>
</tr>
<tr>
<td>2013/14</td>
<td>133</td>
<td>136</td>
<td>+3</td>
</tr>
</tbody>
</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
Annex 1 – 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>
</tr>
</thead>
<tbody>
<tr>
<td>Section A</td>
<td>Agriculture, Forestry and Fishing</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>
</tr>
<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>
</tr>
<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 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>
National Statistics

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

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

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

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

A revisions policy and log can be seen at www.hse.gov.uk/statistics/about/revisions/

Additional data tables can be found at www.hse.gov.uk/statistics/tables/.

General enquiries: Statistician heidi.edwards@hse.gov.uk

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